

Dangers of Dietary Isoflavones, Soy and Others at levels above those found in traditional diets

The Risks Of Abandoning “The Precautionary Principle”

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

<http://www.mayanmajix.com/soy.html> - Dangers of Soy

“Soy - Abundance Of Health Hazards”

<http://www.mayanmajix.com/soy01.html>

May 2003 – November 2004

April 2006

Page 1 of - over 144 pages

Cargill has received “self-determined” GRAS status, **not** approved U.S.A. FDA GRAS status, for its AdvantaSoyTMClearTM isoflavone supplement to be used as an additive for beverages, nutrition bars, yoghurt, meal replacements and confections. **The summaries of abstract studies, the evidence, attached here give ample demonstration of the real dangers to the general public of adding phytoestrogens (isoflavones) to common foods**, as well as, exposing the very real dangers imposed onto the general public by the soy and the food industries “**Self Regulation**”, “**Economic Self Interest**”, and the risks of **abandoning “The Precautionary Principle.”**

This collection of scientific research abstracts, (**the evidence**), out of a continually growing list of hundreds available, represents a fast growing body of scientifically creditable medical and dietary research on the many serious health hazards, (including cancer), of putting soy & soy ingredients in our food supply. Almost all of the abstracts presented here are **also** published in the NIH Medline PubMed data base and are representative of current and past research from around the world, in **2004** and going back to **1916, 1911**, even as far back as **1907**. Full research is also available via these abstracts. Notice some of the research studies include those from the US Department of Energy and NCTR which are Federally operated and funded, and other very reputable research institutions from around the world.

This collection of scientific research abstracts is from well-designed studies, from around the world, conducted in a manner which is consistent with generally recognized scientific procedures & principles which show that **there does exist** significant scientific agreement among experts from around the world, [qualified by scientific training, experience and expertise], a very strong statistically significant association of harm to human and to animal health from the consumption of soy, soy protein, and soy estrogen ingredients in our food supply and an **INCREASED RISK of a variety of cancers and other major and life threatening health problems, referred to in this body of evidence as “Hidden Harm,”** which includes but not limited to this list of known, “**ignored**” and still denied “**Side-Effects**” of ... **endocrine disruption ... thyroid suppression ... immune system suppression ... heart disease ... liver disease ... leukemia, (IAL) ... Cancer(s) - breast, bone, uterine, liver, colon, pancreas, thyroid etc ... Arthritis ... infertility / lower sex drive ... growth problems ... subtle changes in sexually dimorphic behaviors ... Osteoporosis ... learning disabilities & Alzheimer’s / Parkinson’s Disease from Brain / Nervous System damage ... chromosome fragmentation & errors in chromosome orientation ... DNA damage ... “DEATH”**. **Note:** Genistein in soy is also a Topoisomerase II-poison pages, 32, 44. Read testimonials on pages 15 to 20, 100, 116, 117, and 122 – 126.

See page 121 for a **more detailed list of “ignored” health hazards associated with eating soy, which are also being called “adverse medical and developmental conditions.”** For taking “**legal action**” against the manufactures and sellers of soy products regarding developing these medical problems while eating soy, see pages 120, 4-7, 10, 18 and 97-119. **For some of the history on how and why** soy got into our food supply, and **why** soy is still in our food supply, see pages 4, 5, 11, 12, 18, 105. **Now, see the “evidence,” the proof of harm,** which includes but **is not** limited to the over **205 scientific research abstracts** from around the world between **1907** into **2004** on pages 29 - 84 **and** also read what everyone **can do about it** on pages 118 and 142. This research paper will **reveal and easily prove why** the addition of isoflavones to common foods have **always** posed a **clear & extreme danger** to the public and should **not** be allowed.

It has been argued that high levels of soy isoflavones such as genistein, daidzein and genistin in Asian diets protect the inhabitants of Japan and China from certain degenerative diseases, especially breast and prostate cancer. Actually, consumption of soy in traditional Asian diets is low. A **1975** report lists soyfoods as minor sources of protein in Japan and China.**(1.)** Major sources of protein listed were meat including organ meats, poultry, fish and eggs. Average isoflavone consumption in Asian diets ranges from 10-28 mg/day, as shown in the table below. Studies indicate that isoflavone consumption at levels slightly exceeding those found in tradition diets results in thyroid suppression and endocrine disruption. The AdvantaSoyTMClearTM supplement would add 30-50 mg of isoflavones to a 100-gram serving of various common foods, levels that exceed the amounts found in traditional diets and **that are in the range of levels shown to cause problems, especially for sensitive individuals.** It is not only possible but likely that many individuals will consume two or more servings of foods to which the Cargill isoflavones have been added, especially as these foods will be promoted with much advertising touting their health benefits. **Two or more servings of such foods would provide 60-100 mg isoflavones per day, an amount that clearly poses dangers after only a brief period of daily intake.**

Isoflavones

| | |
|---|----------------------------------|
| China (1990, 1999 survey), (5.) | 3 mg/day |
| Japan (1996 survey), (2.) | 10 mg/day |
| Japan (1998 survey), (3.) | 25 mg/day |
| Japan (2000 survey), (4.) | 28 mg/day |
| In Japanese subjects receiving adequate iodine, Soy still causes thyroid suppression after 3 months use, (6.) | 38 mg/day |
| In American women, causing hormonal changes, after 1 month, (7.) | 45 mg/day |
| AdvantaSoyTMClearTM. | 30-50 mg / 100 g serving ... / 2 |

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by Soy Online Service ... <http://www.soyonlineservice.co.nz/>
“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

As evidence on toxicity of soy isoflavones accumulates, warnings have begun to appear in the popular press. An article appearing in the *Washington Post Health Section* was titled: **“You have to be soy careful: tofu and similar foods may be beneficial, but some experts fear that too much could be unsafe.”**(8.) Writing for the *New York Times*, health columnist Marian Burros published the following: **“Against the backdrop of widespread praise ... there is growing suspicion that soy-despite its undisputed benefits-may pose some health hazards ... Not one of the 18 scientists interviewed for this column was willing to say taking isoflavones was risk free”**(9) .

References: (Parts of page 1 are from an earlier draft version. Up-date at ... <http://www.westonaprice.org/soy/dangersisoflavones.html>)

1. *Nutrition during Pregnancy and Lactation*. California Department of Health, 1975.
2. Fukutake M, Takahashi M, Ishida K, Kawamura H, Sugimura T, Wakabayashi K. Quantification of genistein and genistin in soybeans and soybean products. *Food Chem Toxicol* 1996;34:457-461.
3. Nagata C, Takatsuka N, Kurisu Y, Shimizu H. Decreased serum total cholesterol concentration is associated with high intake of soy products in Japanese men and women. *J Nutr* 1998 Feb;128(2):209-13.
4. Nakamura Y, Tsuji S, Tonogai Y. Determination of the levels of isoflavonoids in soybeans and soy-derived foods and estimation of isoflavonoids in the Japanese daily intake. *J AOAC Int* 2000;83:635-650.
5. This exhaustive study of Chinese diets found that legume consumption ranged from 0 to 58 grams per day, with a average of 13 grams. According to the researchers, about 2/3's of this was supplied by soy beans, giving average consumption of about 9 grams of soy products per day. Chen J, Campbell TC, Li J, Peto R. *Diet, Lifestyle and Mortality in China. A study of the characteristics of 65 counties*. Monograph, joint publication of Oxford University Press, Cornell University Press, China People's Medical Publishing House, 1990. Isoflavone content is estimated be about 3 mg per day based on an average amount of 30 mg total isoflavones per 100 grams of tofu. *USDA-Iowa State University Database on the Isoflavone Content of Foods* 1999.
6. Y Ishizuki, et al, “The effects on the thyroid gland of soybeans administered experimentally in healthy subjects,” *Nippon Naibunpi Gakkai Zasshi* 1991, 767: 622-629
7. Cassidy A, Bingham S, Setchell KD. Biological effects of a diet of soy protein rich in isoflavones on the menstrual cycle of premenopausal women. *Am J Clin Nutr* 1994;60(3):333-340.
8. *Washington Post Health Section*, January 30, 2001.
9. Burros M. Doubts Cloud Rosy News on Soy. *New York Times*, January 26, 2000.

**As you read through this paper you will soon discover,
 Soy acts like a fertilizer and fertilizes, feeds, cancer cells causing them to grow.**

“... Propaganda ... “is the systemic propagation of a given doctrine or of allegations reflecting its views and interests; material disseminated by the advocates of a doctrine.” The promotion of soy as a miracle food has been both systematic and reflective of the doctrine of the food industry — that imitation foods are good for us and traditional foods are unhealthy. **The soy campaign is, in fact, a case study in the use of propaganda to promote commercial interests,**” (Profits from a known & proven poisonous food ingredient above the Health, Safety and the Well-being of everyone, world wide). Quote from ... <http://www.mercola.com/2001/apr/7/soy.htm> .

“Strong and Wrong” - virus - “Weak and Right” ... The soy industry ... one of the world’s most wealthy, influential and powerful business organization ... funds millions of dollars of soy research and advertising each year in order to increase sales; so, what chance is there for discoverers of soy toxins to get funding to continue their work of exposing the truth about the many serious and deadly health hazards of eating soy ??. **Soy Politics**, new link at ... <http://www.soyonlineservice.co.nz/05soypolitics.htm> ... the old link at ... <http://www.soyonlineservice.co.nz/politics.htm> ... The soy industry's influence over the media, research institutions and government agencies is strong. The goal of soy research is to boost industry profits and the US economy.

“Education is the most powerful weapon you can use to change the world,” by Nelson Mandela. We, the volunteers of **Soy Online Service**, uncover soy’s many serious & sometimes deadly health hazards, as well as, soy industry’s intense influence and political corruption that allows soy and soy ingredients in our food supply to illegally stay on the market world wide.

“... All Truth Passes Through 3 phases: first it is ridiculed; next it is violently opposed; and finally it is accepted as self evident ...”, by the German philosopher Arthur Schopenhauer.

l l l, l l l, l l l, l l l, (+) l l l - See page 96 for abstract summary.

- <http://www.soyonlineservice.co.nz/articles/Soyatox.htm> .

1994 “Purification and physico-chemical characterization of soyatoxin, a novel toxic protein isolated from soybeans (Glycine max),” – Vasconcelos I.M., Trentim A, and others, Arch Biochem Biophys 1994 Aug 1 312:2 357-66, Department Of Biochemistry and Molecular Biology, Unversidade Federal do Ceara, Fortaleza, Brazil.

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Also see pages 84, 127, "...It may not be coincidental that **Pancreatic Cancer** recently moved up to 4th place as cause of cancer deaths in men & women in the USA as consumption of soyfoods in the US has increased. In the 1970's and 1980's, several researchers studying protease-inhibitor damage on the pancreas noted that pancreatic cancer had moved up to 5th place, wondered if there might be a soybean-protease inhibitor connection..." taken from page 43 of the [Weston A Price Foundation's](#) 50 page petition of objection to the FDA, June 14, 2004, at (# 2004Q-0151), regarding a request by The Solae Corp. asking FDA to issue a Health Claim saying that soy prevents cancer

The Doctor Within

"The Magic Bean? Soy-Taintly Not !."

. http://thedoctorwithin.com/index_fr.php?page=articles/magic_bean.php .
Old Link ... www.thedoctorwithin.com/articles/magic_bean.html .

Soy protein isolate is big business. One of the biggest producers of soy protein is [Protein Technologies International of St. Louis, a DuPont subsidiary. \(Finucan\)](#) We must appreciate the brilliance of taking a waste product from an already extremely processed food source and getting the majority of the population to think of this dead by-product as a food staple.

In general, the vast majority of soy products today are examples of a **super-refined artificial food, devitalized, and devoid of nutritional value.** It is a true **food of commerce**, as Royal Lee would have said.

THE GOLDEN BEAN

Why doesn't anyone know about all this ?? . How can we go from a perfect food to a non-food and have 99% of the population know nothing about it ?? . When this familiar scenario appears, it always means one thing: time to follow the money.

In that regard, here's some interesting statistics: **Today, the soybean is America's 3rd largest crop** (harvesting 73.8 million acres in **2002**), supplying more than **50 percent of the world's soybean demand.** (Soy Stats Reference Guide, **1999**, also Bernard)

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| |
|---|
| US Soybean |
| <u>Production in millions of bushels</u> |
| 1940 --- 78 |
| 1971 --- 1,176 |
| 2002 --- 2,730 |

| |
|---------------------------------|
| US Soybean |
| <u>Crop Value</u> |
| 1971 --- \$ 3.56 billion |
| 2002 --- \$15 billion |

| |
|-------------------------------------|
| US Soybean |
| <u>Oil Production</u> |
| 1996 --- over 6 million tons |
| (1997 Soy Stats) |

- source: **2002 Soy Stats Reference Guide**

By **2002**, crop value is **\$15 billion per year.** Keep in mind, this figure does not take into account the retail market of the dozens of finished soy food products sold in supermarkets. That total probably approaches **\$100 billion.** It's not just in the soyburgers and margarine and cooking oil and soy milk. For well over 20 years, in many, many other processed foods, we often get a ...

... HIDDEN SURPRISE ...

See a list of foods with soy ingredients ... pages 18 and 121

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l ; l

"The Truth About The Drug Companies" ... \$... <http://www.nybooks.com/articles/17244?email> ... 12 page essay

— by Marcia Angell, a former editor of the New England Journal Of Medicine.

— The New York Review of Books, Volume 51, Number 12, July 15, 2004.

— "... The most startling fact about **2002** is that the combined profits for the 10 drug companies in the **Fortune 500** (\$35.9 billion) were more than the profits for all the other **490 businesses** put together (\$33.7 billion).**(12)** ...".

--- **"... When I say this is a profitable industry, I mean really profitable.** It is difficult to conceive of how awash in money big pharma is ...".

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“The Newest Research On Why You Should Avoid Soy”

by Sally Fallon and Mary Enig PhD., 2000 ... http://www.mercola.com/article/soy/avoid_soy.htm

“... The **propaganda** that has created the soy sales miracle is all the more remarkable because, only a few decades ago, the soybean was considered unfit to eat - even in Asia. During the **Chou Dynasty (1134 - 246 BC)** the soybean was designated one of the five sacred grains, along with barley, wheat, millet and rice.

“... However, the pictograph for the soybean, which dates from **earlier times than the Chou Dynasty**, indicates that **it was not first used as a food** ; for whereas the pictographs for the other four grains show the seed and stem structure of the plant, the pictograph for the soybean emphasizes the root structure. Agricultural literature of the period speaks frequently of **the soybean and its use in crop rotation**. Apparently the soy plant was **initially used as a method of fixing nitrogen**”. 13.

“... The soybean did not serve as a food until the discovery of fermentation techniques, some time during the Chou Dynasty. The first soy foods were fermented products like tempeh, natto, miso and soy sauce. At a later date, possibly in the 2nd century BC, Chinese scientists discovered that a purée of cooked soybeans could be precipitated with calcium sulfate or magnesium sulfate (plaster of Paris or Epsom salts) to make a smooth, pale curd - tofu or bean curd. The use of fermented and precipitated soy products soon spread to other parts of the Orient, notably Japan and Indonesia ...”.

“... The Chinese did not eat unfermented soybeans as they did other legumes such as lentils because the soybean contains large quantities of **natural toxins** or **"anti-nutrients"**. **First among them** are potent enzyme inhibitors that block the action of trypsin and other enzymes needed for protein digestion ...”.

“... These inhibitors are large, tightly folded proteins that are not completely deactivated during ordinary cooking. They can produce serious gastric distress, reduced protein digestion and chronic deficiencies in amino acid uptake. In test animals, diets high in trypsin inhibitors cause enlargement and pathological conditions of the pancreas, including cancer ...”. 14.

“... Soybeans also contain haemagglutinin, a clot-promoting substance that causes red blood cells to clump together. Trypsin inhibitors and haemagglutinin are growth inhibitors.

“... **Soy advertisers selectively claim lower rates of reproductive cancers for Japanese and Asians eating soy, while ignoring the fact that these same people also have much higher rates of cancer of the ... esophagus ... stomach ... liver ... pancreas ... and thyroid ... particularly as soy causes these same types of cancers in laboratory test animals.** 37-39

“... **Japanese and Asians eat soy in very small amounts, as a condiment (a seasoning), not as a protein substitute, not as a replacement for animal foods !.** 42.

“... **Soy protein has not been given USA GRAS (Generally Recognized As Safe) status or pre-market approval because of its carcinogenic properties.** 72. **It is not even legal to add it to our food.**

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .
Pet Food, farm animal foods

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Soy Warning Labels, For Medical Reasons

Two of The USA F.D.A.'s Expert Scientists Protest Soy Approval.

Researchers and “Whistle-blowers” Daniel Doerge Ph.D and Daniel Sheehan Ph.D are two of the U.S.A.'s Food and Drug Administration's, FDA, expert scientists on soy who signed a Feb. 18, 1999 letter of protest to the FDA when the FDA granted soy a “health claim” in 1999. This letter expresses serious concerns regarding the perceived safe use of soy, if soy was to be granted a “health claim,” and includes 26 documented scientific referenced studies, (Abstracts), that show a link between eating soy and serious health problems.

In their letter of protest they said, “... it is inappropriate to allow a health claim for Soy Protein Isolate, SPI, ... it could be misinterpreted, ... the health labeling of SPI for foods needs to be considered just as would the addition of any “Estrogen” or “Goitrogen” to foods, which are bad ideas. Estrogenic and goitrogenic drugs are regulated by the FDA, and are taken under a physician's care. Patients are informed of risks, and are monitored by their physicians for evidence of toxicity.

No similar safeguards are in place for foods, so the public will be put at potential risk from soy isoflavones in SPI without adequate warning and information...”

See letter ... http://abcnews.go.com/onair/2020/2020_000609_soyfdaletter_feature.html, article withdrawn, and at ... http://www.mercola.com/2001/jun/30/soy_fda.htm, use Google Search for more.

Toxic Load means that the risk is a function of dose length, dose strength, and of the physical condition of the consumer. Reference:

“The Dose Makes the Poison: A Plain-Language Guide to Toxicology”, 2nd Edition, © 1996, by M. Alice Ottoboni,

“Chemical Carcinogens”, © 1976, by The American Chemical Society,

“Principles of Toxicology”, by Casarett and Doull,

“The Basic Science of Poisons”, © 2001, Casarett, Amdur, Klaassen, Doull

The Soy industry has “applied twice” and was “turned down twice(1979, 1999)” on both of its applications for “GRAS (Generally Recognized As Safe)” status for Soy Protein BECAUSE of Soy's carcinogenic properties; also Soy has not been given “Pre-market Approval” for its use in our food. It is not even legal to add it to our food. In addition, Soy is in breach of, in violation of - “WHO/CODEX - Food Safety Standards.” P.S. To add insult to injury, Soy fails the 1958 “Delaney Amendment” to the USA's FDA Reg.'s which prohibits the use of any food additive if it is found to cause cancer in any animal species or in man, at any dose level ... <http://www.pcdf.org/meadows/delaney.htm>. Add these 6 strikes against the Soy industry to the growing list of ignored side-effects on page 1., and you have millions of crime scenes. In the US FDA's “Poisonous Plant Database” ... <http://vm.cfsan.fda.gov/~djw/pltx.cgi?QUERY=SOY> ... Soy, and (Flax and Linseed), and (Canola, and Rapeseed) are all listed as “poisonous plants”, and the FDA recommends that if you are injured by them, to contact your local “Poison Control Center” in your area, (at ... <http://www.aapcc.org/>), or call 911. Soy acts like a fertilizer and fertilizes, feeds, cancer cells to help them grow.

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“Why” Soy Protein - Is In Breach of - WHO/Codex Standards

... <http://www.soyonlineservice.co.nz/Refs/Codex.htm> ... **old Link**
... <http://www.soyonlineservice.co.nz/articles/Codex.htm> ... **New Link** to new website format
World Health Organization, WHO

WHO/Codex General Standards for Soy Protein Products

WHO/Codex Standard 175-1989

6.3 (c) When tested by appropriate methods of sampling and examination, the product shall not contain other poisonous substances which may represent a hazard to health.

WHO/Codex General Guidelines for the Utilization of Vegetable Protein Products (VPP) in Foods CAC/GL 4-1989

4.1 VPP intended for human consumption should not represent a hazard to health.

Annex

The raw materials from which VPP are produced may contain naturally occurring toxic or anti-nutritional factors. Some of these factors may still be present in VPP after processing. In the light of the above observations it becomes important that prior to the use as human food, VPP be subjected to adequate testing to demonstrate safety and appropriate nutritional quality. A distinct VPP needs to be tested pursuant to this guideline only once, that is, to obtain a toxicological and nutritional profile for VPP. Prior history of safe use may be taken into account in the evaluation of a novel VPP proposed for general consumption, but this alone is not necessarily sufficient to preclude adequate pre-clinical testing by currently available, more objective, laboratory animal feeding studies, and, where applicable, studies using human volunteers.

1.4 Toxicological Safety:

The safety of the VPP should be predicted from information concerning methods of production, chemical and physical properties. This should be supported, where necessary, by safety data using laboratory animals.

2.4.1 Subacute Toxicity Studies:

The purpose of these studies is to delineate the toxic potential of VPP and to elucidate such problems as species sensitivity, the nature of gross and micro-pathological changes and the approximate dose level at which these effects occur. They also provide guidelines for the selection of dosage for chronic toxicity tests and any functional or biochemical studies that may be necessary.

2.4.1.3 Length of Study:

Subacute toxicity feeding trials should be at least three months duration.

2.4.2 Other Studies:

Following an appraisal of the source and the method of manufacture of the VPP together with the results of nutritional and subacute toxicity studies, the need for further studies including chronic, reproduction, teratogenic and mutagenic studies will be evaluated.

SOS comment: There is clear evidence that Soy Protein does not meet WHO/Codex Guidelines.

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The Isoflavones Present In Soy Protein Induce-(cause):
(“Why” Soy Protein - Is In Breach of - WHO/Codex Standards)
Continued

Subacute toxicity ... <http://www.soyonlineservice.co.nz/04thyroid.htm> . **Phytoestrogens Anti-thyroid agents**

Chronic toxicity ... <http://www.soyonlineservice.co.nz/articles/Brain.htm> . **Abstracts (3)**

- 1 1 1, 1 1 1, 1 1 1, 1 1 - Also see ... **Frying the Brain With Soy** ... page 63

1996 “Association of mid-life consumption of tofu with late life cognitive impairment and dementia: the Honolulu-Asia Aging Study,” - *White L, Petrovich H, and others, Fifth International Conference on Alzheimer's Disease, #487, 27 July 1996, Osaka, Japan.*

— There is evidence suggesting that estrogens modulate neural and synaptic plasticity during aging.
— “... We found an association of consistently high levels of tofu consumption in mid-life with low cognitive test scores (p=0.02) and (independently) with **Alzheimer's disease in late life**, controlling for all other relevant variables. The odds ratio for AD in persons who reported eating tofu at least twice weekly was 2.4 (95% CI 1.14-5.09), **compared with** persons reporting tofu consumption rarely or never ...”.

Reproductive toxicity ... <http://www.soyonlineservice.co.nz/04infertility.htm> . **Phytoestrogens, Nature’s contraceptives.**
Reproductive system damage ... Phytoestrogens can make animals infertile, what about People ??.

Teratogenic effects ... <http://www.soyonlineservice.co.nz/articles/Bdefects.htm> . **The Dominion, Feb 21, 2000,**
Embryo, monster making ... Deformities Found in Sons of Vege Mums.

Mutagenic effects ... <http://www.soyonlineservice.co.nz/articles/metzler.htm> . **Immune System Effects**
... <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

(9+) **Abstracts** - 1 1 1, 1 1 1, 1 1 1, 1 1 1 -

Causes cancer cells to grow ... DNA damage ... chromosome fragmentation and errors in chromosome orientation.

The potential oral hazard of phytoestrogens - has long been known - by food regulator such as the FDA.
During his presentation at the 3rd International Phytoestrogen Conference in 1995, FDA regulator Dr Michael Bolger made direct reference to the soy isoflavones causing infertility, uterine hypertrophy and testicular atrophy in rodents, liver disease and reproductive failure in cheetah and menstrual cycle effects on women. (Also, see bottom of page 8 ... the **TRUTH** about Fermented Soy).



Two Books
That Expose and Unmask The Corrupt Soy Industry

http://www.wholesoystory.com/About_the_Whole_Soy_Story.html ... **“The Whole Soy Story,”** by Kaayla T. Daniel, MS, Ph.D, CCN. With 30 chapters & 7 subsections, **new 2004 book tells the whole truth about soy, its many very serious health hazards, & real history of how soy got into our food supply.** It is all about fact and not fiction. This book presents and interprets the often contradictory evidence on soy and disease to determine what studies are valid, which justify hope, which are mere hype – and why, with a FAQ section.

“It is child abuse to feed a baby soy formula.”

<http://www.doctorsaredangerous.com/index.html> ... **“Take Control of Your Health & Escape the Sickness Industry,”** by Elaine Hollingsworth reveals in **Chapter 9** ... **“Soy - The Abominable Bean”**, at

<http://www.doctorsaredangerous.com/ChapterNine.pdf> ... just how we’ve been all conned because of corporate greed, bad science, and regulatory misconduct by most governments around the world. It explains how eating soy foods produces many very serious health hazards like cancer, it destroys your thyroid and leaches calcium from your bones (osteoporosis), and also why **“It is child abuse to feed a baby soy formula.”** All this and a whole lot more.

Want to Reduce Breast Cancer ?. Fish Oil is a Must

... http://www.mercola.com/2002/jun/5/fish_oil.htm ...

June 5, 2002

"... Differences in the actions of Omega-3 fats and Omega-6 fats have been observed on these genes.

** Omega-3 fats ... have been described to "reduce" cancer cell growth, (includes Fish Oils) ...

* Omega-6 fats ... have been found to "cause" cancer growth ...".

*Omega-6 oils, "... I strongly recommend avoiding ... sunflower ... corn ... "Soy" ... safflower ... "Canola" ... or products that contain these oils. **In other words, no hydrogenated or partially hydrogenated fats including ... margarine ... vegetable oil ... (vegetable)-shortening ... etc. These oils are full of Omega-6 fats and will only worsen your Omega-6 / 3 ratios ...".** Soy – (Flax, Linseed) – (Canola, Rapeseed) – are all listed in the FDA’s **Poisonous Plant database** ... <http://www.cfsan.fda.gov/~djw/plantox.html> . Over 685 scientific research abstracts listed, out of over 1,000 known, going way back to 1850, proving serious harm to human - animal health. (over 400 such abstract do exist for soy alone since 1907) Soy industry, food, health food industries and governments have all been lying to us, pages 5, 6, 7, 113, 119, 121 ... abstracts pages 29 – 96

**Omega-3 oils, (EPA, DHA), "... Acceptable oils are high quality ... extra virgin "olive oil" ... "Coconut oil" ... "avocados" ... "organic butter" ... better yet ... "Grass-fed organic butter ..." (ALA) in "Flax" causes prostate cancer cells to grow ... http://www.mercola.com/2004/jul/21/flax_seed_oil.htm ... and ... <http://www.ajcn.org/cgi/content/abstract/80/1/204> .

"... Generally our diet contains far too many omega-6 fats. Experts looking at the dietary ratio of omega-6 to omega-3 fatty acids suggest that in early human history the ratio was about 1:1 Currently most Americans eat a dietary ratio that falls between 20:1 and 50:1. The optimal ratio is most likely closer to the original ratio of 1:1 ...".

"... For most of us, this means greatly reducing the omega-6 fatty acids, & increasing the amount of omega-3 fatty acids we eat ...".

* * *

Fermented Soy ... Cancer Chemo-preventative ??

(Also see pages 5 - 7, 10, 21, 29, 31, 32, 36, 42, 48, 52, 65, 72, 74, 75, 81, 101, 104, 109, 113, 118, 121, 142)

. http://www.mercola.com/2004/aug/4/fermented_soy.htm .

The soy industry’s claim that "... fermented soy products like, Natto, Tempeh, Soy Sauces, Fermented tofu and soymilk, and Miso are particularly rich in the isoflavone aglycones, genistein and daidzein, which they say are believed to be cancer chemo-preventatives ...". The implication by the soy industry is that these natural occurring chemical compounds are good, for instance in cancer prevention, if they are consumed in natto or miso (not exactly staples of Western diets), when in fact it is exactly these same chemicals that are the endocrine disrupters which have so alarmed many independent scientists around the world. Genistein in particular is fingered, was proven, by FDA scientists, S.S. Kuan, O.J. Francis, et al, at the FDA's NCTR and the New Orleans Poisonous Plants laboratories, way back in 1991, as carcinogenic, estrogenic, cytotoxic, anti-thyroid, on research lasting over 3 months, Page 126... (see 10 th World Congress Report, pg. 527)

But, what soy industry also KNOWS but still NEVER tells people when claiming fermented soy is chemo-preventative is ... it all depends on the dose levels of these chemicals, [even though this principle has been a basic teaching since 1500's in the science of Toxicology-(see research by the famous Swiss physician "Paracelsus" ... <http://www.mindfully.org/Pesticide/Paracelsus-Dose-ToxicologyOct01.htm>).]. At high chemotherapy dose levels genistein & daidzein kills cells, and cancer cells. But the dose levels needed for this chemotherapy type responses, (the soy industry claims to happen from eating fermented soy), are also at dose levels far beyond those achievable at dietary consumption levels. So, their claim of chemo-preventative has no relevance at all when it comes to consuming these chemicals at dietary levels in soy or vitamin supplements. As the scientific research clearly demonstrates, at dietary levels genistein and daidzein disrupts and damages the immune and hormone system, and also causes a variety of health problems including a variety of cancers, and DNA damage.

This claim by the soy industry clearly shows the fallacy of seeking and promoting short-term results and ignoring long-term consequences, administering drugs to people who don't need them, a case of hidden mass medication upon the unsuspecting and unknowing public.

Fermentation only lowers the toxin levels, it doesn't eliminate them. To get the lowest toxin level, fermentation needs to be at least 2 years, as Asians do, not like in North America, where it can be shorter than 3 months, & using chemicalized fermentation methods. ... / 9

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[Sunlight Actually Prevents Skin Cancer](http://www.mercola.com/2002/apr/3/sun_prevents_cancer.htm)

http://www.mercola.com/2002/apr/3/sun_prevents_cancer.htm

“... Skin cancers are more likely related to the large distortion most people have in their Omega-6 and Omega-3 fat ratios ... The likeliest mechanism for a protective effect of sunlight is vitamin D, which is synthesized by the body in the presence of Ultraviolet B, UV-B ...”.

“... Most people believe that sun exposure causes cancer. Nothing could be further from the truth. As this study published in the prestigious Cancer journal, March 2002, indicates, **exposure to sun actually decreases cancer rates** ...”.

“... So the solution is not to splatter sun block on. Sun block can be quite “toxic”, and should be avoided by most people ...”

“... The sensible approach would be to limit sun exposure so you never get sunburned. **It is sunburn in conjunction with — excess omega-6 fats — that increases your risk of skin cancer.** But even with the potential increase in skin cancer, most skin cancers are relatively benign when compared with breast, colon, and prostate cancers that lack of sun exposure is associated with ...”.

“... So you can't have it both ways. Avoid the sun and don't change your diet and you will lower your risk of skin cancer, but increase your risk of far more common and deadlier cancers ... So why not change the fat content of your diet and use sensible sun exposure guidelines and reap the benefits of sunlight ?.

[Diet and Sunlight Linked to Breast Cancer Risk](http://www.mercola.com/2002/jan/26/diet_sunlight.htm)

http://www.mercola.com/2002/jan/26/diet_sunlight.htm

“... As for the role of sunlight, researchers found an association between latitude and breast cancer, suggesting that higher **UV-B exposure was protective**. UV-B rays spur the production of vitamin D in the body, it is likely the vitamin is behind the association he found in this study. Other research suggests vitamin D may help ward off cancer ...”.

“... Women who limit their exposure to sunshine will have lower vitamin D levels and an increased risk of breast cancer, in addition to an increased risk of osteoporosis ...”.

* * *

References ...

Want to Reduce Breast Cancer ? Fish Oil is a Must ... http://www.mercola.com/2002/jun/5/fish_oil.htm

British Journal of Nutrition, April 2002, vol. 87, no. 4, pp. 281-289(9), Abstract.

<http://www.ingenta.com/isis/searching/ExpandTOC/ingenta?issue=infobike://cabi/bjn/2002/00000087/00000004&index=1&WebLogi>
[cSession=O87ckEa0teymWCWQdwK7\]-1345150823091522580/-1052814329/6/7051/7051/7052/7052/7051/-1](http://www.ingenta.com/isis/searching/ExpandTOC/ingenta?issue=infobike://cabi/bjn/2002/00000087/00000003&index=1&WebLogi)

British Journal of Nutrition, March 2002, vol. 87, no. 3, pp 193-198(6), Abstract

<http://www.ingenta.com/isis/searching/ExpandTOC/ingenta?issue=infobike://cabi/bjn/2002/00000087/00000003&index=1&WebLogi>
[cSession=O87ckEa0teymWCWQdwK7\]-1345150823091522580/-1052814329/6/7051/7051/7052/7052/7051/-1](http://www.ingenta.com/isis/searching/ExpandTOC/ingenta?issue=infobike://cabi/bjn/2002/00000087/00000003&index=1&WebLogi)

Sunlight Actually Prevents Skin Cancer ... http://www.mercola.com/2002/apr/3/sun_prevents_cancer.htm

Cancer, March 2002; 94:1867-75

Diet and Sunlight Linked to Breast Cancer Risk ... http://www.mercola.com/2002/jan/26/diet_sunlight.htm

Cancer, January 1, 2002; 94:72-281

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .
Pet Food, farm animal foods

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Soy - “Weakens” - Your Immune System

<http://www.mercola.com/2002/jun/8/soy.htm>

Known still Ignored
This 2002 study funded by
“United Soy Bean Board” and the
“Illinois Council on Food & Agricultural Research”

Hormone-like compound found in Soy products, including Soy-based infant formula & menopause remedies, may impair immune function

When mice were injected with the **“plant estrogen” genistein**, which is found in **Soy products**, levels of several immune cells dropped and the thymus, a gland where immune cells mature, shrank.

Of course, people eat rather than inject Soy products, but the **thymus also became smaller** in mice that consumed genistein in their diet. This is particularly concerning, researchers say, since the resulting blood levels of genistein in the mice were lower than those reported in human babies fed soy formula.

A few reports from the late 1970's and early 1980's suggested that a soy-based diet impaired infants' immune functions. About 15% of infants in the US, or roughly 750,000 children, consume soy-based formula each year.

Proceedings of the National Academy of Sciences, (May 21, 2002;99:7616-7621) ... see PubMed at ...
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12032332&dopt=Abstract .

.....

Dr. Mercola’s Comment:

It is quite amazing that this **study** was actually published, as the findings were quite (-)negative for soy and yet it was **funded by the United Soybean Board and the Illinois Council on Food and Agricultural Research**.

Amazing, it seems that eventually the truth on soy does reach the service, despite the massive funding by the edible oil industry to convince the public that soy is the greatest thing that ever hit the planet to improve your health. **See the abstract of the 1997 Lancet study at ...**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9217716&dopt=Abstract .

1997 “Exposure of infants to phyto-oestrogens from soy-based infant formula,” – Setchell K.D., Zimmer-Nechemias L., Cai J., Heubi J.E., Lancet. 1997 Jul 5;350(9070):23-7., Clinical Mass Spectrometry Center, Children’s Hospital Medical Center, Cincinnati, Ohio, 45229, USA.

... (See bottom of page 36)

The abstract above shows that **Soy** has glycosides of **genistein** and **daidzein** or **plant based chemicals that mimic estrogen**. They possess a wide range of hormonal and non-hormonal activities. The daily exposure of infants who consume soy formulas was **6-11 times higher** than adults consuming soy foods.

The blood concentration of these hormones was **13,000 to 22,000 times higher** than estrogen in the blood. **The authors of this article speculate that this concentration may be sufficient to exert biological effects, whereas the contribution from breast-milk or cow-milk is negligible.**

Soy formula is one of the worst foods that you could feed your child. Not only does it have profoundly adverse hormonal effects as discussed above, but it also has over 1000 % more aluminum than conventional milk based formulas

I don't recommend either, but if one, for whatever reason, cannot breast feed, then non-soy **Carnation Good Start** until six months and **Carnation Follow-Up** after that seem to be the best commercial formula currently available. The milk protein is hydrolyzed 80% that tends to significantly decrease its allergenicity.

Continued ...

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Soy “Weakens” Your Immune System

<http://www.mercola.com/2002/jun/8/soy.htm>

... Continued ...

It is also important to note that when breast-feeding it is wise to avoid drinking milk as it has been shown for several decades that the milk will pass directly into the breast milk which can cause potential problems in the infant.

Related Articles:

Pregnant Women Should Not Eat Soy , at ... http://www.mercola.com/1999/archive/pregnant_should_not_eat_soy.htm .
Soy Formulas and the Effects of Isoflavones on the Thyroid , at ... http://www.mercola.com/2000/feb/13/soy_thyroid_disease.htm .
How Safe is Soy Infant Formula? , at ... http://www.mercola.com/2001/jun/13/soy_formula.htm .
Experts Dispute JAMA Soy Infant Formula Study , at ... http://www.mercola.com/2001/sep/15/soy_formula.htm .
Soy Milk Is Safe! That Is What the Formula Industry Says , at ... http://www.mercola.com/2001/aug/25/soy_milk.htm .
Australian Pediatric Soy Protein Formula Policy , at ... http://www.mercola.com/2001/sep/22/soy_protein_formula_policy.htm ,

* * * * *

... More On Soy’s Fraudulent History ...

Also see pages 4, 5, 6, 7, 18, and 105, as well as (12, 100, 107, 121)
Concerns about the potential carcinogenesis of modern soy is not new.

- 1.) The Committee for Food Safety was worried about it in 1966, the definitive textbook “**Chemical Carcinogens**” published by the American Chemical Society in 1976 had a chapter titled “**Plant Carcinogens**” that identified soy isoflavones as “**known**” carcinogens.
- 2.) The “**Life Sciences**” Committee of FASEB in its 1978-9 “**Evaluation of Soy Products for Human Consumption**” for the Food and Drug Administration (SCOGS-101 under contract to the FDA # 223-75-2004) **declined GRAS determination because of the risks of carcinogenic ... nitrosamines ... lysinoalanines ... and nitrite** occurring during the modern processing. (Not to mention the other scientifically documented natural occurring carcinogenic chemicals is soy called **genistein** and **daidzein**).
- 3.) Moreover in 1999, an application by Archer Daniels Midland Corp for GRAS determination of GRAS (GRN 00001) for isoflavones was **declined** due to the failure of the applicant to reveal health risks.
- 4.) **Soy protein does not have GRAS determination.** Soy protein was slipped into the food chain about 1959 even though the developmental research (funded by ADM and Mead Johnson) demonstrated that it caused serious infertility problems in laboratory rats and their offspring. This is recorded in a series of papers in the “**Journal of Nutrition**” by **Schultze, Liener et al** in the 1950's The only evaluation was in 1979 by the “**Life Sciences**” section of FASEB, and soy protein **failed** because of the risk of **nitrosamines** forming in the heat treatment. FASEB assumed the heat treatment was removing the **natural poisons** and did not evaluate their safety at all. You will find a fuller discussion of **GRAS** in the Home Page of www.soyonlineservice.co.nz “**Trouble for Soy Protein**”, including Dr Fitzpatrick's opposition to the grant of health claim labelling by the FDA. The material in ... <http://www.soyonlineservice.co.nz/06doses.htm> ... “**Doses Simplified**” gives an idea of how toxic the levels of isoflavones are in the products.
- 5.) <http://www.soyonlineservice.co.nz/04cancer.htm> . (**Phytoestrogens – Cancer**) ... **Why does the Soy Online Service Webmaster, Dr. Mike Fitzpatrick PhD**, an environmental toxicologist and a scientist of recognized international expertise, expresses the opinion that “**the lowest form of life on the planet**” is anyone who claims soy and isoflavones are protective against cancer ... **without also revealing** ... that there are numerous world wide creditable scientific research studies, (including those by US Federal Government research institutions), which show that Soy ... 1.) damages DNA, chromosomes and the immune system, ... 2.) cause cancer, ... 3.) cause existing cancer cells to multiply, ... 4.) cause non-cancerous tumors to turn cancerous ??. **Because**, those that make this claim are guilty of giving false hope to millions of people, with or without cancer, by withholding and suppressing this valuable life-saving scientific information. But even far worse than all this, those that make this claim are placing innocent consumers at a far greater risk of contracting this same horrendous disease that all consumers are afraid of and are desperately trying to avoid. I agree.

Also see pages 12, and 98 – 105 – 119 – 127

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Soy Online Service Answers 5 Questions **An Introduction: The History Of How Soy Got Into Our Food Supply**

... **This 2nd Reply is 1st** ...

----- Original Message -----

From: [Valerie & Richard James](#) , Soy Online Service

To: [Gerald Hernesmaa](#)

Sent: Wednesday, December 10, 2003 11:29 PM

Subject: Re: Re: Urgent ... Can you help please ?? ... Need answers to these 5 questions !!

OK Gerald. In brief. (An Introduction ... A plausible conspiracy theory consistent with [known](#) facts and the USA National Security Agency minutes.)

In the early 1950's the British Government was hoping to rebuild the empire that it had largely lost as a result of **WW-2**. The principle used was the one that had worked in the past. That is, to have **colonies** producing raw materials for shipment to **Britain** for processing and re-export. That is how Canada, NZ, Australia, Argentina and numerous others including the USA got started.

For West Africa, it became known as the British Groundnut. **Scheme** ... grow peanuts and ship them to the UK for protein extraction. The extraction plants were built in the English Midlands .

The **CIA** did not want a strong Britain again (remember the Suez canal debacle a couple years later in **1956?**). The US Dept. of Agriculture was besotted with using the toxic waste from soymeal extraction as an export and its brief was solely to promote US agriculture. Even the laboratory was named the Northern Resource Utilisation Center at Peoria, Ill.. Agricultural exports were to be pushed...nothing less, nothing more.

So a connivance was **fabricated**. Undercut the British peanut protein with cheap US soy meal. **LIBERTY ships** were pulled out of mothballs, export subsidies were arranged, and shipments of all-American soy hit the West African beaches in **1954**. The British groundnut scheme became totally uneconomic, the British government lost millions of pounds and ultimately its West African Colonies... Ghana, Nigeria, Sierra Leone. Liberty ships were useful again at last.

What a coup for the US spooks!

There was an added bonus. The US government, esp Dept of Agriculture scientists, knew soymeal caused infertility. It was no secret...it was published by [Chang et al](#) for a start in **1953**. ***(They probably would have thought, at the time, What a win - win - win !!. Use the US ships to promote US agriculture, reduce the blacks, protect the Georgia peanut growers and damage the British Empire all in one ploy. How nice to send all those infertility foods to the black populace. That all holds up.)*** What they probably did not know was that the infertility chemical in soybeans (genistein) was also a powerful disrupter of immune systems. It may have opened up the West Africans' immune systems to an invasion by a little known type of monkey herpes virus that we now call HIV, and its result as Acquired Immune Deficiency Syndrome.

It may not be all correct, but it hangs together and is **historically correct** per time line. And it was postulated by a very competent biochemist in **1993**.

Cheers Dick

.....

Remember ... To protect your health and your families health, be sure to read the [ingredient labels](#) on all of the foods you buy. **Also ... be very, very careful about eating in "Restaurants" and in "Hospitals", as they do not list the ingredients in their foods. Vegetable oil ... has not been real vegetable oil, made from a varitey of vegetables, not including soy, since the early 1970's. Since then it is ... either "Soy" or "Canola" or both, and it rarely includes cottonseed, peanut, palm oil. Genistein in soy is proven to be and is classified as a [Topoisomerase II-poison](#).**

Note: Make sure the [label](#) on your vitamins, minerals, medications says ... [contains no Soy](#) ... or ... [contains no Soy ingredients](#) ... / 13

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(Also see ... <http://www.proparanoid.com/truth.htm> ... “25 Ways To Suppress Truth, The Rules of Disinformation”)

5 Questions

The “Answers” with this 1st reply

----- Original Message -----

From: "H. Michael Sweeney", hms@proparanoid.com
To: "Gerald Hernesmaa" healthwise933@shaw.ca
Sent: Tuesday, December 09, 2003 7:38 PM
Subject: Re: Urgent ... Did you receive my package containing the Soy Research Paper ... and the \$10.00 USA money order

----- Original Message -----

From: [Valerie & Richard James](#) , Soy Online Service
To: Gerald Hernesmaa
Cc: Irvin E. Liener
Sent: Tuesday, December 09, 2003 11:34 PM
Subject: Re: Urgent...Can you help please ??...Need answers to these 5 questions !!.

From: Mr. H. Michael Sweeney ... Yes, thank you. Just picked it up today. (mailed him a copy of our Soy Research paper and Soy Pamphlet). The newsletter will be mailed tomorrow, barring unexpected disaster, like runing out of ink !.

The soy material is another matter. Not quite up my ally, but very interesting topically for a number of reasons you may not have considered. I'm throwing these (5 questions) at you for your comments, in case you know the answers. They are probably too left field and may leave us both wondering.

Questions & Answers:

From: Richard and Valerie James ... Hi Gerald, Ok, Will try to keep it short. Jimmy Hoffa is not our line !, But the C I A theory is a possibility.

1) Who knew all the negative ramifications and when did they know it? If they knew it in the late **1950's** and **60's**, I'm thinking that may be why Jimmy Hoffa got into **Soy beans** in a big way, I'm thinking he likely partnered with **CIA** to do it (see next.).

The Soy Online Service

Answer ... The original projects to extract the protein from left- over **soymeal** after oil removal were done with funding by ADM and Mead Johnson in the early **1950's**. Results of rat -feeding trials were published in subsequent issues of the **Journal of Nutrition**, by **M.O. Schultz et al**, in around **1953/4/5**. We have those papers but they are a rotten layout and not suitable for putting on a website as they have no opening abstracts. **The rats had troubles creating baby rats and the few baby rats they created had poor reproductive performances. A first clue that this stuff crosses generations.** It would take us a while to get to the papers for more detail and we are flat-out with other urgent stuff. As we recall some work was at University of Minnesota and other was at the Dept of Agriculture Resource Utilisation Center, Peoria, Illinois.

Subsequent work was at both Peoria and the D of A facility at Albany Ca.

The scientists all knew they were not removing the “estrogens” or “sterols.” That is published in a paper by Eldridge, Nash and Wolf in the **1967** Jour of Food Chemistry. We have that here too. In fact Walter J Wolf would be high on our list of most harmful scientists in history. There also was research in South Carolina by Carter Matrone et al on the estrogenic effects of **soy** on mice in the **1960's**.

All this is in published academic papers. The first published analysis of **estrogenic** content of **soy** protein was by Murphy in **1982**, though the UK Central Veterinary lab did analysis in **1980** and compared estrogenic effects of **human-use soy**...16 ppb DES and 24 ppb DES in the two samples tested....with diethylstilbestrol. You can get that in ... <http://www.soyonlineservice.co.nz/04soy&DES.htm> ... "**Soy and DES**" .

(and also at ... <http://www.soyonlineservice.co.nz/Refs/murphy.htm>)

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Questions & Answers: Cont ...

2) What would be the effect of **Soy** on someone who was taking anti depressants (SSRIs)? This is a **CIA** developed product class which I describe as an enabler for select mind control applications. Yes, it can be beneficial for those with true mental imbalances, a normal person it makes them more susceptible to various MC attacks and programming methods. Mn These products went into development in the mid **1960's**, if I remember my dating. Prior to that, **CIA** was experimenting with a WIDE range of products, including LSD (for the same purpose) and I'm wondering if that included Soy extracts or other Soy products, byproducts, or compounds.

Answer ... Don't know Nor does anyone else we are aware of.

3) In like manner, what would be the effect of Soy be on a schizophrenic or paranoiac personality? Would it elivate, agrivate, or excentuate, be neutral, or reduce or impede the symptoms? Same reason for asking, since certain forms of MC targeting seems to selectively focus on individuals with these personalities. Further, targeting on 'normal' people long term produces these personalities in the end, especially when augmented with SSRIs.

Answer ... It would, based on the rat research that is published, send them into low-earth orbit. A major windup and is confirmed by numerous parent-anecdotes. The aggressiveness has been almost beyond control. Here's a recent one ...

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12618915&dopt=Abstract .

2003 “The soya isoflavone content of rat diet can increase anxiety and stress hormone release in the male rat,” – Hartley D.E., Edwards J.E., and others, *Psychopharmacology (Berl)* 2003 Apr 5; 167(1):46-53. Epub 2003 Mar 05., *Psychopharmacology Research Unit, Centre for Neuroscience, Hodgkin Building, Kings College London, Guy's Campus, SE1 1UL, London, UK.* david.2.hartley@kcl.ac.uk

We had it in our family too. Teenagers at a time of hormonal change are most vulnerable. In fact the peripubertal time is a risk age that was identified by Clarkson, Anmthony and Hughes et al in a paper published in **1995**.

4) Where does Eli Lilly stand with respect to anything **Soy** - any participation, studys, products, etc? They were very connected to early MC work and to the Bush family.

Answer ... Eli Lilley is not into soy, soy supplements or drugs with **pseudo-soy** chemicals.....as far as we know

5) Are you aware of any military or intelligence community projects or research involving Soy for any purpose, and if so, what was its nature? Can you point me to references that discuss it?

Answer ... Not as far as we know. Professor XXXXX told us in a **1998** personal conversation that the US Army knew soy protein was toxic when they put it into C-rations in the Korean war...but as the users had a low survival outlook anyway, a bit more risk was deemed acceptable **(That it not quotable without Irv's permission as he was on the Army's project).**

Privately we often wonder if the Gulf War syndromes may have been connected.!

This is all top-of-the head stuff. More detail would take us hours which we do not at present have.
Cheers Dick.

Mr. H. Michael Sweeney ends with saying ... ”Regardless of, if you have any answers on the above that I might find useful, I have a couple of other people who would likely be quite interested in your material, and who might be better suited to helping to promote it on their Web sites. If you **DO have some useful answers, that list will be longer. I'll make gentle inquiries and suggest they contact you directly. One is local, and I'll give them the packet, (soy research paper and soy pamphlet), you sent me to reduce your expenses (lot of work put into it, too - great job!) ...”**

Best , Harry .

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----- Original Message -----

From: [Valerie & Richard James](#) , Soy Online Service
To: Tinawinwood@XXXXXXXX
Cc: [Mike](#)
Sent: Monday, December 15, 2003 4:47 PM
Subject: Re: 3 generations of soy problems

Hello Tina. We help the www.soyonlineservice.co.nz webmaster with his mail. Thank you for your input, though we are really shocked to hear this. However it is not the first time by any means, and by **1993** we knew that the reproductive system **effects of soy in the diet could carry down at least three generations.** A CANADIAN ASSOCIATE OF OURS HAD FOLLOWED IT IN DAIRY COWS FOR **FIVE** GENERATIONS BY **1995.**

For the good of future generations of your family you should all try to avoid all exposures to estrogenic foods. (See SOS guidance) ... and this includes soy oil, alfalfa, and flaxseed. Brassicas should be thoroughly cooked

Your comments about "news" are a bit sad as, without being totally paranoid we can guarantee that **most major media have an embargo on criticising this industry. We know of countless tales that have been written by journos who think as you do, but have ended up in the Editor's/ Publishers " too hot " bins.** Text is the gray stuff between adverts.....and if an industry like this blacklists a publication, the effects on revenue can be horrendous. They are also adept at using the threat of lawsuits. The one at ... <http://www.soyonlineservice.co.nz/articles/Sanitarium.pdf> ... **"Teams of Lawyers"**, (and also at ... <http://www.soyonlineservice.co.nz/files/Havoc.htm>), is just a small example which happened to be reported in a gossip paper. **Sanitarium was the pinch-hitter for Protein Technologies, the DuPont subsidiary.** They lost but it cost the radio station's insurers a bunch to make it go away. Most insurers want to approve publication if the word "sue" etc is mentioned. As most editors ask that the industry be interviewed too, the industry threatens to sue. We know it as "censorship by insurance clerk." If you go to **HOT READING** just regard it as a miracle that that much got published. Before the NZ scientists got started stuff like that did not exist.

Do your best locally, **Best wishes**, Valerie.

----- Original Message -----

From: Tinawinwood@XXXXXX
To: divulge@xtra.co.nz
Sent: Monday, December 15, 2003 1:15 PM
Subject: 3 generations of soy problems

I have been researching the **negative effects of soy** for several reason, **for the past week i have been on a soy based diet and have found that i gained 9 lbs in 7 days, highly unusual for my body,** i went online to research if the change in my diet could be the cause and found the information about the ability of **soy to depress the thyroid gland**, needless to say I have removed the **soy** in my diet and am hoping to reverse this sudden weight gain, **more importantly my vegan daughter gave birth to a son this october who was born with hypospadias,** she researched the cause and only found information saying that the pesitcides in her **vegan diet** may have been the cause, we now know have reason to believe **it was her daily consumption of soy products,** her baby was scheduled to be weaned this week from breast milk & be put on **soy formula**, of course now that will not be the case, my son who was allergic to milk when he was born **29 years ago** was put on **prescription soy formula** and **is going for surgery to have his enlarged breasts reduced**, my doctor never told me it was not tested back then, and my daughter peditrician just told her last week that **soy formula** was okay for our grandson....i am so surprised this **soy issue** is not in the forefront of the news and tests need to be done,
Sincerely, tina winwood

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .
Pet Food, farm animal foods

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at levels above those found in traditional diets
The Risks Of Abandoning “The Precautionary Principle”
by Soy Online Service ... <http://www.soyonlineservice.co.nz/>
“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

----- Original Message -----

From: [Valerie & Richard James](#) , Soy Online Service
To: [Walter Aaron Foster](#)
Sent: Tuesday, December 16, 2003 4:39 PM , (**Note:** Time Zone differences)
Subject: Re: [thank you!](#)

Dear Heather,

We are terribly sorry to read this. If you would like to help on a cold winter eve, one way is to forward by email your letter and our reply to every State medical association. They mostly have sites with a list of Staff and Officials. Ask them to pass it to their County branches and advise all members. Just a 5% hit rate may prevent some harm somewhere. We've done that before but got absolutely no feedback, so have no idea if it made any difference.
Best Wishes, Valerie.

.....

----- Original Message -----

From: [Walter Aaron Foster](#)
To: webmaster@soyonlineservice.co.nz , Soy Online Service
Sent: Wednesday, December 17, 2003 4:27 AM
Subject: [thank you!](#)

Thank you for the service you are doing by having this site. As the mother of a wonderful 4 year old boy, I'd like to add my 2 cents regarding the extreme health hazards of soy. **My son was born with a “3rd degree hypospadias” which required 10...yes ten surgeries to correct.** He had the worst hypospadias a male can have, where **his urethra's opening appeared at the base of his genitals.** How did this utter nightmare occur? **Well, little did I know that the DAILY tofu and soy milk I was drinking for the past decade** (I was foolishly a vegan) was highly estrogenating my already estrogenated body. Healthy women make enough estrogen as it is. **The phyto estrogens disrupted my fetus' development.** I have met other women who had son's with hypospadias and **they ate soy daily all during pregnancy.** Enough said.
Thank you for helping the public realize how detrimental soy is, and that it's really just junk food. **Regards, Heather**

.....

“Hypospadia”

<http://www.amershamhealth.com/medcyclopaedia/Volume%20IV%202/HYPOSPADIA.asp>

“... A congenital malformation of the urethral groove and urethral canal, resulting in an abnormal opening on the ventral penile surface. On physical examination, the external urethral meatus can be found anywhere on the ventral aspect of the penis, from just proximal to its normal location to the perineum. It is associated with failure of normal testicular descent and malformations of the urinary tract ...”.

http://health_info.nmh.org/Library/HealthGuide/IllnessConditions/topic.asp?hwid=rt1129

“... because of abnormalities in their chromosomes or endocrine system ...”.

See below, just some of many abstracts ... **DNA damage** ... **Chromosome fragmentation & errors in Chromosome orientation** at ... <http://www.soyonlineservice.co.nz/04immunefunction.htm> ... **and** ... **NCBI, PubMed, the USA's National Center for Biotechnology Information.** Over 15 million citations for biomedical articles from the present and going back to the 1950's (National Library of Medicine and National Institutes of Health).

- 1989** - http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=2548712&dopt=Abstract .
- 1998** - http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9729267&dopt=Abstract .
- 1999** - http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10086720&dopt=Abstract .
- 2000** - http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10762754&dopt=Abstract .
- 2002** - <http://www.giftinfo.uni-mainz.de/EXCLI/volumes/Vol1/2002volume1pp8-14.pdf> .

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Also see pages 105 - 113 of this 144 page Soy Research Paper

Example, this **2003 news research story** below from ... http://alberta.indymedia.org/news/2003/03/6009_comment.php provides a clear and undeniable example of the documented proof of the attempted and mostly successful **suppression & cover-up of the truth** about the harmful side-effects to human and animal health of **BGH growth hormone in milk**. The same type of cover-up around the world can easily be proven with respect to the information about the harmful side-effects of eating Soy. This news article and legal ruling shows why 99% of the research and its information on the many health hazards of eating soy does not reach or get past the **news media** in order to inform the public. **Also see** ... “Hidden Danger in Your Milk ?” at ... <http://www.foxBGHsuit.com> , BGH growth hormone.

Some of us know very well that the goal of the **news media** is about **KEEPING NEWS AWAY FROM** people. In the former Soviet Union, folks knew that their press was controlled. In North America, it's much worse, because folks **THINK** that they have a **FREE**, democratic press, when in fact, the press has been controlled, manipulated, fabricated and distorted for years !!. It's **Brainwashing** at its best and most effective !.

Appellate Court Rules Media Can “Legally Lie”

http://alberta.indymedia.org/news/2003/03/6009_comment.php

By Mike Gaddy, Published 02. 28. 03 at 19:31 Sierra Time

On February 14, 2003, a Florida Appeals court ruled **there is absolutely nothing “illegal” about lying, concealing or distorting information by a major press organization**. The court reversed the \$425,000 jury verdict in favor of journalist **Jane Akre** who charged she was pressured by Fox Television management and lawyers to air what she knew and documented to be false information. The ruling basically declares it is technically not against any law, rule, or regulation to deliberately lie or distort the news on a television broadcast.

On Aug. 18, 2000, a 6-person jury was unanimous in its conclusion that Akre was indeed fired for threatening to report the station's pressure to broadcast what jurors decided was “a false, distorted, or slanted” story about **widespread use of growth hormone in dairy cows**. Court didn't dispute the heart of Akre's claim, that Fox pressured her to broadcast a false story to protect the broadcaster from having to defend the truth in court, as well as, suffer the ire of irate advertisers.

Fox argued from the first, and failed on three separate occasions, in front of three different judges, to have the case tossed out on the grounds there is no hard, fast, and written rule against deliberate distortion of the news. The attorneys for Fox, owned by media baron Rupert Murdoch, argued the First Amendment gives broadcasters the right to lie or deliberately distort news reports on the public airwaves.

In its six-page written decision, the Court of Appeals held that the Federal Communications Commission position against news distortion **is only a “policy,”** not a promulgated law, rule, or regulation.

Fox aired a report after the ruling saying it was “totally vindicated” by the verdict.

.....
See ... <http://www.hairyeyeball.net/jotbook/archives/001530.html> "... In other words, in a layman's reading, Fox did not order her to do anything illegal, only something that Fox could get its license yanked for by the FCC. Well, hmmm, actually, come to think of it, that means there's no "law" against it, only a regulatory "rule," and not an "adopted rule."

“The **Florida whistle-blower's law** at ...

http://www.flsenate.gov/Statutes/index.cfm?mode=View%20Statutes&SubMenu=1&App_mode=Display_Statute&Search_String=&URL=CH0448/Ch0448.HTM , ... specifies that an employee must have been order to break a "law, rule, or regulation." Once again, fine slicing and dicing, Florida jurists ...".

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Want to know "why" you don't hear about the many health hazards of Soy ??.

Also see pages 105 - 113 of this 144 page Soy Research Paper
... Continued ...

Appellate Court Rules Media Can Legally Lie

... Continued ...

----- Original Message -----

From: [Valerie & Richard James](#) , Soy Online Service

To: [Gerald Hernesmaa](#)

Sent: Tuesday, December 20, 2003 2:36 PM ... **and** ... December 20, 2003 2:38 PM

Subject: Re: "News Media Can Legally Lie" ... The Suppression of Truth Is Now Legal ... how convenient !!.

Hi Gerald

We have known this for years.... and in NZ we suffer from Heinz controlling our biggest media empire....Wilson and Horton ...with 42 papers, 53 radio stations and the two biggest magazines in this little country. **Camille Guy** suffered from exactly the same treatment here. Lost her job, was sent to "Conentry" and blackballed.

Dick.

... and ...

Hi Gerald

Further to our reply to this (topic), a Los Angeles lawyer has pointed out to us that - **the FDA and its employees have legislative immunity and can lie with no fear of being held accountable.** Which is what they did in approving a "health claims" for soy.

Dick.

.....
Einstein said, "...the world is a dangerous place to live in, not because of the people who are evil, but because of the people who don't do anything about it...".

Soy, The *Deadly* Stealth Ingredient

Remember to read the ingredient labels on all of the foods you buy !!.

If Soy Isn't Harmful, Why Is It Hidden ??.

Found in thousands of ... processed ... canned ... frozen ... junk foods ... Vitamins ... Prescription medications ... etc.

"Hidden soy" ... where you wouldn't expect to find it, as in ... up to 90 percentage of hospital foods feed to staff, patients, including cancer patients ... even protein drinks served to cancer patients in hospitals and in cancer clinics ... **vitamins, minerals, Medications ... liquid in vitamin E capsules ...** almost all candy ... regular ice cream ... all regular salad dressings ... mayonnaise ... a variety of restaurant foods including burgers, french fries ... Kentucky Fried Chicken ... store baked chickens ... hamburger meat in food store meat dept.'s ... some canned tuna's ... airline foods ... large percentage of baked goods like bread, cakes ... fruit drinks ... lard, margarine ... dairy ... whipped cream ... breakfast cereals ... potato, corn chips ... hot dogs ... Baby foods ... diet beverages ... Campbells Soups ... pet foods ... etc.

"Undeclared soy" ... Soy that is not listed on the food or medication ingredient labels, as in ... Prescription medications ... vitamins for children and adults ... **MSG is from soy...** food manufacturers can be careless and neglect, or purposely neglect to mention soy, or the ingredients have **changed** and the label hasn't caught up ... cross-contamination caused by soy used in other products produced at the same facility ... soy dust in the air from the bulk bins at health food stores ... trace amount of soy that has rubbed off from a variety of cardboard packaging, (food, non food packaging), in which soy protein isolate has been used as a bonding ingredient.

The 8 "Aliases" of soy - ("False names - also known as") ... Commonly used ingredients that people don't recognize as being soy are ... "Vegetable oil" ... or ... "Vegetable Shortening" ... or ... "textured vegetable protein" ... or ... "bouillon". These may also contain canola, or both soy and canola. Then there is ... **"MSG" which is made from soy ... <http://www.truthinlabeling.org/> ... Truth In Labeling.** Three more names are **"Natural Flavoring" ... "Vegetable Flavoring" ... "Hydrolyzed Protein or Vegetable Protein"**.

Note: Make sure the label on your vitamins, minerals, medications says ... contains no Soy ... or ... contains no Soy ingredients ... / 19

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[Want to know “why” you don’t hear about the many health hazards of Soy ??](#)

Also see pages 105 - 113 of this 144 page Soy Research Paper

... Continued ...

----- Original Message -----

From: [Valerie & Richard James](#) , Soy Online Service

To: [Randy Kay and Beatrice Ekwa Ekoko](#)

Cc: [Mike](#)

Sent: Sunday, December 21, 2003 12:17 PM

Subject: Re: [precocious puberty ?](#).

Hello Beatrice.

We help the webmaster with his mail. Yes, she has been subjected to those risks.....in fact both your daughters have been. **“Health Canada” [knew specifically of this likelihood in December 1995 and ever since have deliberately hidden this information from mothers even though by Canadian law it should have been revealed to you.](#)**

If you go to ... www.soyonlineservice.co.nz Hot Reading, you will see an internet link to an essay by the **American Endocrine Society called ... “Pseudo Puberty”** at ... <http://www.emedicine.com/ped/topic1881.htm#> . At page 4 they say that excess **soy** consumption can cause it. Our webmaster believes that exposing children to any estrogens is excessive.

We suggest you write to your Minister of Health expressing your dismay.

Good Luck Valerie.

----- Original Message -----

From: [Randy Kay and Beatrice Ekwa Ekoko](#)

To: webmaster@soyonlineservice.co.nz

Sent: Monday, December 22, 2003 5:04 AM

Subject: [precocious puberty?](#)

Hello.

from the age of 18 months, when my daughter weaned herself, up until I discovered a breast bud on her chest at age 5 1/2 years old, my daughter **drunk soy “milk”**. Could this be the reason **she started to develop breasts?** She is also very tall for her age(8)

She now takes Traditional Chinese Medicine to slow down the development.

I also fed my younger daughter [soy products from age one](#), when I was advised not to feed her diary products as she had chronic ear infections. She stopped at 18 months when we moved and her ear infections cleared up. I am worried that she too might show signs of early puberty like her sister.

Looking forward to hearing from you.

Sincerely,

Beatrice Ekoko

Hamilton, Ontario

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----- Original Message -----

From: [Valerie & Richard James](#) , Soy Online Service

To: [Sheila](#)

Sent: Wednesday, June 23, 2004 8:50 PM

Subject: Re: soy/low thyroid connection

Hello Sheila

We help the webmaster with his mail. It's good to hear a few doctors are aware of the dangers. Most conventional ones still have the notion that if they have not heard of something, therefore by definition it cannot exist. [The God Complex](#).

This is the definitive work from the FDA's own scientists ...

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9464451&dopt=Abstract .

1997 Anti-thyroid isoflavones from Soybean; isolation, characterization, and mechanisms of action, *Biochem Pharmacol* - Nov 1997; 54(10):1087-96, National Center For Toxicological Research, nctr

You are recounting classic secondary signs of hypo-thyroidism and your physical and mental health are likely to improve if you avoid all soy (see SOS Guidance) Also be wary of isoflavone supplements, flaxseed, alfalfa and soy oil, all of which are estrogenic and can destabilize your thyroid

Good Luck, Valerie

.....

----- Original Message -----

From: [Sheila](#)

To: webmaster@soyonlineservice.co.nz

Sent: Wednesday, June 23, 2004 5:52 PM

Subject: soy/low thyroid connection

I drink about a glass to two glasses of soy milk a day and eat tofu about twice a week. I was diagnosed with hypothyroidism through my acupuncturist in January of **2004** and am on something called Thyrostim. My hair was falling out prior to being put on Thirostim Also, I was depressed and got hot/cold flashes. I am thirty one years old.. **My acupuncturist has also put me on a strict alkalizing diet plan, but soybeans and tofu are OK with this diet plan, he says.** I even decided to go Vegetarian a month ago. Even though my hair has stopped falling out, I feel moody and depressed and have gained weight and am not even eating that much.

Today I visited a natural alternative healing doctor and he told me to stop the Soy altogether because of my thyroid problem. **He told me to type in the “Dangers” of Soy on the internet and here I am. This is all news to me. I am actually shocked. I am now going to dump out my soy milk in the fridge and cupboards. I will report back on how I feel in a couple of weeks after being off Soy completely.**

Sheila in the U.S.

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l ; l

Bush’s “Sound Science”, (Is No Science At All), Turning a deaf ear to reality — by David Schubert, July 9, **2004**, Organic Consumers Association ... <http://www.organicconsumers.org/corp/bushscience071604.cfm> .

“... Much of the justification for this repression of scientific communication **falls under the “Orwellian concept of sound science,”** which is clearly understood by the scientific community **to mean the “misrepresentation” of scientific data** to reflect the administration's political **and** social agendas ... **This political manipulation** of U.S. science began well below the level of public awareness within days after the current administration took office, **2001. Highly respected scientists on dozens of advisory committees were replaced with individuals who promote "sound science" as defined by industry and the religious right.**

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Soy

The Miracle Food or Pandora's Box?

Researched by Gerald, volunteer, Health Action Network Society
Pamphlet <http://www.hans.org/>

What has science been telling us? ... What does history reveal?

"Current evidence for the beneficial effects of soy requires a full understanding of potential adverse effects as well."

Dr. D. Doerge, scientist from the National Center for Toxicological Research.
The genistein in soy is a Topoisomerase II-poison

Quoted here are many of the scientific research studies on soy spanning the years 1907 through to the present.
Updated: June 2004

Soy Blocks Vitamin and Mineral Absorption

Studies indicate that soy (organic and non-organic) causes increased requirements for vitamins E, K, D and B12. Phytic acid from SPI blocks the absorption of essential minerals and creates deficiency symptoms of calcium, magnesium, copper, molybdenum, iron, manganese and especially zinc - in the intestinal tract. (2) This may be contributing to the early onset of osteoporosis in Japan, starting there as early as age 20 versus age 34 in the USA. (1b,3) Also test animals fed SPI developed enlarged organs, particularly the thyroid gland and pancreas, and caused increased deposition of fatty acids in the liver.

Soybeans have one of the highest phytate levels of any grain or legume. Phytates in soy are highly resistant to normal phytate-reducing techniques such as long, slow cooking. Only long periods of fermentation will greatly reduce soy's phytate levels, but will not eliminate them.

Soy Has Natural Toxins or Anti-nutrients

Soybeans contain potent enzyme inhibitors that block the action of trypsin and other enzymes needed for protein digestion. These inhibitors are not completely deactivated during ordinary cooking. They can produce serious gastric distress, reduced protein digestion and create chronic deficiencies in amino acid uptakes. In test animals, diets high in trypsin inhibitors also caused enlargement and pathological conditions of the pancreas, including cancer. (1,3,6,8)

Soy contains haemagglutinin, which is a clot-promoting substance that causes red blood cells to clump together, setting the stage for clogged arteries and stroke.

Endocrine-disrupting isoflavones, genistein and daidzein are **naturally occurring** goitrogenic components found in soy. In vitro and in vivo studies document isoflavones **inhibiting the** synthesis of estradiol and other steroid hormones. Infertility, reproductive problems, thyroid and liver disease due to dietary intake of isoflavones have been observed for several species of animals including mice, cheetah, quail, pigs, rats, sturgeon and sheep. (1.a,3,6)

100 grams of soy protein - the maximum suggested cholesterol lowering dose - can contain almost 600mg of isoflavones, an undeniably toxic amount. Only 45 mg of isoflavones taken daily for one month, in pre-menopausal women, reduced hormones needed for adequate thyroid function. In some of the women, these effects lingered for 3 months after soy consumption was discontinued.

The Swiss Health Service, in 1992, estimated that 100 grams of soy protein provides the estrogenic equivalent of one birth control pill. (1.a,3,6)

Asians throughout the world have high rates of thyroid cancer. Japanese researchers reported in 1991 that consumption of as little as 30 grams or 2 tablespoons of soybeans per day for only one month resulted in a significant decrease in thyroid-stimulating hormone. **Japanese and Asians eat soy in very small amounts, as a condiment (seasoning), not as a protein substitute and not as a replacement for animal foods. (1.a,3,6,8)**

Continued ...

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[Processing of Soy Adds Even More Toxins](#)

Much soy is acid washed in aluminum tanks, leaching high levels of aluminum into the final product. Nitrites, potent carcinogens, are formed during spray-drying, and toxic lysinoalanine is formed during alkaline processing. Artificial flavourings, particularly **MSG** are added to SPI and textured vegetable protein (TVP) products to mask their strong, "beany" taste and to impart the flavor of meat. (3,9)

[Cancer and DNA Damage](#)

Soy is carcinogenic, causing cancer cells to grow and non-cancerous tumours to turn cancerous. (3,6,8) Thousands of women are now consuming soy in the belief that it protects them against breast cancer. Yet in **1996**, researchers found that women consuming soy protein isolate (SPI) had an increased incidence of epithelial hyperplasia, a condition that preceded malignancies. **Genistein and diadzein stimulate breast cells to enter the breast cancer cycle.** (3,6,8) Since **1989**, soy has been known to cause DNA damage, chromosome fragmentation and errors in chromosome orientation. (3,6,8) Pregnant women who eat soy products are at an increase risk for breast cancer. (3,4,6,8)

Soy advertisers collectively claim lower rates of reproductive cancers for Japanese and Asians eating soy, while ignoring the fact that these people also have much higher rates of cancer of the esophagus, stomach, liver, pancreas and thyroid, particularly as soy causes these same types of cancer in laboratory test animals. (1,3,6,8)

[Brain and Nervous System Damage](#)

Genistein destroys the myelin sheath surrounding the nerves, spinal cord, and brain cell tissue...one cause of Alzheimer's-Parkinson's disease, & learning disabilities ADD-ADHD.(3,6,8)

Japanese Americans living in Hawaii show a significant statistical relationship between two or more servings of tofu a week and accelerated brain aging (atrophy). In another study, those eating tofu in mid-life experienced greater incidence of Parkinson's / Alzheimer's disease, dementia, lowered cognitive function, and looked older in later life. (1,a,3,6,8,9)

[Soy Infant Formula](#)

Daily exposure of infants to isoflavones in soy infant formula is 6 to 11 times higher on body-weight basis than the dose that has negative hormonal side effects in adults consuming soy foods. (1,a,3,6,8,9)

Approximately 25 per cent of bottle-fed children in the US receive soy-based formula - a much higher per cent than in other parts of the Western world. Toxicologist Dr Mike Fitzpatrick estimated that infants exclusively fed soy formula receive the estrogenic equivalent (based on body weight) of at least 5 birth control pills per day. By contrast, almost no phyto-estrogens have been detected in dairy-based infant formula or in human milk, even when the mother consumes soy products.

In the **1986** Puerto Rico Premature Thelarche Study, the most significant dietary association with premature sexual development was not chicken, as the press reported, but soy infant formula. (1.a)

Early maturation in girls is frequently an indicator of problems with their reproductive system in later life, including failure to menstruate, infertility, breast cancer and possibly uterine cancer. (3,6,8) Problems in both sexes associated with soy-based infant formula later in life also include extreme emotional behaviour, immune system problems, pituitary insufficiency, irritable bowel syndrome, asthma, thyroid disorders including thyroid problems in babies and infantile leukaemia. (1.a,3,6,8,9,10)

[Thyroid Problems](#)

Soy also contains goitrogens - substances that depress thyroid function. Diffuse goiter and hypothyroidism appeared in some of the subjects and many complained of fatigue, lethargy and constipation, even though their intake of iodine was adequate. (3,6,8,9,10)

[Soy Warning Labels, for Medical Reasons](#)

In **1999**, USA's FDA ignored two of their own expert research scientists, Daniel Sheehan, PhD and Daniel Doerge, PhD, who expressed serious concerns regarding the perceived safe use of soy, if soy was to be granted a 'health claim'. In their letter of protest they said, "...it is inappropriate to

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Soy Warning Labels, For Medical Reasons

Continued

allow a health claim for SPI..... it could be misinterpreted.... the health labelling of SPI for foods need to be considered just as would the addition of any 'estrogen' or 'goitrogen' to foods, which are bad ideas.' Estrogenic and goitrogenic drugs are regulated by the FDA, and are taken under a physician's care. Patients are informed of risks, and are monitored by their physicians for evidence of toxicity. No similar safeguards are in place for foods, so the public will be put at potential risk from soy isoflavones in SPI without adequate warning and information." (7) Vegetable oil is no longer vegetable oil, it is either soy, canola, or both. (1a,3,4,6)

The soy industry "applied twice and was turned down twice" on both of its applications to the USA's FDA for "GRAS (Generally Recognized as Safe)" status for soy protein because of soy's carcinogenic properties and soy has not been given "Pre-Market Approval" for use in our food. Also, soy is in breach of, in violation of, "WHO / CODEX" Food Safety Standards." It is not even legal to add it to our food (1a,b,3,4,6)

"Toxic Load" means that the risk is a function of dose length, dose strength, and of the physical condition of the consumer. **Reference:** "The Dose Makes the Poison: A Plain-Language Guide to Toxicology," 2nd edition, © 1996, by M. Alice Ottoboni. (1a,3)

A comprehensive information package on soy is available from **The Health Action Network Society** - www.hans.org

References:

The small numbered footnotes 1-72 correspond to the studies, articles and the legislation referenced in (1.a) by **Weston A. Price Foundation**. - www.westonaprice.org. Also see its update (1.b) Both are © 2000 by S Fallon and MG Enig, PhD

(1.a) "Newest Research on Why You Should Avoid Soy" - www.mercola.com/article/soy/avoid_soy.htm, and

(1.b) "Tragedy and Hype: The 3rd International Soy Symposium," - www.westonaprice.org/soy/tragedy.html.

(2) **The Gerson Institute**, 1572 Second Avenue, San Diego, California 92101, Phone; 619 685 5353 - www.gerson.org/.

(3) **Soy – Abundance of Health Hazards**, - http://www.mayanmajix.com/soy_summary.pdf ... one page Summary - <http://www.mayanmajix.com/soy01.html> ... Full 144 page HTML

References: continued

(4) **Optimal Wellness Center**, by Dr. Joseph Mercola, and e-mail newsletter "eHealthy News you Can Use" - www.mercola.com (In 'search', type: soy)

(5) **The 1958 "Delaney Amendment" to the USA FDA Reg.s prohibits the use of any food additive if it is found to cause cancer in any animal species or man, at any dose level.** - <http://www.pcdf.org/meadows/delaney.htm>.

(6) **Soy OnLine Service, SOS**, are a small group of private citizens from New Zealand, the United States and the United Kingdom. They have no industry connections and are not funded by any outside interest groups. Their mission is to uncover truths about soy and to provide consumers with an alternative opinion to the information generated from the soy industry. - <http://www.soyonlineservice.co.nz/>.

(7) **USA Scientists Protest Soy Approval, FDA Lay Out Concerns.** Researchers, Daniel Doerge PhD and Daniel Sheehan PhD are two of the USA's Food and Drug Administration's experts on soy who signed a Feb. 18, 1999 letter of protest documenting 26 referenced studies that show a link between eating soy and serious health problems. - http://www.mercola.com/2001/jun/30/soy_fda.htm,

(8) **PUBMED** - www.ncbi.nlm.nih.gov/PubMed/; with hundreds of scientific abstracts showing serious health hazards from eating soy.

DNA damage: "Inhibitory effects of the tyrosine kinase inhibitor genistein on mammalian DNA topoisomerase II." (Sept. 15, 1989)

Causes cancer cells to grow: "Phytoestrogen interaction with estrogen receptors in human breast cancer cells." (Nov. 1978)

Abstracts ... <http://www.soyonlineservice.co.nz/07abstract.htm>.

Osteoporosis ... <http://www.soyonlineservice.co.nz/03toxins.htm>.

Infertility ... <http://www.soyonlineservice.co.nz/04infertility.htm>.

Birth Defects ... <http://www.soyonlineservice.co.nz/04birthdefects.htm>.

Cancer ... <http://www.soyonlineservice.co.nz/04cancer.htm>.

DNA damage ... www.soyonlineservice.co.nz/04immunefunction.htm.

Brain " ... www.soyonlineservice.co.nz/04cognitivefunction.htm

(9) The Doctor Within ... "The Magic Bean? Soy-Taintly Not!," - http://thedoctorwithin.com/index_fr.php?page=articles/magic_bean.php. Soybean-Bad - <http://www.rogerkyoung.com/old/soybean.html>.

(10) "FDA Poisonous Plant Database" Research on the toxic properties and effects of plants & plant parts. Going way back to 1907, see # 184 Soy in search, <http://vm.cfsan.fda.gov/~djw/pltx.cgi?QUERY=SOY>.

(11) "Uterine Adenocarcinoma in Mice Treated Neonatally with Genistein," June 1, 2001, Cancer Research, Abstract, - <http://cancerres.aacrjournals.org/cgi/content/abstract/61/11/4325>.

... End ...

... / 24

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at levels above those found in traditional diets

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by Soy Online Service ... <http://www.soyonlineservice.co.nz/>,

(Also see ... <http://www.mayanmajix.com/soy.html> -- Health Articles - Soy)

Soy - Abundance of Health Hazards

((healthwise933@shaw.ca))

Gerald & Deanna - (Deonaa)

Soy - Vegetable Protein % Chart

"Nutritive Value of American Foods in Common Units"

USDA Agriculture Handbook No. 456

Fruits

| | | | | | |
|-----------------------|------------------|---------------|------------------|--------------|------------------|
| Lemons 16 | Strawberry ... 8 | Apricot ... 8 | Watermelon ... 8 | Papaya ... 6 | Grapefruit ... 5 |
| Honeydew melon ... 10 | Blackberry ... 8 | Grape ... 8 | Tangerine ... 7 | Pear ... 5 | Pineapple ... 3 |
| Cantaloupe 9 | Cherry 8 | Orange ... 8 | Peach 6 | Banana ... 5 | Apple 1 |

Vegetables

| | | | |
|-----------------------------|------------------------------|--------------------------|----------------------|
| Spinach 49 | Cauliflower 40 | Green beans 26 | Tomatoes 18 |
| New Zealand Spinach ... 47 | Mustard Greens 39 | Cucumbers 24 | Onions 16 |
| Watercress 46 | Mushrooms 38 | Dandelion Greens ... 24 | Beets 15 |
| Kale 45 | Chinese Cabbage 34 | Green Pepper 22 | Pumpkin 12 |
| Broccoli 45 | * Lettuce ... Parsley ... 34 | Artichokes 22 | Potatoes 11 |
| Brussels Sprouts 44 | Green Peas 30 | Cabbage 22 | Yams 8 |
| Turnip Greens / Collards 43 | Zucchini 28 | Celery / Eggplant ... 21 | Sweet Potatoes ... 6 |

Legumes

| |
|--|
| Soybean sprouts 54 |
| (Pick non-Soy type) Mungbean sprouts 43 |
| Soybean curd (tofu) ... 43 |
| Soy Flour 35 |
| Soybeans 35 |
| Soy sauce 33 |
| Broad beans 32 |
| Lentils 20 |
| Split peas 28 |
| Kidney beans 26 |
| Navy beans 26 |
| Lima beans 26 |
| Garbanzo beans 23 |

Grains

| |
|------------------------|
| Wheat germ 31 |
| Rye 20 |
| Wheat, hard red ... 17 |
| Wild rice 16 |
| Buckwheat 15 |
| Oatmeal 15 |
| Millet 12 |
| Barley 11 |
| Brown rice 8 |

Nuts & Seeds

| |
|-------------------------|
| Pumpkin seeds 21 |
| Sunflower seeds ... 17 |
| Walnuts, black ... 13 |
| Sesame seeds 13 |
| Almonds 12 |
| Cashews 12 |
| Filberts 8 |

Note ... Protease (Enzyme) inhibitors in Soy - block protein digestion, pg. 84
 Remember, Soy is a very Low quality protein, and it is not very well absorbed by the body. The actual amount of usable protein in soy is about 50 % of what it says to the Left, **which is then from 16 % to 27 %.**

More - Safe - Alternatives

Instead of Cow's milk or Soy Milk ... try using "Almond milk" -- "Oat milk" -- "Rice milk". Best to add "Organic" Maple Syrup to Rice milk because that will help make up for its' low mineral content. This is especially very, very important for ... babies ... children ... pregnant women ... cancer patients ... the elderly. **Note:** MSG - is also made from soy ... <http://www.truthinlabeling.org/>.

Be careful ... be careful !! ... Be careful I said ... Be careful !!. "Vegetable oil" has not been real Vegetable Oil, that is, actually made from a variety of vegetables, NOT including soy, since early 1970's. Since then, it has been either "Soy" or "Canola" or both, and it rarely includes cottonseed, peanut, palm oil. Genistein in soy is proven to be and is classified as a Topoisomerase II-poison. Use safe Omega-3 oils ... cold press 100 % Extra Virgin Olive Oil ... Avocado ... Coconut Oil ... Organic Butter ... safe Fish oil. Flax has been scientifically proven to causes prostate cancer cells to grow, and to be a poisonous plant since 1850. It is listed along with Soy and Canola in the US FDA's - Poisonous Plant and Plant Part database, at ... <http://www.cfsan.fda.gov/~djw/plantox.html>. To protect yourself and the ones you ♥ Love ... read the ingredient labels on all of the food you buy, switch brands as necessary. **Remember**, when eating out at ... restaurants ... hotels ... parties ... hospitals, etc ... they do not list the ingredients in their food. **Note:** Make sure the label on your vitamins, minerals, medications says ... contains no Soy ... or ... contains no Soy ingredients .../ 25

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NCBI ... <http://www.ncbi.nlm.nih.gov/pubmed/>

See ... Page 74.

1. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9731492&dopt=Abstract .
1998 “Estrogenic effects of genistein on the growth of estrogen receptor-positive human breast cancer (MCF-7) cells in vitro and in vivo,” – [Hsieh C.Y., Santell R.C., Haslam S.Z., Helferich W.G.](#), *Cancer Res* 1998 Sep 1 58:17 3833-8.
“... Genistein causes ... the proliferation of cultured human breast cancer cells ...”

Page 49.

2. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11577007&dopt=Abstract .
2001 “Dietary genistin stimulates growth of estrogen-dependent breast cancer tumors similar to that observed with genistein,” – [Allred C.D. and others](#), *Carcinogenesis* 2001 Oct;22(10):1667-73.
Stimulates estrogen-dependent breast cancer cell growth ... removal of genistein from diet caused tumors to regress ... Genistin is converted to genistein by human saliva.

Page 42.

3. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10086720&dopt=Abstract .
1999 “Infantile leukemia and soybeans—a hypothesis,” – [Abe T.](#), *Leukemia* 1999 Mar;13(3)317-20.
DNA strand breaks ... Infantile Acute Leukemia (IAL) .

Page 44.

4. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10762754&dopt=Abstract .
2000 “Genistein induces apoptosis and topoisomerase II-mediated DNA breakage in colon cancer cells,” – [Salti G.I. and others](#), *Eur J Cancer* 2000 Apr;36(6):796-802.
DNA breakage in colon cancer cells occurred within 1 hour of treatment with genistein.

Page 40.

5. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9848512&dopt=Abstract .
1998 “Effects of soy-protein supplementation on epithelial proliferation in the histologically normal human breast,” – [McMichael-Phillips D.F. and others](#), *Am J Clin Nutr* 1998 Dec;68(6 Suppl):1431S-1435S.
The proliferation rate of breast lobular epithelium significantly increased after just 14 days of soy supplementation ...thus short-term dietary soy containing isoflavone levels found in modern soy foods stimulates breast proliferation.

Page 47.

6. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11694625&dopt=Abstract .
2001 “Physiological concentrations of dietary genistein dose-dependently stimulate growth of estrogen-dependent human breast cancer (MCF-7) tumors implanted in athymic nude mice,” – [Ju Y.H. and others](#), *J Nutr* 2001 Nov;131(11):2957-62.
Genistein stimulated breast tumor growth and cell proliferation in mice in a dose-responsive manner.

Page 50.

7. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11250801&dopt=Abstract .
2001 “Cross-species and interassay comparisons of phytoestrogen actions,” – [Whitten P.L. and Patisaul H.B.](#), *Environ Health Perspect* 2001 Mar;109 Suppl 1:5-20.
“In vivo data show that phytoestrogens have a wide range of biologic effects at doses and plasma concentrations seen with normal human diets. Significant in vivo responses have been observed in animal & human tests for ... bone ... breast ... ovary ... pituitary ... vasculature ... prostate and serum lipids. . . . Steroidogenesis and the hypothalamic-pituitary-gonadal axis appear to be important loci of phytoestrogen actions, but these inferences must be tentative because good dose-response data are not available for many end points.”

Page 90.

8. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=3559747&dopt=Abstract .
1987 “Absorption of zinc from soy protein meals in humans,” – [Sandström B., Kivistö B., & others](#) *J Nutr* 1987 Feb 117:2 321-7.
Osteoporosis...Lower Zinc absorption...Soy is very high in Phytic Acid...Soy prevents the absorption of essential minerals

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... continued ...

See ... Page 52.

9. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11980635&dopt=Abstract .
2002 **“Dietary genistein negates the inhibitory effect of tamoxifen on growth of estrogen-dependent human breast cancer (MCF-7) cells implanted in athymic mice,” – Ju Y.H. and others, *Cancer Res* 2002 May 1;62(9):2474-7.**
The use of “dietary isoflavone supplements” by postmenopausal women “with breast cancer” is increasing. Dietary genistein negated or overwhelmed the inhibitor effect of tamoxifen on MCF-7 tumor growth, lowered E2 levels in plasma, and increased expression of E-response genes (e.g., pS2, PR, and cyclin D1) in ovariectomized and athymic mice.
“Therefore, “Caution Is Warranted” for postmenopausal women consuming dietary genistein while on TAM therapy for E-responsive breast cancer.”

Page 52.

10. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11993873&dopt=Abstract .
2002 **““Something from “nothing” - - eight weak estrogenic chemicals combined at concentrations below NOECs produce significant mixture effects,” – Silva E. and others, *Environ Sci Technol* 2002 Apr;36(8):1751-6.**
Xenoestrogens including genistein were tested in combinations. The results were additive, producing significant effects when combined at low concentrations. “Our results highlight the limitations of the traditional focus on the effects of single agents.
Hazard assessments that ignore the possibility of joint action of estrogenic chemicals will almost certainly lead to significant underestimations of risk.”

Page 49.

11. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11431339&dopt=Abstract .
2001 **“Soy diets containing varying amounts of genistein stimulate growth of estrogen-dependent (MCF-7) tumors in a dose-dependent manner,” – Allred C.D. and others, *Cancer Res* 2001 Jul 1;61(13):5045-50.**
Depending on processing, soy protein isolates, SPI's, very widely in concentrations of genistein.
Soy protein isolates containing increasing concentrations of genistein stimulate the growth of “estrogen-dependent breast cancer cells” in vivo in a dose-dependent manner.

Page 52.

12. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12060828&dopt=Abstract .
2002 **“Goitrogenic and estrogenic activity of soy isoflavones,” – Doerge D.R. and D.M. Sheehan, *Environ Health Perspect* 2002 Jun;110 suppl 3:349-53.**
Although safety testing of natural products, including soy products, is not required, the possibility that widely consumed Soy products may cause harm in the human population via either or both estrogenic and goitrogenic activities is of concern.

Page 55.

13. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12113884&dopt=Abstract .
2002 **“A pilot study of the effects of phytoestrogen supplementation on postmenopausal endometrium,” – Balk J.L. and others, *J Soc Gynecol Investig* 2002 Jul-Aug;9(4)238-42.**
This was a ... double-blinded ... randomized ... placebo-controlled trial ... comparing the effects of 6 months of dietary phytoestrogen supplementation versus placebo in postmenopausal women.
“Phytoestrogens did not cause stimulation of the endometrium. Insomnia was more frequent over the 6-month study in the soy group, whereas - hot flushes, night sweats and vaginal dryness improved from baseline in the placebo group but not in the soy group.”

Page 32.

14. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=2548712&dopt=Abstract .
1989 **“Inhibitory effects of the tyrosine kinase inhibitor genistein on mammalian DNA topoisomerase II,” – Markovits J. and others, *Cancer Res* 1989 Sep 15;49(18):5111-7.**
Genistein stimulates double strand **DNA** breaks.

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See ... Page 32.

15. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=3297906&dopt=Abstract .
1987 **“Dietary estrogens - a probable cause of infertility and liver disease in captive cheetahs,”** – [Setchell K.D. and others](#), *Gastroenterology*, 1987 Aug;93(2): 225-233.

Captive adult cheetahs consuming approximately 50 mg soy isoflavones per day from soy-based feed develop reproductive failure and liver disease.

When chicken-based feed was substituted for soy-based feed, liver function improved. “. . . the relatively high concentrations of phytoestrogens from soybean protein present in the commercial diet fed to captive cheetahs in North American zoos may be one of the major factors in the decline of fertility and in the etiology of - liver disease - in this species. The survival of the captive cheetah population could depend upon a simple change of diet by excluding exogenous estrogen.”

Page 31.

16. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=570914&dopt=Abstract&itool=iconabstr .
1978 **“Phytoestrogen interaction with estrogen receptors in human breast cancer cells,”** – [Martin M.P. and others](#), *Endocrinology* 1978 Nov;103(5):1860-7.

Phytoestrogens “translocate the cytoplasmic estrogen receptor & bind to unfilled nuclear estrogen receptors in whole cells. Bound nuclear receptors are then processed in a manner similar to estradiol in a step which rapidly decreases total cellular estrogen receptors. **Phytoestrogens are also biologically active; they can markedly enhance tumor cell proliferation.**”

“Frying The Brain With Soy”

;

Page 64.

17. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10763906&dopt=Abstract .
2000 **“Brain aging and midlife tofu consumption,** – [White L.R., Petrovitch H., Ross G.W., and others](#), *J Am Coll Nutr*. 2000 Apr;19(2):242-55.,

RESULTS: Poor cognitive test performance... enlargement of ventricles... **low brain weight...** were each significantly & independently associated with **higher** mid-life tofu consumption.

Statistically significant associations were **consistently demonstrated** in linear & logistic multivariate regression models.

CONCLUSIONS: In this population, higher midlife tofu consumption was independently associated with I hope you and your family find it interesting and useful ... indicators of **cognitive impairment** and **brain atrophy** in late life.

Page 63.

18. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12566171&dopt=Abstract .
2003 **“Soya phytoestrogens change cortical and hippocampal expression of BDNF mRNA in male rats,”** – [File SE, Hartley DE, Alom N.](#), *Neurosci Lett* 2003 Feb 27;338(2):135-38.,
... **Significant reductions** were found in brain-derived neurotrophic factor (BDNF) mRNA expression in the CA3 and CA4 region of the **hippocampus and in the cerebral cortex** in the rats fed the diet containing **phytoestrogens**, compared with those on the soya-free diet.

Page 63.

19. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9387865&dopt=Abstract .
1997 **“Brain-derived neurotrophic factor is reduced in Alzheimer's disease,”** – [Connor B, Young D, Yan Q, and others.](#), *Brain Res Mol Brain Res.*, 1997 Oct3;49(1-2):71-81.,
... **BDNF mRNA is reduced** in the human Alzheimer's disease hippocampus and temporal cortex, and suggest that **a loss of BDNF** may contribute to the progressive **atrophy of neurons in Alzheimer's disease.**

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See ... Page 43.

20. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11910681&dopt=Abstract .
1999 **“Hot flushes and other menopausal symptoms in relation to soy product intake in Japanese women,”** – *Nagata C. and others, Climacteric* 1999 Mar;2(1):6-12.

Intake of fermented soy products was found to reduce the severity of hot flashes in Japanese women, but not total soy intake (from unfermented soy products such as are found in western diets).

This study is included because it contradicts assertions that Japanese women do not suffer from hot flashes.

Side note: All the promotions for soy for menopausal relief were because Japanese women do not have a word for it. All that means is they don't talk about them. They have them all right. Look at this research.

Only fermented soy products had a minor effect and that was just within the margin of statistical error (ie.) it was more likely to be random chance !.

Page 56.

21. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12738504&dopt=Abstract .
2003 **“Effect of soy-derived isoflavones on hot flushes, endometrial thickness, and the pulsatility index of the uterine and cerebral arteries,”** – *Penotti M., Fabio E., and others, Fertil Steril* 2003 May;79(5):1112-1117.,

To determine the effect of soy-derived isoflavones on hot flushes, endometrial thickness, and the vascular reactivity of uterine and cerebral arteries. **Double-blind, randomized, placebo-controlled trial. Healthy volunteers in an academic research environment.**

Daily administration of 72 mg of soy-derived isoflavones is no more effective than placebo in reducing hot flushes in postmenopausal women. It also has no effect on endometrial thickness or **PI** of the uterine and cerebral arteries

Page 58.

22. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12704663&dopt=Abstract .
2003 **“Cell-transforming activity and mutagenicity of 5 phytoestrogens in cultured mammalian cells,”** – *Tsutsui T, Tamura Y, Yagi E, and others, Int J Cancer* 2003 Jun 20;105(3):312-20.,

For the simultaneous assessment of in vitro **carcinogenicity and mutagenicity of phytoestrogens**, the abilities of 5 phytoestrogens, **daidzein, genistein**, biochanin A, prunetin, and coumestrol, to induce cell transformation and genetic effects were examined using the Syrian hamster embryo (SHE) cell model.

Our results provide evidence that... genistein... coumestrol... daidzein ... biochanin A ... induce cell transformation in SHE cells and that the transforming activities of these phytoestrogens correspond to at least 2 of the mutagenic effects by each phytoestrogen, i.e., gene mutations, chromosome aberrations, aneuploidy or DNA adduct formation, suggesting possible involvement of mutagenicity in initiation of phytoestrogen-induced carcinogenesis.

Page 37.

23. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=8896889&dopt=Abstract .
1996 **“Stimulatory influence of soy protein isolate on breast secretion in pre-and postmenopausal women,”** – *Petrakis N.L. and others, Cancer Epidemiol Biomarkers Prev* 1996 Oct;5(10):785-794.

The authors noted that “the findings **“did not”** support our a priori hypothesis” that soy protected Asian women against breast cancer.

“Instead, this pilot study indicates that “prolonged consumption” of soy protein isolate has a “stimulatory effect” on the premenopausal female breast ... These findings are suggestive of an estrogenic stimulus from the isoflavones “genistein” and “daidzein” contained in soy protein isolate.

Page 42.

24. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10425307&dopt=Abstract .
1999 **“Maternal exposure to genistein during pregnancy increases carcinogen-induced mammary tumorigenesis in female rat offspring,”** – *Hilakiviv-Clarke L., others, Oncol Rep* 1999 Sep-Oct;6(5):1089-95.

Increased breast tumor risk from foetal exposure to Soy ... **Carcinogen-induced** mamary tumorigenesis.

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April 2006

“Hidden Harm”

The Evidence ... Long Known, Ignored, and still Denied

(120 + 85(+)) Short Summaries of Abstracts

and plus Toxic, Poisonous “Plant Sterols”

from

Isoflavone Studies

1907 - 1953 – 2004

(+)Plus “The Precautionary Principle”

Error on the side of caution ... The obligation to prevent harm

Please note: the **†** does not indicate any magnitude of importance scientifically, it only indicates order of importance to me, Gerald Hernesmaa, healthwise933@shaw.ca.

1907 (See page 83 of this paper) for this abstract from the list in US FDA’s “**Poisonous Plant Database**”. For a lot more abstracts between **1907** and 2004 not listed here, **click on** ... <http://www.cfsan.fda.gov/~djw/pltx.cgi?QUERY=soy>, (see item # 165).

1925 "Experimental rickets: The effect of cereals and their interaction with other factors of diet and environment in producing rickets", — Mellanby, Edward., *Journal of the Medical Research Council* 93:265, March 1925, This research footnote (#20) is from the essay, “The Newest Research On Why You Should Avoid Soy,” — Fallon S., Enig M.G., April 2000, Weston A. Price Foundation

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=13076231&dopt=Abstract .

1953 “**Estrogenic Activity of Isoflavone Derivatives Extracted and Prepared from Soybean Meal,**” — Cheng C. and others, *Science* 1953;118:164-5.

Feeding 2.5 or 5.0 mg of either genistein or genistin per day to the mouse resulted in increased uterine weights.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=14368363&dopt=Abstract .

1954 “**Effect of Genistin on Reproduction of the Mouse,**” — Carter and others, *J Nutr* 1954;55:639.

— Exposure to the phytoestrogen genistin caused significant advancement of the vaginal opening and a decrease in the number of litters born.

† † †

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=13346413&dopt=Abstract .

1956 “**Effect of Genistin on Growth and Development of the Male Mouse,**” — Matrone G. and others, *J Nutr,* 1956, 235-240.

— “The evidence presented indicates that genistin at certain dose levels has a detrimental effect on survival, growth rates and spermatogenesis in mice. . . **the higher dose appeared to be lethal.** It appears that genistin in relation to its estrogenic activity has a greater depressing effect on growth than does stilbestrol.”

1963 “**Biological Responses of Young Rats Fed Diets Contain Genistin or Genistein,**” — Magee A.C., *J Nutr* 1963;80:151.

— A dietary level of 0.5% genistin or genistein resulted in significant decreases in weight gain and in the weights of kidneys and spleen.

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- <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&DB=PubMed> .

1963 “Estrogenic Effects of Genistein and Coumestrol Diacetate,” – Noteboom and Gorski, *Endocrinology*, 1963 Dec., 73736-9. No abstract available.

— “It is quite likely that plant estrogens perform the same function as estradiol in triggering anabolic responses. The results of these experiments indicate that certain of the nonsteroidal estrogenic compounds are capable of stimulation of labelled precursors into protein, lipid and ribonucleic acid in the cells of the rat uterus.”

1 1 1

- <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&DB=PubMed> .

1966 “The interaction in the Immature Mouse of Potent Estrogens with Coumestrol, Genistein and other utero-Vaginitropic Compounds of Low Potency,” – Folmon Y. and others, *J Endocrin* 1966 ;34:215-225. No abstract available.

— Phytoestrogens such as genistein are said to be of “weak” potency. This study found that sometimes these estrogens were additive at very small doses and appeared to be antagonistic at higher doses. “Genistein gave a steep dose-response curve with high responses (uterus weight near 45 grams) typical of the most potent estrogens.”

1 1 1, 1 1 1, 1 - can cause reproductive disorders in females.

1967 “The oestrogenic activity and metabolism of certain isoflavones in sheep,” – Braden and others, *Australian Journal of Agricultural Research* 1967, 18:335-348.

— “Some plants that are commonly grazed nevertheless contain substances that are harmful to the animals ingesting them and one group of such compounds (phyto-estrogens) **can cause reproductive disorders in females.**”

1972 “Steroid and Phytoestrogen Binding to Sheep Uterine Receptors in Vitro,” – Shutt D.R., *J Endocrin* 1972;52:299-305.

— Phytoestrogens were found to compete with **estradiol** for binding sites. “A full estrogenic response is elicited only when they are given in repeated frequent doses, which may be necessary to maintain a high blood concentration.”

1 1 1, 1 1 1, 1

1976 “Phytoestrogens: Adverse effects on reproduction in California Quail,” – Leopold A.S. and others, *Science*, 1976 Jan 9;191(4222): 98-100.

— During dry years, phytoestrogens, including genistein, are produced in the leaves of stunted desert annuals. When ingested by California quail, **these compounds apparently inhibit reproduction and prevent the production of young** that will not have adequate food. In a wet year, forage grows vigorously and phytoestrogenic substances are largely absent. Quail then breed prolifically and the abundant seed crop carries the enlarged population through the winter.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - developed enlarged goiters and malignant thyroid tumors.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=1035180&dopt=Abstract .

1976 “Development of malignant goiter by defatted soybean with iodine-free diet in rats,” – Kimura S. and others, *Gann* 1976, 67:763-765.

— Iodine-deficient rats fed defatted soybean for 6 to 12 months **developed enlarged goiters and malignant thyroid tumors**. Thyroid enlargement was inhibited with the addition of small amounts of iodine to the diet.

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1 1 1, 1 1 1, 1 - reduce fertility

1976 “The Effects of Plant Estrogens in Animal Reproduction,” – Shutt D.R., *Endeavour* 1976:110-113.

— “In high concentrations, a weak plant estrogen can exert a significant estrogenic effect in the animal and can product hormonal imbalance ... when high blood concentrations are maintained, they can exert a maximal estrogenic effect ... From the wider viewpoint of evolution, it is interesting that compounds have evolved in plants that not only give the plant some protection from pathogens, but also **reduce fertility of animals ingesting the plant.**”

1 1 1, 1 1 1, 1 - fertility impairment

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=1066275&dopt=Abstract .

1976 “Occurrence of Anabolic Agents in Plants and their Importance,” – Lindner H.R., *Environment Quality Supplement* 1976;5:151-158.

— “Coumestrol and genistein stimulate estradiol in stimulating macromolecular changes in the uterus. The biological effects of clover estrogens responsible for **fertility impairment** appear to be multiple.”

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Phytoestrogens can markedly enhance tumor cell proliferation

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=570914&dopt=Abstract .

1978 “Phytoestrogen interaction with estrogen receptors in human breast cancer cells,” – Martin M.P. and others, *Endocrinology* 1978 Nov;103(5):1860-7.

— Phytoestrogens can markedly enhance tumor cell proliferation. The interactions of phytoestrogens with estrogen receptors were studied in the human breast cancer cell line, MCF-7.

— The compounds tested were ... coumestrol ... genistein ... and formononetin and the mycotoxins, zearalenone and its reduced derivative, zearalenol. All but formononetin compete for binding of [3H]-estradiol to unfilled cytoplasmic estrogen receptor or unfilled nuclear estrogen receptor sites.

— The phytoestrogens are also biologically active; they can markedly enhance tumor cell proliferation.

— In summary ... phytoestrogens interact with the estrogen receptors of human breast cancer cells in culture and, therefore, may affect estrogen-mediated events in these cells.

— Phytoestrogens “translocate the cytoplasmic estrogen receptor and bind to unfilled nuclear estrogen receptors in whole cells. Bound nuclear receptors are then processed in a manner similar to **estradiol** in a step which rapidly decreases total cellular estrogen receptors. **The phytoestrogens are also biologically active; they can markedly enhance tumor cell proliferation.**”

1980 “Oestrogenic activity of soya-bean products,” – Drane H. M. and others, *Food Cosmetics and Technology* 1980 Aug ;18(4): 425-427.

— Sixteen samples of soya-containing products were examined after the commercial mouse diet was found to have estrogenic effects in laboratory mice, and compared with the effects of **DES** on the weight of the mouse uterus. All samples demonstrated estrogenic activity. The researchers attributed the effects as equivalent to 16 ppm and 24 ppm **DES** in the two samples of human food used.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - has been know for more than half a century

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=4018320&dopt=Abstract .

1985 “Naturally Occurring Estrogens in Food - - A Review,” – Jones and others, *Journal of Food Additives and Contamination* 1985;2(2):73-106.

; 1 ; — That estrogen compounds in plants “induce estrus in immature animals and interfere with normal reproductive processes **has been know for more than half a century**. Consideration should be taken of any medium or long-term changes in dietary habits which might be expected to increase the intake of such phytoestrogens. The increasing use of vegetable proteins in general and in particular and the **introduction of soy milk products for infant feeding** are two such examples.”

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1 1 1, 1 1 1, 1

1985 “Non Steroidal Estrogens of Dietary Origin,” – Setchell K.D., *Estrogens in the Environment*, John A McLaughlin, ed. Elsevier, 1985:69-83.

— “Since as little as 8 mg of genistein and 10 mg of daidzein are sufficient to initiate uterotrophic effects in mice, it is not surprising that the relatively large amounts of isoflavones present in soy protein will readily explain the previously observed estrogenic effects in animals ... The effects of plant estrogens in man should, however, be of some concern since the **newborn infant will be subject to chronic exposure to soya–milk**, in some cases for up to two years ... this situation could be considered analogous to sheep grazing on clover.”

1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=2980380&dopt=Abstract .

1987 “Effects of phytoestrogens on GnRH-induced luteinizing hormone secretion in ovariectomized rats,” – Hughes C.I. Jr., *Reprod Toxicol* 1987-88;1(3):179-81.

— “The dose potency of genistein appears to be approximately 1/10 that of E2 [estradiol-17 beta] in this system. Phytoestrogens acutely perturb reproductive neuroendocrine function.”

1 1 1, 1 1 1, 1 1 1, 1 1 1 - liver function improved ...

... when chicken-based feed was **substituted** for soy-based feed.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=3297906&dopt=Abstract .

1987 “Dietary estrogens - a probable cause of infertility and liver disease in captive cheetahs,” – Setchell K.D. and others, *Gastroenterology* Aug;1993(2): 225-233.

— Captive adult cheetahs consuming approximately 50 mg soy isoflavones per day from soy-based feed develop reproductive failure and liver disease.

— **When chicken-based feed was substituted for soy-based feed, liver function improved.** “. . . the relatively high concentrations of phytoestrogens from soybean protein present in the **commercial diet fed to captive cheetahs in North American zoos may be one of the major factors in the decline of fertility and in the etiology of - liver disease - in this species.** The survival of the captive cheetah population could depend upon a simple change of diet by excluding exogenous estrogen.”

1 1 1, 1 1 1, 1 1 1, 1 1 1 - double strand DNA breaks.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=2548712&dopt=Abstract .

1989 “Inhibitory effects of the tyrosine kinase inhibitor genistein on mammalian DNA topoisomerase II,” – Markovits J. and others, *Cancer Res* 1989 Sep 15;49(18):5111-7., *Laboratoire de Pharmacologie Moléculaire, URA 158 du CNRS, U 140 de l'INSERM, Institut Gustave Roussy, Villejuif, France.*

; 1 ; — **Genistein stimulates double strand DNA breaks.**

— **Our results show that genistein (a) inhibits the decatenation activity of DNA topoisomerase II and (b) stimulates DNA topoisomerase II-mediated double strand breaks in pBR322 DNA on sites different from those of 4'-(9-acridinylamino)methanesulfon-m-anisidide, etoposide, and 2-methyl-9-hydroxyellipticinium.**

— **Finally, genistein treatment of DC-3F cells results in the occurrence of protein-linked DNA strand breaks as shown by DNA filter elution. Viscometric (lengthening) studies demonstrate that genistein isn't a DNA intercalator. Genistein is therefore an interesting compound because it induces cleavable complexes without intercalation.**

— **Taken together, our results show that genistein is an inhibitor of both protein tyrosine kinases and mammalian DNA topoisomerase II. This could be accounted for by the sharing of a common structure sequence between the two proteins at the ATP binding site.**

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1 1 1, 1 1 1, 1

1989 “Development and Application of High Performance Chromatographic Method for the Analysis of Phytoestrogens,” – Jones A.E., *Jour Sci Food Agric* 1989;46:157-164.

— “It should be emphasized that the effects of long-term low level exposure are unknown ... **Vegetarians, vegans** and those relying on ‘health’ food preparations from **alfalfa, legumes or soya** in particular would appear to be likely to regularly **consume very much higher levels of estrogens** than those estimated for the population at large.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - DNA cleavage in vitro.

1990 “Induction of mammalian topoisomerase II dependent DNA cleavage by nonintercalative flavonoids, genistein and orobol,” – Yamashita Y. and others, *Biochem Pharmacol* 1990 Feb 15;39(4):737-44.

— Genistein induced **DNA** cleavage in vitro.

1 1 1, 1 1 1, 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=1868922&dopt=Abstract .

1991 “The effects on the thyroid gland of soybeans administered experimentally in healthy subjects,” – Y. Ishizuki and others, *Nippon Naibunpi Gakkai Zasshi* 1991, 767: 622-629.

— Feeding 30 grams (2 tablespoons) soybeans per day for three months to healthy adults receiving adequate iodine intake caused thyroid suppression, especially in the elderly. Hypometabolic symptoms (malaise, constipation, sleepiness) and goiters appeared in half the younger subjects (mean age of 29) and half the older subjects (mean age 61). The symptoms disappeared 1 month after the cessation of soybean ingestion. **“These findings suggested that excessive soybean ingestion for a certain duration might suppress thyroid function and cause goiters in healthy people, especially elderly subjects.”** Note that 30 grams per day was considered “excessive” by these Japanese researchers.

1991 “Estrogenic effect of dietary soy bean meal on vitellogenesis in cultured Siberian Sturgeon *Acipenser baeri*,” – Pelissero C. and others, *Gen Comp Endocrinol* 1991 Sep;83(3):447-57 83:447-457.

— Sturgeon fed a diet high in isoflavones from soybeans had significantly higher levels of plasma vitellogenin. **Vitellogenin is a biomarker for estrogenic effects.**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=1656271&dopt=Abstract .

1991 “Long-term potentiation in the hippocampus is blocked by tyrosine kinase inhibitors,” – O’Dell T.J. and others, *Nature* 1991 Oct;353(6344):558-60.

— Long-term potentiation (LTP) in the hippocampus is thought to contribute to memory formation. Tyrosine kinase inhibitors (such as genistein) block LTP.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - a strong immuno-suppressant

1991 “Evidence that genistein, a protein-tyrosine kinase inhibitor, inhibits CD28 monoclonal-antibody-stimulated human T cell proliferation,” – Atluru S. and Atluru D., *Transplantation* 1991 Feb;51(2):448-50., *Department of Anatomy and Physiology, Kansas State University, Manhattan 66506*

; 1 ; — Genistein **blocks** the production of T cells, **needed** for the immune system.
 — **The authors conclude: “ ... that genistein is a powerful immuno-suppressive agent ...” and suggest that it has a potential use in the treatment of allograft rejection.**

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - 100 grams of Soy protein = 1 contraceptive pill

- http://www.mercola.com/article/soy/avoid_soy.htm , Foot Note #53.

1992 **“Bulletin de L’Office Federal de la Santé Publique,”** — #53. Bulletin de L’Office Fédéral de la Santé Publique, No. 28, July 20, 1992.

— **The Swiss Health Service estimates that 100 grams of soy protein provides the estrogenic equivalent of the contraceptive pill.**

1 1 1, 1 1 1, 1 1 1, 1 1 1 - a strong immuno-suppressant

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=1330289&dopt=Abstract .

1992 **“Effects of genistein on the growth and cell cycle progression of normal human lymphocytes and human leukemic MOLT-4 and HL-60 cells,”** – ***Traganos F. & others***, *Cancer Res* 1992 Nov 15;52(22):6200-8., *Cancer Research Institute, New York Medical College, Valhalla 10595.*

; 1 ; — **The results suggest that genistein “is expected to be a strong immuno-suppressant.**

— **Genistein (GEN) is an isoflavone known to inhibit both tyrosine protein kinases and DNA topoisomerase II.**

— **The effects of GEN on cell proliferation and cell cycle kinetics of human myelogenous leukemia HL-60 and lymphocytic leukemia MOLT-4 cell cultures were studied, and the data were compared to results obtained with normal human lymphocytes stimulated to proliferate with phytohemagglutinin.**

1 1 1, 1 1 1 - in all kinds of farm animals ... risk to man cannot be excluded.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=1387742&dopt=Abstract .

1992 **“Validation of Two In Vitro Test Systems of Estrogenic Activities with Zearelenone Phytoestrogens and Cereal Extracts,”** – ***Mayr U.***, *Toxicology* 1992;72:135-149., *Institut fur Tierernahrung, Universitat Hohenheim, Stuttgart, Germany.*

— **disease ... in all kinds of farm animals ... inherent health risk ... to man cannot be excluded.**

— **“Ingestion of these compounds causes diseases of the ... reproductive system ... reversible and irreversible infertility ... and abnormal fetal development ... in all kinds of farm animals.**

— **Furthermore, an inherent health risk to man cannot be excluded.” This paper contains graphs showing the crossover of phytoestrogens from estrogenic to antiestrogenic to toxic.**

1 1 1, 1 1 1, 1 1 1, 1 1 1 - <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=8393675&dopt=Abstract

1993 **“Genistein induces apoptosis in immature human thymocytes by inhibiting topoisomerase-II,”** – ***McCabe M.J. Jr. and Orrenius S.***, *Biochem Biophys Res Commun* 1993; 194(2):944-50.

— **The toxicity of genistein on human thymus cells was investigated. “Genistein induced marked chromatin fragmentation indicative of apoptosis in human thymocyte cultures.”**

1 1 1, 1 1 1, 1 1 1, 1 1 1 - **Errors in chromosome orientation -**

- <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=8314908&dopt=Abstract .

1993 **“Odd chromosome movement and inaccurate chromosome distribution in mitosis and meiosis after treatment with protein kinase inhibitors,”** – ***Nicklas R.B. and others***, *J Cell Sci* 1993 Apr;104 part 4:961-73., *Department of Zoology, Duke University, Durham, NC 27706.*

; 1 ; — **Genistein, a protein kinase inhibitor, caused errors in chromosome orientation from grasshopper spermatocytes.**

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1994 “Biological Effects of a Diet of Soy Protein Rich in Isoflavones on the Menstrual Cycle of Premenopausal Women,” – Cassidy A. and others, *Am J Clin Nutr* 1994 Sep;60(3):333-340.

— Six women with regular menstrual cycles were given 60 grams soy protein containing 45 mg isoflavones daily. After one month, all experienced delayed menstruation. Luteinizing hormone and follicle-stimulating hormone were significantly suppressed. The effects were similar to those of tamoxifen, an antiestrogen drug. **Regular menstruation did not resume until 3 months** following the cessation of soy protein consumption.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=7507447&dopt=Abstract .

1994 “The ligand of the c-kit receptor promotes oocyte growth,” – Packer A.I. and others, *Dev Biol* 1994 Jan;161(1):194-205.

— **“In the presence of genistein**, many of the follicles became disorganized and the oocytes became partially denuded (Fig. 6B). There also appeared to be less granulosa cell proliferation compared to the control follicles.” **This statement appeared in the body of the report, not in the abstract.**

1111
 - http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=8147890&dopt=Abstract .
1994 “Hepatocyte Growth Factor Accelerates the Wound Repair of Cultured Gastric Mucosal Cells,” – Watanabe S. and others, *Biochem Biophys Res Comm* 1994; 199(3) 1453-60.

— Genistein retarded the repair of gastric mucosal cells, suggesting that genistein may retard the healing of gastric ulcers.

1994 “Nonsteroidal estrogens of dietary origin: possible roles in hormone-dependent disease,” – Setchell K.D. and others, *Am J Clin Nutr* 1984 Sep;40:569-78.

— Equol is a breakdown product of phytoestrogens which shows up in the urine of individuals who eat soy. However, some subjects are unable to breakdown phytoestrogens and equol does not show up in their urine.

111,111,111,111 - children exposed to estrogens ... more susceptible to prostate cancer later in life
 - http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=7508622&dopt=Abstract .

1994 “Developmental estrogenization and prostatic neoplasia,” – Santti R. and others, *Prostate* 1994; 24(2):67-78., *Department of Anatomy, University of Turku, Finland.*

; 1 ; — Children exposed to Estrogens ... more susceptible to prostate cancer later in life

— **The association of estrogens with benign prostatic hyperplasia and prostate cancer has been widely studied, but no conclusive evidence exists for a role of estrogens in prostatic disease. This paper reviews the literature and describes studies which have sought to show a correlation of estrogens and alterations in the prostates of humans and experimental animal models.**

— **Using the developmentally estrogenized mouse model, we propose an alternative role for estrogens as a predisposing factor for prostatic diseases: estrogen exposure during development may initiate cellular changes in the prostate which would require estrogens and/or androgens later in life for promotion to hyperplasia or neoplasia.**

— **Evidence indicates ... that estrogen exposure during development may initiate cellular changes in the prostate which would require estrogens and/or androgens later in life for promotion of prostatic hyperplasia or neoplasia.**

— Thus, the critical time for estrogen action would be during the development of the prostatic tissue.

— **We further suggest that estrogen-sensitive cells may remain in the prostate and be more responsive to estrogens later in life or less responsive to the normal controlling mechanisms of prostatic growth.**

— **In other words**, exposure of the developing male child to phytoestrogens in soy may make him more susceptible to prostate cancer later in life.

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- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=7488041&dopt=Abstract .

1995 “Dietary estrogenic isoflavones are potent inhibitors of B-hydroxysteroid dehydrogenase of P testosteroneii,” – Keung W.M., *Biochem Biophys Res Commun* 1995 Oct 24;215(3):1137-1144.

— The isoflavones daidzein, genistein, biochanin A and formononetin were found to inhibit enzymes that produce steroid hormones critical to reproductive and neurological function, particularly hormones that produce testosterone.

1 1 1

1995 “Dietary soybean may be antiestrogenic in male mice,” – Makela S.I. and others, *J Nutr* 1995 Mar;125(3):437-45.

— Soy isoflavones were found to have antiestrogenic action in male mice.

1 1 1, 1 1 1, 1 1 1, 1 1 1, 1 - causing DEATH ... ; 1 ;

1995 “Phytoestrogens and parrots: The anatomy of an investigation,” – Woodhams D.J., *Proceedings of the Nutrition Society of New Zealand*. 1995, 20:22-30.

; 1 ; — Observations in aviaries and in handrearing of parrots with bird-baby food were associated with parrot infertility, premature sexual maturation and in some cases acute symptoms causing DEATH. It was noted that soy protein and/or soy meal were a constant ingredient in all the diets used.

; 1 ; — This triggered an investigation into the literature on the toxic effects of processed soy products. The first source consulted was *Soy Beans: Chemistry and Technology* by Smith and Circle, an industry test book published in 1972 that clearly listed a number of established toxic effects, with copious reference lists for each chapter.

1 1 1, 1 1 1, 1 1 1, 1 1 1 -

1995 “The Potential Adverse Effects of Soybean Phytoestrogens in Infant Feeding,” – Irvine C. and others, *New Zealand Medical Journal*. 1995 May 24:318. No abstract available.

— “Exposure to estrogenic compounds may pose developmental hazard in infants...particularly to reproductive system ... Neonates are generally more susceptible than adults to perturbations of the sex steroid milieu.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Soy has glycosides of genistein and daidzein or plant based chemicals that mimic estrogen

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9217716&dopt=Abstract .

1997 “Exposure of infants to phyto-estrogens from soy-based infant formula,” – Setchell K.D., Zimmer-Nechemias L., Cai J., Heubi J.E., *Lancet*. 1997 Jul 5;350(9070):23-7., *Clinical Mass Spectrometry Center, Children’s Hospital Medical Center, Cincinnati, Ohio, 45229, USA*.

— INTERPRETATION:. Soy has glycosides of genistein and daidzein ... or plant based chemicals that mimic estrogen.

; 1 ; — The daily exposure of infants to isoflavones in soy infant-formulas is 6-11 fold higher on a body-weight basis than the dose that has hormonal effects in adults consuming soy foods. Circulating concentrations of isoflavones in the seven infants fed soy-based formula were 13000-22000 times higher than plasma oestradiol concentrations in early life, and may be sufficient to exert biological effects, whereas the contribution of isoflavones from breast-milk and cow-milk is negligible.

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1995 “Phytoestrogens: Toxicology and Regulatory Recommendations,” – [Robertson I.G.C.](#), *Proc Nutr Soc of NZ* 1995;20:35-42.

— “Concerns have been expressed about possible adverse effects, particularly to the foetal-neonatal nervous and reproductive system. Adverse effects may occur by inhibition of the enzyme which converts the relatively impotent estrone to the much more potent oestradiol and by occupying the estrogen receptor resulting in antagonism of the naturally produced oestradiol. Adequate oestradiol is necessary for the imprinting and development of many physical, physiological and behavioural characteristics during the neonatal period and infancy. Infants on soy-based formula have been identified as a high risk group because the formula is the main source of nutrient, and because of their small size and developmental phase. **Infants absorb phytoestrogens and have a calculated daily dietary intake (per kg) 3-6 times that shown to have physiological effects on women ...”**

111,111,111,111,111 - The authors noted that “the findings **did not** support our a priori hypothesis” that soy protected Asian women against breast cancer.

“Instead, this pilot study indicates that “**prolonged consumption**” of soy protein isolate has a “**stimulatory effect**” on the premenopausal female breast ... **genistein and daidzein** in Soy protein isolate (SPI).

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=8896889&dopt=Abstract .

1996 “Stimulatory influence of soy protein isolate on breast secretion in pre-and postmenopausal women,” – [Petrakis N.L. and others](#), *Cancer Epidemiol Biomarkers Prev* 1996 Oct;5(10):785-794., Department of Epidemiology and Biostatistics, University of California, San Francisco 94143-0560, USA.

— Twenty-four (24) normal pre- and postmenopausal white women, ages 30 - 58 were studied for one year. During months 4-9, the women ingested 38 g **soy protein isolate** containing 38 mg **genistein**. Seven of the 24 women developed epithelial hyperplasia during the period of soy feeding, a condition that presages breast cancer.

— **The authors noted that “the findings did not support our a priori hypothesis” that soy protected Asian women against breast cancer.** “Instead, this pilot study indicates that prolonged consumption of soy protein isolate has a stimulatory effect on the premenopausal female breast, characterized by increased secretion of breast fluid, the appearance of hyperplastic epithelial cells and elevated levels of plasma estradiol.

— **These findings are suggestive of an estrogenic stimulus from the isoflavones [genistein](#) and [daidzein](#) contained in Soy protein isolate (SPI).”**

111,111,111,111 - **stimulate human breast cancer cells to enter the cell cycle** ; 1 ;

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9168007&dopt=Abstract .

1997 “Dietary estrogens stimulate human breast cells to enter the cell cycle,” – [Dees C. and others](#), *Environ Health Perspect* 1997 Apr;105(Suppl 3):633-636., Health Sciences Research Division, Oak Ridge National Laboratory, Tennessee, USA

; 1 ; — Dietary estrogens were found to increase enzymatic activity **leading to breast cancer**.

; 1 ; --- “Our findings are consistent with a conclusion that **dietary estrogens, (genistein), at low concentrations** do not act as antiestrogens, **but act like DDT and estradiol to stimulate human breast cancer cells** , (MC-7), to enter the cell cycle.

; 1 ; **Note:** At the end of this full research paper, **Dees concluded that** "... women **should not consume** particular foods, (eg. Soy derived products), **to prevent breast cancer ...”**...

Also see [Dees C.](#) , on pages 74 and 73.

111,111,111,111 - **DNA strand breaks ... <http://www.soyonlineservice.co.nz/04immunefunction.htm> .**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9225019&dopt=Abstract .

1997 “Induction of micronuclei, DNA strand breaks and HPRT mutations in cultured Chinese hamster

V79 cells by the phytoestrogen coumestrol,” – Kulling S.E. and Metzler M., *Food Chem Toxicol* 1997 Jun;35(6):605-13., *Institute of Food Chemistry, University of Karlsruhe, Germany.*

— Coumestrol and genistein caused DNA strand breaks in cultured hamster cells.

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

The Risks Of Abandoning “The Precautionary Principle”

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Stimulates growth of tumors ... Suppress enzymes protective of breast cancer

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9343831&dopt=Abstract .

1997 “Phytoestrogen concentration determines effects on DNA synthesis in human breast cancer cells,” – Wang C. and Kurzer M.S., *Nutr Cancer* 1997;28(3):236-47., *Department of Food Science and Nutrition, University of Minnesota, St. Paul 55108, USA*

; 1; — Soy intake caused larger mammary fat pad tumors to occur in mice. Soy feeding appeared to suppress enzymes protective of breast cancer.

— Although high levels of isoflavones inhibited DNA synthesis in human breast cancer cells, low levels of genistein and related compounds induced DNA synthesis 150-235%. “The current focus on the role of phytoestrogens in cancer prevention must take into account the biphasic effects observed in this study, showing inhibition of DNA synthesis at high concentrations but induction at concentrations close to probable levels in humans.”

— “Our data suggest the possibility that, at typical concentrations in humans, phytoestrogens and related flavonoids and lignans may stimulate, rather than inhibit, growth of estrogen-dependent tumours.”

— Soy intake caused larger mammary fat pad tumors to occur in mice. Soy feeding appeared to suppress enzymes protective of breast cancer.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - DNA damage to human sperm ...

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9249928&dopt=Abstract .

1997 “Effect of various genotoxins and reproductive toxins in human lymphocytes and sperm in the Comet assay,” – Anderson D. and others., *Teratog Carcinog Mutagen* 1997;17(1):29-43., *Department of Genetic and Reproductive Toxicology, BIBRA International, Carshalton, Surrey, United Kingdom.*

— DNA damage to human sperm ...

— Human sperm exposed to the phytoestrogen daidzein had reduced DNA integrity.

— “The integrity of DNA is necessary not only for the noncancerous state, but also for the accurate transmission of genetic material to the next generation.”

1 1 1, 1 1 1, 1 1 1, 1 1 1 (+) 1 1 1 - identifies genistein & daidzein as goitrogenic compounds in Soy, inhibition of enzymes involved in the production of thyroid hormones ... in humans consuming Soy products.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9464451&dopt=Abstract .

1997 “Anti-thyroid isoflavones from the soybean: isolation, characterization & mechanisms,” – Divi R.L., Chang H.C. Doerge D.R., and others., *Biochem Pharmacol* 1997 Nov 15; 54:1087-96., *National Center for Toxicological Research, Jefferson, Ar., 72079, USA.*

— This important study identifies the goitrogenic compounds in soy as the isoflavones genistein & daidzein, which were found to inhibit synthesis of thyroid hormone. Inhibition of enzymes involved in the production of thyroid hormones occurred at isoflavone levels “previously measured in plasma from humans consuming soy products.”

— The extensive consumption of soy products in infant formulas and in vegetarian diets makes it essential to define the goitrogenic potential..... “Because inhibition of thyroid hormones synthesis can induce goiter and thyroid neoplasia in rodents, delineation of antithyroid mechanisms for soy isoflavones may be important for extrapolating goitrogenic hazards identified in chronic rodent bioassays to humans consuming soy products.....This mechanism predicts that any compound that inhibits TPO-mediated thyroid hormone synthesis is a potential thyroid carcinogen.” Authors note: “The soybean has been implicated in diet-induced goiter by many studies.”

1 1 1, 1 1 1, 1 1 1, 1 1 1 - stimulate cellular changes leading to breast cancer

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9383784&dopt=Abstract .

1997 “Effects of dietary menhaden oil, soy, and a cyclooxygenase inhibitor on human breast cancer cell

growth and metastasis in nude mice,” – Connolly J.M. and others, *Nutr Cancer* 1997;29(1):48-54., Division of Nutrition and Endocrinology, American Health Foundation, Valhalla, NY 10595, USA.

; 1; — Phytoestrogens at levels close to probable levels in humans were found to stimulate cellular changes leading to breast cancer.

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1 1 1, 1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9288778&dopt=Abstract .

1997 “**Enhancement of experimental colon cancer by genistein,**” – Roa C.V. and others, *Cancer Res* 1997 Sep 1;57(17):3717-22.

— Administration of genistein to rats caused an **increase in colon tumor** enhancement.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - **risk: benefit ratio ...**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9492351&dopt=Abstract .

1998 “**Herbal medicines, phytoestrogens and toxicity: risk: benefit considerations,**” – Sheehan D.M., *Proc Soc Exp Biol Med* 1998 Mar;217(3):379-85.

— Knowledge of toxicity is crucial **to decrease the risk:benefit ratio**, but herbal medicines and phytoestrogens in food are not tested as are drugs.

; 1; — “Important toxicities with long latencies are particularly difficult to associate with a causative agent ... **These considerations suggest that much closer study in experimental animals and human populations exposed to phytoestrogen-containing products, and particularly soy-based foods, is necessary.** Among human exposures, infant soy formula exposure appears to provide the highest of all phytoestrogen doses, and this occurs during development, often the most sensitive life-stage for induction of toxicity.”

1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10022277&dopt=Abstract .

1998 “**Dietary phytoestrogens and their role in hormonally dependent disease,**” – Strauss L. and others, *Toxicol Lett* 1998 Dec 28;102-103:349-54., Institute of Biomedicine and Medicity Research Laboratory, University of Turku, Finland.

— Although epidemiological studies suggest that diets rich in phytoestrogens may be associated with low risk of breast and prostate cancer, **there is no direct evidence for the beneficial effects of phytoestrogens in humans.** It is plausible that phytoestrogens, as any exogenous hormonally active agent, might also cause adverse effects in the endocrine system.

1 1 1, 1

1998 “**Environmental signaling: a biological context for endocrine disruption,**” – Cheek A.O. and others, *Environ Health Perspect* 1998 Feb;106 suppl 1:5-10.

— The authors discuss the effects of various compounds on steroid-like signaling pathways, especially estrogen. “Based on their mechanisms of action, chemical steroid mimics could plausibly be associated with recent adverse health trends in humans and animals.

1 1 1, 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9848516&dopt=Abstract .

1998 “**Isoflavone content of infant formulas and the metabolic fate of these early phytoestrogens in early life,**” – Setchell K.D. and others, *Am J Clin Nutr* 1998 Dec;68(6 Suppl):1453S-1461S.

— Plasma isoflavone levels in infants fed soy-based formula were 13,000-22,000 higher than concentrations found in fed breast milk or milk-based formula. These high levels are explained “by reduced intestinal biotransformation, as evidenced by low or undetectable concentrations of equol and other metabolites, and is maintained by constant daily

exposure from frequent feeding.” The authors assert that these unnaturally high levels of isoflavones in the bloodstreams of soy-fed children “may have long-term health benefits for hormone-dependent diseases.”

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - cellular damage and DEATH, genistein in Soy is a chromosomal mutagen

- Soy Online Service ... <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

NCBI - PubMed ... <http://www.ncbi.nlm.nih.gov/pubmed/> ,

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9729267&dopt=Abstract .

1998 “p53, mutations, and apoptosis in genistein-exposed human lymphoblastoid cells,” – Morris S.M. and others, *Mutat Res* 1998 Aug 31;405(1):41-56. Division of Genetic and Reproductive Toxicology, National Center for Toxicological Research, Food and Drug Administration, Jefferson, AR 72079, USA

- ; 1 ;
- In vitro administration of genistein was found to cause cellular damage and DEATH. “Our results may be interpreted that genistein is a chromosomal mutagen ...”
 - The phytoestrogen, genistein, is a naturally occurring isoflavone found in soy products.
 - On a biochemical basis, genistein is a competitive inhibitor of tyrosine kinases and the DNA synthesis-related enzyme, topoisomerase-II (topo-II).
 - Exposure of mammalian cells to genistein results in DNA damage that is similar to that induced by the topo-II inhibitor and chromosomal mutagen, m-amsa.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9460177&dopt=Abstract .

1998 “Phytoestrogens: potential endocrine disrupters in males,” – Santti R. and others, *Toxicol Ind Health* 1998 Jan-Apr;14(1-2):223-37.

— In doses comparable to the daily intake from soy-based feed, isoflavonoids such as genistein were estrogen agonists in the prostate of adult laboratory rodents. When given neonatally, no persistent effects were observed. In contrast, the central nervous system (CHS)-gonadal axis and the male sexual behavior of the rat appear to be sensitive to phytoestrogens during development. The changes were similar but not identical to those seen after neonatal treatment with **DES**, but higher doses of phytoestrogens were needed.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Genistein is a chromosomal mutagen ... short term dietary use of soy foods

stimulates breast cancer cell proliferation ... Soy foods stimulate breast proliferation ... after just 14 days

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9848512&dopt=Abstract .

1998 “Effects of soy-protein supplementation on epithelial proliferation in the histologically normal human breast,” – McMichael-Phillips D.F. and others, *Am J Clin Nutr* 1998 Dec;68(6 Suppl):1431S-1435S. Depart. of Epithelial Biology, Paterson Institute for Cancer Research, Christie Hospital NHS Trust, Manchester, U.K.

- ; 1 ;
- This study examines the effects of dietary soy supplementation on the proliferation rate of premenopausal, histologically normal breast epithelium and the expression of progesterone receptor.
 - Soy foods stimulates breast proliferation ... after just 14 days
 - Forty-eight, 48, women with benign or malignant breast disease were randomly assigned a normal diet either alone or with a 60 gram soy supplement containing 45 mg isoflavones, taken for 14 days.
 - The proliferation rate of breast lobular epithelium ... significantly increased ... after just 14 days ... of soy supplementation ... when both the day of menstrual cycle & age of patient were accounted for. Thus short-term use of dietary soy containing isoflavone levels found in modern soy foods stimulates breast proliferation.
- ; 1 ;
- Our results may be interpreted that ... genistein is a chromosomal mutagen and that p53 functional status affects the recovery of chromosomal mutants, possibly by signalling cells into the apoptosis pathways. Short-term dietary soy stimulates breast proliferation; further studies are required to determine whether this is due to estrogen agonist activity & to examine the long-term effects of soy supplementation on the pituitary gland / breast

1 1 1, 1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9863629&dopt=Abstract .

1998 **“Genistein exerts estrogen-like effects in make mouse reproductive tract,”** – [Strauss and others](#), *Mol Cell Endocrinol* 1998 Sept 25;144(1-2):83-93.

; 1 ; — Genistein was found to have estrogenic effects in adult male mice, at doses comparable to those present in Soy-based human diets. In neonatal animals, considerably higher doses are required to show estrogen-like activity.

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1 1 1, 1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10543025&dopt=Abstract .

1999 **“Developmental effects of dietary phytoestrogens in Sprague-Dawley rats and interactions of genistein and daidzein with rat estrogen receptors alpha and beta in vitro,”** – [Casanova M. and others](#), *Toxicol Sci* 1999 Oct;51(2):236-44.

— Effects of dietary genistein included a decreased rate of body-weight gain, a markedly increased (2.3 fold) uterine/body weight and a significant acceleration of puberty among females.

e

1 1 1, 1 1 1, 1 1 1, 1 1 1 - caused **Chromosomal** aberrations, chromatid breaks, gaps, interchanges

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10207614&dopt=Abstract .

1999 **“The phytoestrogens coumoestrol and genistein induce structural chromosomal aberrations in cultured human peripheral blood lymphocytes,”** – [Kulling S.E. and others](#), *Arch Toxicol* 1999 Feb;73(1):50-4., *Institute of Food Chemistry, University of Karlsruhe, Germany*. Sabine.Kulling@chemie.uni-karlsruhe.de

; 1 ; — Phytoestrogens **“coumoestrol”** & **“genistein”** caused chromosomal aberrations in human peripheral blood lymphocytes in vitro. “The major alterations were chromatid breaks, gaps and interchanges ...
— Exposure of blood lymphocytes to low levels of genistein in vitro **caused chromosomal aberrations including chromatid breaks, gaps and interchanges**. Exposure to daidzein did not cause aberrations, even at high levels. The results suggest that “... some but not all phytoestrogens have the potential for genetic toxicity.”

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10210696&dopt=Abstract .

1999 **“Effect of neonatal exposure to estrogenic compounds on development of the excurrent ducts of the rat testis through puberty to adulthood,”** – [Fisher J.S. and others](#), *Environ Health Perspect* 1999 May;107(5):397-405.

— Administration of genistein to rats caused minor but significant changes in rat testes. “This study suggests that structural and functional... development of the excurrent ducts is susceptible to impairment by neonatal estrogen exposure, probably as a consequence of direct effects. The magnitude and duration of adverse changes induced by treatment with a range of estrogenic compounds was broadly comparable to their estrogenic potencies reported from in vitro assays.”

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Also see ... **Frying the Brain With Soy ... page 63**

- Soy phytoestrogens affect brain function of female rats ... promote sexual maturation

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10352122&dopt=Abstract .

1999 **“Effect of estradiol and soy phytoestrogens on choline acetyltransferase and nerve growth factor mRNAs in the frontal cortex and hippocampus of female rats,”** – [Pan Y. and others](#), *Proc Soc Exp Biol Med* 1999 Jun;221(2):118-25.

— “Our data suggest that soy phytoestrogens may function as estrogen agonists in regulating CHAT and NDF mRNAs in the brain of female rats.”

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - There is an increased breast tumor risk from foetal exposure to Soy ... **Carcinogen-induced** mammary tumorigenesis.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10425307&dopt=Abstract .

1999 “Maternal exposure to genistein during pregnancy increases carcinogen-induced mammary tumorigenesis in female rat offspring,” – Hilakiviv-Clarke L. & others, *Oncol Rep* 1999 Sep-Oct;6(5):1089-95., Research Bldg., Lombardi Cancer Center, Georgetown University, NW, Washington, DC, USA.

— Dietary genistein was found to **enhance the growth of mammary gland tumors** in mice.

— **Increased breast tumor risk from foetal exposure to Soy ... Carcinogen-induced** mammary tumorigenesis.

— **"A high estrogenic environment in utero may increase subsequent breast cancer risk.**

; 1 ; — It was therefore determined whether a maternal **exposure during pregnancy** to the phytoestrogen genistein or zearalenone, both of which exhibit estrogenic activities in vitro and in vivo, alters breast cancer risk among female offspring

— **The results indicate that in utero exposure to genistein, but not to zearalenone, dose-dependently increased the incidence of DMBA-induced mammary tumors, when compared with the controls. Tumor growth characteristics were not altered**

— **Our results suggest that a maternal exposure to subcutaneous administration of genistein can increase mammary tumorigenesis in the offspring, mimicking the effects of in utero estrogenic exposures.**

— **Further, increased ER protein levels and reduced PKC activity in the mammary gland may be involved in increasing susceptibility to carcinogen-induced mammary tumorigenesis in rats exposed to genistein in utero."**

1 1 1, 1 1 1, 1 1 1, 1 1 1 - DNA strand breaks - infantile acute leukemia (IAL) ...

- <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10086720&dopt=Abstract .

1999 “Infantile leukemia and soybeans—a hypothesis,” – Abe T., *Leukemia* 1999 Mar;13(3)317-20.,

; 1 ; — Genistein from soybeans contributes to **DNA strand breaks** and may be “largely responsible” for **infantile acute leukemia**.

— Recent molecular-genetic studies have revealed that in the majority of patients with **secondary leukemia** induced by topoisomerase II (topo II) inhibitors and also with **infantile acute leukemia (IAL)**, the breakpoints are clustered within scaffold attachment regions (SARs) of 3'-MLL-bcr near exon 9.

— **Genistein, abundant in soybeans,** is reported to be a potent nonintercalative topo II inhibitor.

— **It interferes with the break-reseal reaction** of topo II by stabilizing a cleavable complex, which in the presence of detergents, results in **DNA strand breaks**. The present study revealed that genistein induced chromatid-type aberrations, in which chromatid exchanges **are often observed**.

— **Genistein seems to act in a manner very similar to that of VP-16,** although the latter is reported to produce both chromatid- and chromosome-type aberrations.

— **In view of this pharmacological similarity between genistein and VP-16, and also the similarity of breakpoint clustering regions within the MLL gene in reported cases with secondary leukemia and IAL, genistein may be largely responsible for the development of IAL.**

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1 1 1, 1 1 1, 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11910681&dopt=Abstract .

1999 “Hot flushes and other menopausal symptoms in relation to soy product intake in Japanese women,”
 – **Nagata C. and others, *Climacteric* 1999 Mar;2(1):6-12.**

— Intake of fermented soy products was found to reduce the severity of hot flashes in Japanese women, but not total soy intake (from unfermented soy products such as are found in western diets).

— **This study is included because it contradicts assertions that Japanese women do not suffer from hot flashes.**

— **Only fermented soy products had a minor effect** and that was just within the margin of statistical error (ie.) it was more likely to be random chance !.

— **Side note: All the promotions for soy for menopausal relief were because Japanese women do not have a word for it. All that means is they don't talk about them.** They have them all right. Look at this research.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11133815&dopt=Abstract .

2000 “Increased induction of aberrant crypt foci by 1,2-dimethylhydrazine in rats fed diets containing purified genistein or genistein-rich soya protein,” – **Gee J.M. and others, *Carcinogenesis* 2000 Dec;21(12):2255-9.**

— Genistein promotes induction of **aberrant crypt foci**, by an as yet unidentified mechanism when fed immediately before treatment with 1,2-dimethylhydrazine.

1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11014247&dopt=Abstract .

2000 “Comparative effects of neonatal exposure of male rats to potent and weak (environmental) estrogens on spermatogenesis at puberty and the relationship to adult testis size and fertility: evidence for stimulatory effects of low estrogen levels,” – **Cassanova N. and others, *Endocrinology* 2000 Oct;141(10):3898-907.**

— Administration of genistein to rats significantly retarded most measures of pubertal spermatogenesis. Animals fed a soy-free diet had significantly larger testes than controls fed a soy-containing diet.

— **“It is concluded that ... the presence or absence of soy or genistein in the diet has significant short-term (pubertal spermatogenesis) and long-term (body weight, testis size, FSH levels and possibly mating) effects on males.**

1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11216491&dopt=Abstract .

2000 “Effects of isoflavone supplement on healthy women,” – **Watanabe S. and others, *Biofactors* 2000;12(1-4):233-41.**

— **After one month of taking 20 mg or 40 mg isoflavones daily**, 60% of the young women had prolonged menstruation, 20% had shortened menstruation, 17% remained unchanged and 3% became irregular. Other hormonal changes “suggest that isoflavones influence not only estrogen receptor-related functions but the hypothalamo-hypophysis-gonadal axis.”

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - DNA breakage ... **within 1 hour ... of treatment** ; 1 ;

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10762754&dopt=Abstract .

2000 “Genistein induces apoptosis and topoisomerase II-mediated DNA breakage in colon cancer cells,” – Salti G.I. and others, *Eur J Cancer* 2000 Apr;36(6):796-802. University of Illinois at Chicago, College of Medicine, Department of Surgical Oncology, Chicago, USA

; 1 ; — DNA breakage in colon cancer cells occurred **within 1 hour of treatment** with genistein.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Also see ... **Frying the Brain With Soy ... page 63**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10720621&dopt=Abstract .

2000 “Phytoestrogens decrease brain calcium-binding proteins but do not alter hypothalamic androgen metabolizing enzymes in adult male rats,” – Lephard E.D. and others, *Brain Res* 2000 Mar 17;859(1):123-31.

— Animals fed diets containing **phytoestrogens** ... for 5 weeks ... had elevated levels of phytoestrogens in the **brain** and a decrease of **brain** calcium-binding proteins. **Calcium-binding proteins are associated with protections against neurodegenerative diseases.**

1 1 1, 1 1 1, 1 1 1, 1 1 1 - **infant leukemia**

- <http://www.soyonlineservice.co.nz/downloads/strick.pdf> ,

- <http://www.cancerpage.com/cancernews/cancernews704.htm> .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10758153&dopt=Citation .

2000 “Dietary bioflavonoids induce cleavage in the MLL gene and may contribute to infant leukemia,” – Strick R. and others,” *Proc Natl Acad Sci USA* 2000 Apr 25;97(9):4790-5.

; 1 ; — Researchers found that flavonoids, especially **genistein, can cross the placenta and induce cell changes that lead to infant leukemia.**

1 1 1, 1 1 1 .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11042097&dopt=Abstract .

2000 “Dietary genistein inactivates rat thyroid peroxidase in vivo without an apparent hypothyroid effect,” – Chang H.S. and George D.R., *Toxicol Appl Pharmacol* 2000 Nov 1;168(3):244-52.

— The activity of **thyroid peroxidase activity** in soy-fed rats was **reduced by up to 80% compared to those on a soy-free diet**. As thyroid hormone levels and thyroid weights were no different between treated and untreated groups, the researchers concluded that “the remaining enzymatic activity is sufficient to maintain thyroid homeostasis in the absence of additional perturbations.” However, it is difficult or impossible to measure some of the more subtle manifestations of hypothyroidism in rats.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11133815&dopt=Abstract .

2000 “Increased induction of aberrant crypt foci by 1,2-dimethylhydrazine in rats fed diet containing purified genistein or genistein-rich soya protein,” – Gee J.M. and others, *Carcinogenesis* 2000;21:2255-2259.

— Rats fed the **isoflavone genistein** exhibited pathological changes in the colon.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - **Genistein in Soy is a endocrine disruptor & induces mammary carcinoma**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10737721&dopt=Abstract .

2000 “**Influence of perinatal genistein exposure on the development of MNU-induced mammary carcinoma in female Sprague-Dawley rats,**” – ***Yang J. and others,*** *Cancer Lett* **2000 Feb 28;149(1-2):171-9., Department of Pathology II, Kansai Medical University, Moriguchi, Osaka, Japan.**

— “... perinatal **genistein** is an endocrine disrupter and increases the multiplicity of MNU-induced mammary **carcinoma** in rats.”

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - caused **abnormal growth** of the Thyroid gland.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10753207&dopt=Abstract .

2000 “**Dramatic synergism between excess soybean intake and iodine deficiency on the development of rat thyroid hyperplasia,**” – ***Ikeda T. and others,*** *Carcinogenesis* **2000 Apr;21(4):707-13.**

— Excess soybean intake with iodine deficiency caused **abnormal growth** of the Thyroid gland.

1 1 1, 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10798211&dopt=Abstract .

2000 “**Inverse association of soy product intake with serum androgen and estrogen concentrations in Japanese men,**” – ***Nagata C. and others,*** *Nutr Cancer* **2000;36(1):14-8.**

— Researchers found **lower testosterone levels** and **higher estrogen levels** in Japanese men who consumed higher levels of soy foods.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Also see ... **Frying the Brain With Soy** ... page 63

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10917909&dopt=Abstract .

2000 “**Mass Spectrometric determination of Genistein tissue distribution in diet-exposed Sprague-Dawley rats,**” – ***Chang H.C. and others,*** *J Nutr* **2000 Aug;130(8):1963-70., Division of Biochemical Toxicology, National Center for Toxicological Research, Jefferson, AR 72079, USA.**

— **Genistein** administered to mice via **maternal milk or fortified feed** showed dose-dependent increases in total **genistein concentration** in the **brain**, liver, mammary, ovary, prostate, testis, thyroid and uterus.

— Female liver contained the highest amount of genistein (7.3 pmol/mg tissue) and male whole brain contained the least (0.04 pmol/mg).

— These results for measured amounts of genistein, present as aglycone and conjugates, in putative target tissues provide **a link with other studies** in which blood concentrations and physiologic effects of genistein are measured.

1 1 1, 1 1 1, 1 1 1 - **Genistein has adverse effects on animal reproduction**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10828262&dopt=Abstract .

2000 “**Effects of genistein exposure on sexually dimorphic behaviors in rats,**” – ***Flynn K.M. and others,*** *Toxicol Sci* **2000 Jun;55(2):311-9.**

; 1;

— Noting that genistein “**has adverse effects on animal reproduction,**” the researchers administered genistein to pregnant rats and to their offspring during growth. Results indicated significantly decreased body weight in genistein-fed rats compared to controls. The results indicate that developmental genistein treatment, at levels that decrease maternal and offspring body weight, causes subtle alternations in some sexually dimorphic behaviors.

1 1 1, 1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11103227&dopt=Abstract .

2000 “**Effects of replacing meat with soyabean in the diet on sex hormone concentrations in healthy adult males,**” – ***Habito R.C. and others,*** *Br J Nutr* **2000 Oct;84(4):557-63.**

— Men eating tofu instead of meat for 4 weeks had **lower testosterone-oestradiol ratios**, as well as, changes in other hormone levels. “**Thus, replacement of meat protein with soyabean protein, as tofu, may have a minor effect on**

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1 1 1, 1 1 1, 1 1 1 - Soy protein isolate, SPI, was found to accelerate puberty

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11488559&dopt=Abstract .

2001 “Developmental effects and health aspects of soy protein isolate, casein and whey in male and female rats,” – *Badger T.M. and others*, *Int J Toxicol* 2001 May-Jun;20(3):165-74.

— Feeding of soy protein isolate was found to accelerate puberty in female rats. Female rats also had reduced serum 17beta-estradiol concentrations.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Placental transfer to the fetal brain ... Genistein cross the rat placenta and reaches the fetal brain in doses similar to those observed in humans ...

Also see ... **Frying the Brain With Soy** ... page 63

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11297868&dopt=Abstract .

2001 “Placental transfer of the soy isoflavone genistein following dietary and gavage administration to Sprague Dawley rats,” – *Doerge D.R. and others*, *Reprod Toxicol* 2001 Mar-Apr;15(2):105-10., *Division of Biochemical Toxicology, National Center for Toxicological Research, U.S. FDA, Jefferson, AR 72079, USA.*

; 1 ; — Genistein was found to cross the rat placenta and reach the fetal brain in doses similar to those observed in humans.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Genistein is more carcinogenic than DES - Diethylstilbestrol

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11389053&dopt=Abstract .

2001 “Uterine adenocarcinoma in mice treated neonatally with genistein,” – *Newbold R.R. and others*, *Cancer Res* 2001 Jun 1;61(11):4325-8., *Developmental Endocrinology Section, Laboratory of Toxicology, Environmental Toxicology Program, Division of Intramural Research, National Institute of Environmental Health Sciences, Research Triangle Park, NC, USA.*

; 1 ; — Genistein in soy was found to be more carcinogenic than DES, especially during “critical periods of differentiation — “The developing fetus is uniquely sensitive to perturbation with estrogenic chemicals. The carcinogenic effect of prenatal exposure to diethylstilbestrol (DES) is the classic example. **Because phytoestrogen use in nutritional and pharmaceutical applications for infants and children is increasing, we investigated the carcinogenic potential of genistein, a naturally occurring plant estrogen in soy, in an experimental animal model previously reported to result in a high incidence of uterine adenocarcinoma after neonatal DES exposure. Outbred female CD-1 mice were treated on days 1-5 with equivalent estrogenic doses of DES (0.001 mg/kg/day) or genistein (50 mg/kg/day). At 18 months, the incidence of uterine adenocarcinoma was 35% for genistein and 31% for DES.** — These data suggest that genistein is carcinogenic if exposure occurs during critical periods of differentiation. Thus, the use of soy-based infant formulas in the absence of medical necessity and the marketing of soy products designed to appeal to children should be closely examined”.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11354798&dopt=Abstract .

2001 “Inhibitory effect of genistein on the proliferation of the anterior pituitary cells of rats,” – *Zhang O.H. and others*, *Sheng Li Xue Bao* 2001 Feb;53(1):51-4.

— In consequence, genistein, as a tyrosine kinase inhibitor, can significantly inhibit the proliferation of pituitary cells possibly by inducing apoptosis, and the tyrosine kinase activity may play a key role in the proliferation and differentiation of pituitary cells.

— Genistein inhibits proliferation & causes apoptosis of pituitary cells by inhibiting tyrosine kinase activity

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - **Stimulate breast cancer growth ??.** **Yes !!.**

Women with current or past breast cancer **should be aware of the risks of potential tumor growth when taking soy products ... antagonize the effects of tamoxifen ...**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11573864&dopt=Abstract .

2001 “Effects of soy phytoestrogens genistein and daidzein on breast cancer growth,” – de Lemos M.L., *Ann Pharmacother* 2001 Sep;35(9):1118-21., *British Columbia Cancer Agency, Vancouver, B.C., Canada*, mdelemos@bccancer.bc.ca

— **Objective:** to determine whether **genistein** and **daidzein**, the major phytoestrogens in soy, **can stimulate breast cancer growth ??.**

; 1 ; — Women with current or past breast cancer **should be aware of the risks of potential tumor growth when taking soy products.”**

; 1 ; — **Conclusions:** Genistein and daidzein may **stimulate existing breast tumor growth** and antagonize the effects of tamoxifen.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - **stimulated breast tumor growth and cell proliferation**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11694625&dopt=Abstract .

2001 “Physiological concentrations of dietary genistein dose-dependently stimulate growth of estrogen-dependent human breast cancer (MCF-7) tumors implanted in athymic nude mice,” – Ju Y.H. and others, *J Nutr* 2001 Nov;131(11):2957-62., *Department of Food Science and Human Nutrition, University of Illinois at Urbana-Champaign, Urbana, IL 61801, USA*.

— Genistein **stimulated** breast tumor growth and **cell proliferation** in mice in a dose-responsive manner.

1 1 1, 1 1 1, 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11303591&dopt=Abstract .

2001 “Urinary phytoestrogens and postmenopausal breast cancer risk,” – den Tonkelaar I. and others, *Cancer Epidemiol Biomarkers Prev* 2001 Mar;10(3):223-8.

— “We were **not able to detect** the previously **reported protective** effects of genistein and enterolactone on breast cancer risk in our postmenopausal population of Dutch women.”

1 1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11489596&dopt=Abstract .

2001 “Reproductive effects in male and female rats of neonatal exposure to genistein,” – Nagao T. and others, *Reprod Toxicol* 2001 Jul-Aug;15(4):399-411.

— Feeding of genistein to newborn rats resulted in **lower body weight in male and female rats, estrous cycle irregularities and lowered fertility in female rats**. Neonatal exposure to genistein caused dysfunction of postpubertal reproduction performance, as well as, **abnormal development of gonads in female** but not in male rats.

1 1 1, 1 1 1 - causes a decrease in testosterone levels in rainbow trout

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11178883&dopt=Abstract .

2001 “Effect of genistein-enriched diets on the endocrine process of gametogenesis and on reproduction efficiency of the rainbow trout *Oncorhynchus mykiss*,” – Bennetau-Pelissero C. and others, *Gen Comp*

— Genistein caused a **decrease in testosterone levels in rainbow trout**. Testicular development was accelerated in genistein-fed fish and sperm motility and concentration were decreased in a dose-dependent manner at spawning.

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - These effects occurred **-within-** exposure ranges **achievable in humans.**”

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11738518&dopt=Abstract .

2001 “Effects of dietary genistein exposure during development on male and female DC (Sprague-Dawley) rats,” – Declos K.B., Bucci T.J., Lomax L.G., and others, *Reprod Toxicol* 2001 Nov;15(6):647-63., Division of Biochemical Toxicology, NCTR, Jefferson, AR, USA. bdeleclous@nctr.fda.gov

— **Genistein** was administered to rats at various concentrations starting on gestation day 7 and continuing throughout pregnancy, lactation and growth of the pups to day 50. The genistein-fed rats showed a number of variances from the norm: lower weight in both sexes; decreased prostate weight in males; higher pituitary gland to body weight ratios in both sexes; hyperplasia of the mammary glands, abnormal ovarian antral follicles and abnormal cellular maturation in the vagina in females; aberrant or delayed spermatogenesis and deficit sperm in males; and an increase in the incidence and/or severity of renal tubal mineralization in both sexes, even at low doses. **“Dietary genistein thus produced effects in multiple estrogen-sensitive tissues in males and females that are generally consistent with its estrogenic activity.**

; 1 ;

--- **These effects occurred - within - exposure ranges achievable in humans.**”

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Dietary levels of **daidzein** and **genistein** were associated with an increase in the incidence of vulvar **carcinomas** in mice

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12132873&dopt=Abstract .

2001 “Effects of the dietary phytoestrogens daidzein and genistein on the incidence of vulvar carcinomas in 129/J mice,” – Thigpen J.E. and others, *Cancer Detect Prev* 2001;25(6):527-32. *Comparative Medicine Branch, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709, USA*

— The objective of this study was to determine the effect of dietary phytoestrogens on the incidence of spontaneous vulvar carcinomas in 129/J mice using three natural ingredient diets and two purified diets containing predetermined levels of **daidzein** and **genistein**. Vulvar carcinomas in representative groups of mice were confirmed using routine histological procedures..

— **Within one month, the incidence of vulvar carcinomas in mice fed a modified soy protein diet was significantly increased over those of mice fed control diets.**

— **Within 3 months, the incidence of vulvar carcinomas in mice fed the soy protein diet was significantly increased over those of mice fed other control diets.**

— **“We concluded that dietary levels of daidzein and genistein were associated with an increase in the incidence of vulvar carcinomas in mice, and that the 129/J mouse may provide an animal model for studying the development of vulvar carcinomas.**

1 1 1, 1 1 1, 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11488560&dopt=Abstract .

2001 “Gender-based differences in rats after chronic dietary exposure to genistein,” – Slikker W. Jr. and others, *Int J Toxicol* 2001 May-Jun;20(3):175-9.

— Dose-related alternations of the volume of the sexually dimorphic nucleus of the medial preoptic area were observed in genistein-exposed male rats but not females.

— **Gender-based differences can be observed from pharmacokinetic, behavioral, or anatomical assessments. No single assessment tool will provide a complete answer, but the use of a variety of indices, each with known gender-related outcome differences, can reveal agent-induced gender-based alterations.**

— These observations describe the utility of a variety of gender-based assessment tools and indicate that dose-related effects of developmental and chronic dietary exposure to **genistein** can be observed in the rodent. **Additional studies, perhaps in nonhuman primates, are necessary to further predict the effect(s) of genistein on human gender-based**

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - **stimulate the growth** of “**estrogen-dependent breast cancer cells**”

Depending on processing, **soy protein isolates, SPI's, vary widely** in concentrations of **genistein**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11431339&dopt=Abstract .

2001 “Soy diets containing varying amounts of genistein stimulate growth of estrogen-dependent (MCF-7) tumors in a dose-dependent manner,” – Allred C.D. and others, *Cancer Res* 2001 Jul 1;61(13):5045-50. Department of Food Science and Human Nutrition, University of Illinois, Urbana, Illinois, USA

Depending on processing, **soy protein isolates, SPI's, vary widely** in concentrations of **genistein**

; 1; Here we present new information that **soy protein isolates** containing increasing concentrations of **genistein** **stimulate the growth of estrogen-dependent breast cancer cells** in vivo in a dose-dependent manner.

1 1 1, 1 1 1, 1 1 1, 1 1 1, 1 - **Removal of soy genistin ... caused tumors to regress.**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11577007&dopt=Abstract .

2001 “Dietary genistin stimulates growth of estrogen-dependent breast cancer tumors similar to that observed with genistein,” – Allred C.D. and others, *Carcinogenesis* 2001 Oct;22(10):1667-73. Depart. of Food Science & Human Nutrition, and Division of Nutritional Sciences, Univ. of Illinois, at Urbana-Champaign, IL 61801, USA.

— Genistin, the glycoside form of genistein, is converted to genistein by human saliva. The glycoside genistin, like the aglycone genistein, can **stimulate estrogen-dependent breast cancer cell growth in vivo. Removal of genistin or genistein from the diet caused tumors to regress.**

1 1 1, 1 1 1, 1 1 1, 1 1 1 - **Also see ... Frying the Brain With Soy ... page 63**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11733689&dopt=Abstract .

2001 “Dietary soy phytoestrogen effects on brain structure and aromatase in Long-Evans rats,” – Lephart E.D. and others, *Neuroreport* 2001 Nov 16;12(16):3451-5.

— Dietary phytoestrogens significantly decrease body and prostate weights and during adulthood significantly change the structure of the sexually dimorphic **brain region in male** but not in female rats.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - **Also see ... Frying the Brain With Soy ... page 63**

- Soy Isoflavone supplements antagonizes reproductive behavior
- lowers Sex drive

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11416015&dopt=Abstract .

2001 “Soy isoflavone supplements antagonize reproductive behavior and estrogen receptor alpha- and beta-dependent gene expression in the brain,” – Patisual H.B. and others, *Endocrinology* 2001 Jul;142(7):2946-52.

; 1; — Soy lowers Sex drive
— Soy isoflavones **interfere with estrogen receptors** in the adult female rat **brain** resulting in a significant decrease in receptive behavior in estrogen- and progesterone-primed females.
— “The observed disruption of sexual receptivity by isoflavone supplement is probably due to antiestrogenic effects observed in the **brain**.”
— These results suggest that isoflavone phytoestrogens are antiestrogenic on both ERalpha- and ERbeta-dependent gene expression in the brain and estrogen-dependent behavior.

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1 1 1, 1 1 1 - **disruption of gene expression continued 3 months after ... into adulthood**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11873863&dopt=Abstract .

2001 “Neonatal exposure to genistein reduces expression of estrogen receptor alpha and androgen receptor in testes of adult mice,” – Shibayama T. and others, *Endocr J* 2001 Dec;48(6):655-63. *Core Research for Evolutional Science and Technology, Japan Science and Technology Corporation, Kawaguchi, Saitama.*

— “Our results exhibited that the disruption of gene expression continued for long term such as ... 3 months after administration of genistein ... even if no effect was found at conventional reproductive-toxicological levels. We have shown that neonatal administration of weak estrogenic compound (genistein) **affects male reproductive organs at molecular levels in adulthood.**”

1 1 1, 1 1 1, 1 1 1, 1 1 1 - **Humans are affected at lower doses than rodents.**

“In vivo data show that phytoestrogens have a wide range of biologic effects at doses and plasma concentrations seen with normal human diets. Significant in vivo responses have been observed in animal and human tests for bone, breast, ovary, pituitary, vasculature, prostate, and serum lipids.”

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11250801&dopt=Abstract .

2001 “Cross-species and interassay comparisons of phytoestrogen action,” – Whitten P.L., Patisaul H.B., *Environ Health Perspect* 2001 Mar;109 Suppl 1:5-20., *Department of Anthropology, Emory University, Atlanta, Georgia 03022, USA.*

; 1;

Humans are affected at lower doses than rodents.

— “In vivo data show that phytoestrogens have a wide range of biologic effects at doses and plasma concentrations seen with normal human diets. **Significant in vivo responses have been observed in animal & human tests for ... bone ... breast ... ovary ... pituitary ... vasculature ... prostate and serum lipids ... Steroidogenesis and the hypothalamic-pituitary-gonadal axis appear to be important loci of phytoestrogen actions**, but these inferences must be tentative because good dose-response data are not available for many end points.”

— **This paper compiles animal and human data on the biologic effects and exposure levels of phytoestrogens in order to identify areas of research in which direct species comparisons can be made.** “In vivo data show that phytoestrogens have a wide range of biologic effects at doses and plasma concentrations seen with **normal** human diets. **Significant in vivo responses have been observed in animal and human tests for bone, breast, ovary, pituitary, vasculature, prostate, and serum lipids.**”

— **The similarity of reported proliferative and antiproliferative doses** illustrates the need for fuller examination of dose-response relationships and multiple end points in assessing phytoestrogen actions.

1 1 1, 1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12270211&dopt=Abstract .

2002 “Assessing estrogenic activity of phytochemicals using transcriptional activation and immature mouse uterotrophic responses,” – Jefferson W. and others, *J Chromatogr B Analyt Technol Biomed Life Sci* 2002 Sep 25;777(1-2):179.

— Genistein caused an **increase** in uterine weight and several other indications of estrogenicity.

1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12270214&dopt=Abstract .

2002 **“Oxidative metabolism and genotoxic potential of major isoflavone phytoestrogens,”** – [Kulling S. and others](#), *J Chromatogr B Analyt Technol Biomed Life Sci* 2002 Sep 25;777(1-2):211.

— The study describes the **potential genetic toxicity of the breakdown products of soy isoflavones.**

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e

1 1 1, 1 1 1 - Genistein directly **inhibits** steroid-production enzymes.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11870108&dopt=Abstract .

2002 **“Acute and chronic effects of genistein, tyrphostin and lavendustin A on steroid synthesis in luteinized human granulosa cells,”** – [Whitehead S.A. and others](#), *Hum Reprod* 2002 Mar;17(3):589-94. , Department of Physiology, St George's Hospital Medical School, Cranmer Terrace, London SW17 0RE, UK., s.whitehead@sghms.ac.uk

— Genistein directly **inhibits** steroid-production enzymes.

1 1 1, 1 1 1, 1 1 1, 1 1 1, 1

- implications for **reproductive toxicity & carcinogenesis** - warrants further investigation

- further study of auto-immune **thyroiditis** in children consuming Soy formula is warranted

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12270219&dopt=Abstract .

2002 **“Inactivation of thyroid peroxidase by soy isoflavones, in vitro & in vivo,”**– [Doerge D.R. & Chang H.C.](#), *J Chromatogr B Analyt Technol Biomed Life Sci* 2002 Sep 25;777(1-2):269-79., Division of Biochemical Toxicology, National Center for Toxicological Research, 3900 NCTR Road, Jefferson, AR 72079, USA.

— studies of soy isoflavones in experimental animals suggest possible adverse effects as ... enhancement of reproductive organ cancer, modulation of endocrine function, anti-thyroid effects.

— The paper **reviews the evidence in humans & animals for anti-thyroid effects of soy & its principal isoflavones, genistein & daidzein.** Genistein interferes with estrogen receptors in rat prostate glands which “. . . may have implications for **reproductive toxicity & carcinogenesis** that warrant further investigation”

— **Also** “... further study of **autoimmune thyroiditis in children consuming soy formula** is warranted ...”.

1 1 1, 1 1 1, 1 1 1, 1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11888703&dopt=Abstract .

2002 **“Detection of phytoestrogens in samples of second trimester human amniotic fluid,”** – [Foster W.G. and others](#), *Toxicol Lett* 2002 Mar 28;129(3):199-205., Center for Women's Health, Cedars-Sinai Medical Center, Los Angeles, California, USA

— The study describes a method for measuring phytoestrogens **daidzein** and **genistein** in **amniotic fluid.** Such tests are needed, the authors assert, because **“There is widespread concern that fetal exposure to hormonally active chemicals may adversely affect development of the reproductive tract.”**

1 1 1, 1 1 1, 1 1 1, 1 1 1 - **the results were additive ... joint action of estrogenic chemicals lead to significant underestimations of risk. ... ; 1 ; ... ; 1 ; ... ; 1 ;**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11993873&dopt=Abstract .

2002 **““Something from “nothing” - - eight weak estrogenic chemicals combined at concentrations below NOECs produce significant mixture effects,”** – [Silva E. and others](#), *Environ Sci Technol* 2002 Apr;36(8):1751-6., Centre for Toxicology, Department of Pharmacology, The School of Pharmacy, University of London.

; 1 ; — **Xenoestrogens including genistein** were tested in combinations. **The results were additive, producing significant effects when combined at low concentrations.** “We conclude that estrogenic agents are able to act together to produce significant effects when combined at concentrations below their NOEC’s. Our results highlight the limitations of the traditional focus on the effects of single agents. **Hazard assessments that ignore the possibility of joint action of**

estrogenic chemicals will almost certainly lead to significant underestimations of risk.”

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - ; 1 ; - Overwhelms effects of Tamoxifen, Therefore ... **Caution** ... is warranted
- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11980635&dopt=Abstract .

2002 “Dietary genistein negates the inhibitory effect of tamoxifen on growth of estrogen-dependent human breast cancer (MCF-7) cells implanted in athymic mice,” – Ju Y.H. and others, Cancer Res 2002 May 1;62(9):2474-7., Department of Food Science and Human Nutrition, University of Illinois at Urbana-Champaign, Urbana, Illinois 61801, USA.

; 1 ; — The use of “**dietary isoflavone supplements**” by postmenopausal women “**with breast cancer**” is increasing.
— Dietary genistein negated or **overwhelmed the inhibitor effect of tamoxifen on MCF-7 tumor growth, lowered E2 levels in plasma, and increased expression of E-response genes (e.g., pS2, PR, and cyclin D1)** in ovariectomized and athymic mice. ...

; 1 ; --- “Therefore, **caution is warranted** for postmenopausal women consuming dietary genistein while on TAM therapy for E-responsive breast cancer.”

1 1 1, 1 1 1, 1 1 1 - **Genistein caused a decrease in the percentage of helper T cells**
- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12079431&dopt=Abstract .

2002 “Genistein modulates splenic natural killer cell activity, antibody-forming cell response and phenotypic marker expression in F(0) and F(1) generations of Sprague-Dawley rats,” – Guo T.L. and others, Toxicol Appl Pharmacol 2002 Jun 15;181(3):219-27.

— **Genistein caused a decrease in the percentage of helper T cells** and an increase in the relative weights of spleen and thymus in rats.

1 1 1, 1 1 1, 1 1 1 - **safety testing of natural products, including soy products, is not required**
- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12060828&dopt=Abstract .

2002 “Goitrogenic and estrogenic activity of soy isoflavones,” – Doerge D.R. and D.M. Sheehan, Environ Health Perspect 2002 Jun;110 suppl 3:349-53., Division of Biochemical Toxicology, National Center for Toxicological Research, Jefferson, Arkansas, USA.

— “Soy is known to produce estrogenic isoflavones. Here, we briefly review the evidence for binding of isoflavones to the estrogen receptor, in vivo estrogenicity and developmental toxicity, and estrogen developmental **carcinogenesis** in rats. **Genistein, the major soy isoflavone, also has a frank estrogenic effect in women.** We then focus on **evidence from animal and human studies** suggesting a link between soy consumption and goiter, an activity independent of estrogenicity. Iodine deficiency greatly increases soy antithyroid effects, whereas iodine supplementation is protective. ... **Although safety testing of natural products, including soy products, is not required, the possibility that widely consumed soy products may cause harm in the human population via either or both estrogenic and goitrogenic activities is of concern.**”

1 1 1, 1 1 1, 1 1 1 -
- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12021182&dopt=Abstract .

2002 “Genistein affects ER beta- but not ER alphadependent gene expression in the hypothalamus,” – Patisaul H.B. and others, Endocrinology 2002 Jun;143(6):2189-97.

— Genistein at a dietary concentration of 100 or 500 ppm had no effect on lordosis behavior in rats. However, at 500 ppm genistein had differential activity through ER alpha and ER beta in the **hypothalamus**.

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1 1 1, 1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11920488&dopt=Abstract .

2002 “The specific role of isoflavones on estrogen metabolism in premenopausal women,” – Kumar N.B. and others, *Cancer* 2002 Feb 15;94(4):1166-74.

Sixty eight women consuming 40 mg soy isoflavones daily for 12 weeks had changes in steroid hormones and **increased cycle length**.

1 1 1, 1 1 1, 1 1 1, 1 1 - Also see ... **Frying the Brain With Soy ... page 63**

- **Premature Anovulation in Female Offspring & Suppressed Sexual Behavior in Males.**

- **can alter estrogen-dependent gene expression in the brain and complex behavior.**

- **Small exposure levels can alter estrogen-dependent gene expression in the brain and complex behavior**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11836071&dopt=Abstract .

2002 “Neurobehavioral actions of coumestrol and related isoflavonoids in rodents, – Whitten P.L. and others,” *Neurotoxicol Teratol* 2002 Jan-Feb;24(1):47-54.

; 1 ; — **Coumestrol and related isoflavones induced neurobehavioral actions in rodents** that were antiestrogenic, either antagonizing or producing an action in opposition to that of **estradiol**. “This work demonstrates that **even small, physiologically relevant, exposure levels** can alter estrogen-dependent gene expression in the **brain** and complex behavior.

1 1 1, 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11925465&dopt=Abstract .

2002 “Effects of soy consumption on gonadotropin secretion and acute pituitary responses to gonadotropin-releasing hormone in women,” – Nicholls J. and others, *J Nutr* 2002 Apr;132(4):708-14.

— 12 women consumed 60 mg isoflavones daily for 10-14 days. A residual postmenopausal effects was seen in postmenopausal subjects. “In one premenopausal woman, enhanced LH secretion was observed after soy treatment, suggesting there may be subpopulations of women are highly sensitive to isoflavones.”

1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11861976&dopt=Abstract .

2002 “Combined effects of dietary phytoestrogen and synthetic endocrine-active compounds on reproductive development in Sprague-Dawley rats: genistein and methoxychlor,” – You L. and others, *Toxicol Sci* 2002 Mar;66(1):91-104.

— “Data from this study indicate that phytoestrogens are capable of altering the toxicological behaviors of other EACs, and the interactions of these compounds may involve complexities that are difficult to predict based on their in vitro steroid receptor reactivities.”

1 1 1, 1 1 1, 1 1 1, 1 1 - Also see ... **Frying the Brain With Soy ... page 63**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11836071&dopt=Abstract .

2002 “Neurobehavioral actions of coumestrol and related isoflavonoids in rodents,” – Whitten P.L. and

others, *Neurotoxicol Teratol* 2002 Jan;24(1):47-54.

— Treatment of female rats with coumestrol (a phytoestrogen found in soy) **induced premature anovulation in female offspring and suppressed sexual behavior in male offspring**. Various hormonal effects were observed with **even small doses**. "... even small, physiologically relevant exposure levels can alter estrogen-dependent gene expression in the **brain** and complex behavior."

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1 1 1, 1 1 1 - the potential for soy isoflavones to **cause** heart arrhythmias.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12145529&dopt=Abstract .

2002 **"Genistein Inhibits the Inward Rectifying Potassium Current in Guinea Pig Ventricular Myocytes,"** – Chiang C.E. and others, *J Biomed Sci* 2002;9:321-326.

— Dietary isoflavones genistein dose-dependently and reversibly inhibit the inward rectifying K⁺ (potassium) current in guinea pigs ventricular myocytes, suggesting **the potential for soy isoflavones to cause heart arrhythmia's**.

1 1 1, 1 1 1, 1 1 1, 1 - the placenta **does not** represent a barrier

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11875621&dopt=Abstract .

2002 **"Transplacental transfer of the phytoestrogen daidzein in DA/Han rats,"** – Degen G.H. and others, *Arch Toxicol* 2002 Feb;76(1):23-9., Institute fur Arbeitsphysiologie an der Universitat Dortmund, Ardeystrasse 67, 44139 Dortmund, Germany.

— The research found indications of **a rapid transfer of daidzen from the mother to the fetus**, but also that efficient extraction of daidzein from the maternal blood occurs. "Since dietary phytoestrogens account for a significant proportion of human exposure to potential endocrine modulators, and since **the placenta does not represent a barrier to daidzein or related estrogenic isoflavones, the consequences of these exposures early in life should be examined and monitored carefully.**"

1 1 1, 1 1 1, 1 1 1, 1 1 1 - It is therefore considered likely that similar or larger effects may occur in human male infants fed infant soy milk formula

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12093826&dopt=Abstract .

2002 **"Infant feeding with soy formula milk: effects on the testis and on blood testosterone levels in marmoset monkeys during the period of neonatal testicular activity,"** – Sharp R.M. and others, *Hum Reprod* 2002 Jul;17(7):1692-703. MRC Human Reproductive Sciences Unit, Centre for Reproductive Biology, 37 Chalmers Street, Edinburgh EH3 9ET, UK., r.sharpe@hrsu.mrc.ac.uk

; 1 ;— Infant male marmoset monkeys were fed either soy-based or milk-based formula. The neonatal testosterone rise was suppressed in the soy-fed monkeys. Levels of isoflavone in the monkey diets were 40-87% of that reported in 4-month human infants fed a 100% soy-based formula diet. **"It is therefore considered likely that similar, or larger, effects to those shown here in marmosets may occur in human male infants fed with SFM [soy formula milk]."**

1 1 1, 1 1 1, 1 1 1, 1 1 1 - **Carcinogenic**

- http://www.eurekalert.org/pub_releases/2001-05/NIOE-Iucs-3005101.php .

2002 **"Increased uterine cancer seen in mice injected with genistein, a soy estrogen, as newborns,"** – Newbold R. and others, *Cancer Research* 2002 June.

— Infant mice given genistein developed cancer of the uterus later in life.

; 1 ;— "The data suggest that **genistein is carcinogenic** if exposure occurs during critical periods in a young animal's development."

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1 1 1, 1 - women ... hot flushes, night sweats, and vaginal dryness **did not** improve in the soy group.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12113884&dopt=Abstract .

2002 “A pilot study of the effects of phytoestrogen supplementation on postmenopausal endometrium,” – Balk J.L. and others, *J Soc Gynecol Investig* 2002 Jul-Aug;9(4)238-42., Department of Obstetrics, Gynecology, and Reproductive Sciences, Magee-Womens’ Hospital, University of Pittsburgh, Pennsylvania 15213, USA.

— This was a double-blinded, randomized, placebo-controlled trial comparing the effects of 6 months of dietary phytoestrogen supplementation versus placebo in postmenopausal women.

; 1 ; — **“Phytoestrogens did not cause stimulation of the endometrium. Insomnia was more frequent over the 6-month study in the soy group, where as - hot flushes, night sweats and vaginal dryness improved from baseline in the placebo group but not in the soy group.”**

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Thymic & immune abnormality

- <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

- <http://www.mercola.com/2002/jun/8/soy.htm> , **“Soy Weakens Your Immune System” ...**

Dr. Mercola’s Comment ... “It is quite amazing that this study was actually published, as the findings were quite negative for Soy, and yet it was funded by the United Soybean Board and the Illinois Council on Food and Agricultural Research .”

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12032332&dopt=Abstract&itool=iconpmc .

2002 “The phytoestrogen genistein induces thymic and immune changes: a human health concern ?,” – Yellayka S. and others, *Proc Natl Acad Sci USA* 2002 May 28;99(11):7616-21. Department of Veterinary Biosciences, University of Illinois, Urbana, IL 61802, USA.

; 1 ; — Genistein injections in ovariectomized adult mice produce dose-responsive decreases in **thymic** weight of up to 80%. Genistein decreased thymocyte numbers up to 86% and doubled apoptosis.

— There was a corresponding reduction in **splenic** cells. **The does that caused significant thymic and immune changes in mice was comparable to those reported in soy-fed human infants.** “These results raise the possibility that serum genistein concentrations found in soy-fed infants may be capable of producing thymic and immune abnormalities, as suggested by previous reports of immune impairments in soy-fed infants.”

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Also see ... **Frying the Brain With Soy ... page 63**

- short interval of consumption can significantly **alter** sexually dimorphic **brain** regions, anxiety, learning and memory ... **Alzheimer’s disease, especially in women.**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11836067&dopt=Abstract .

2002 “Neurobehavioral effects of dietary soy phytoestrogens,” – Lephart E.D. and others, *Neurotoxicol Teratol* 2002 Jan-Feb;24(1):5-16. Neuroscience Center, 633 WIDB, Brigham Young University, Provo, UT 86402, USA. edwin_lephart@byu.edu

— Male mice fed diets rich in phytoestrogens had lower levels of maze performance than male mice fed diets free of phytoestrogens. (Opposite results were observed in female mice.)

— The results indicate that consumption of dietary phytoestrogens resulting in very high plasma isoflavone levels, **(in many cases, over a relatively - short - interval of consumption in adulthood), can significantly alter sexually**

in an academic research environment. Sixty-two postmenopausal women aged 45-60 years attending the Outpatient Menopause Clinic of our gynecological departments. **The patients were administered 72 mg of soy-derived isoflavones or placebo under double-blind conditions. The daily number of hot flushes was recorded in a diary ... Both treatments led to a 40% reduction in the number of hot flushes. Soy-derived isoflavones had no effect on endometrial thickness or the PI of the uterine and cerebral arteries.**

— **The daily administration of 72 mg of soy-derived isoflavones is no more effective than placebo in reducing hot flushes in postmenopausal women.**

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .
Pet Food, farm animal foods

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1 1 1, 1 1 1, 1 1 1, 1 - Potential relationships of endocrine disrupters and urogenital abnormalities thought to be increasing in incidence in boys and men

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12629420&dopt=Abstract .

2003 “Exposure to genistein during gestation and lactation demasculinizes the reproductive system of rats,” – Wisniewski A.B., Klein S.L., and others, *J Urol* 2003 Apr, 169(4):1582-6., *Division of Pediatric Endocrinology, Dept of Pediatrics, The Johns Hopkins School of Medicine, Baltimore, Maryland, USA*

— **PURPOSE:** Exposure to the phytoestrogen genistein (Indofine Chemical Co., Somerville, New Jersey) can disrupt normal male sexual differentiation. To determine if perinatal (that is gestation and lactation) genistein exposure at doses common in human diets alters masculinization we examined the development of the external genitalia, testes, wolffian ducts and sexual behavior in male rats exposed to genistein supplemented diets during early development.

— **CONCLUSIONS:** Perinatal genistein exposure results in transient and lasting alterations in masculinization of the reproductive system. **These results extend our knowledge of the effects of early genistein exposure on male development and may have implications for human health in terms of potential relationships of endocrine disrupters and urogenital abnormalities thought to be increasing in incidence in boys and men.**

1 1 1, 1 1 1, 1 1 1, 1 - The effects of genistein continued long after the rats were exposed

- http://www.eurekalert.org/pub_releases/2003-03/jhmi-cis031003.php .

2003 “Chemical in soy alters reproductive organs in male rats,” – Wisniewski, Klein, John P., Gearhart M.D., Yegappan Lakshmanan, *EurekAlert* 10 March 2003.

— Researchers at the Johns Hopkins Children's Center and the Johns Hopkins Bloomberg School of Public Health report that **male rats whose mothers were fed diets containing genistein, a chemical found in soybeans, developed abnormal reproductive organs and experienced sexual dysfunction as adults.**

— While these findings do not indicate that genistein has a similar effect in humans, researchers say the **increasing popularity of soy and soy-based foods, such as tofu and some infant formulas, may warrant further research to determine if genistein exposure in the womb and during breast-feeding influences human reproductive development.**

; 1 ; — “The effects of genistein continued long after the rats were exposed, leading us to believe that exposure to this plant-derived estrogen during reproductive development can have long-term detrimental effects in males,” said the study's lead author, Amy B. Wisniewski, Ph.D., a researcher at the Johns Hopkins Children's Center.

— **“Genistein may act as an estrogen or an anti-androgen, blocking the function of endogenous androgens — the sex hormones necessary for males to develop a normal reproductive system — and ultimately leading to the reproductive abnormalities and sexual dysfunction we saw in the exposed rats,”** added study co-author Sabra L. Klein, Ph.D., of the School of Public Health. "However, additional research is needed to determine if this is the case."

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- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12566171 .

2003 “Soya phytoestrogens change cortical and hippocampal expression of BDNF mRNA in male rats,” — File S.E., Hartley D.E., Alom N., Rattray M., *Neurosci Lett.*, 2003 Feb 27;338(2):135-8. *Psychopharmacology Research Unit and Biochemical Neuropharmacology Group, Centre for Neuroscience Research, King's College London,*

Hodgkin Building, Guy's Campus, SE1 1UL, London, UK.

— Adult male hooded Lister rats were either fed a diet containing 150 microg/g soya phytoestrogens or a soya-free diet for 18 days. This concentration of phytoestrogens should have been sufficient to occupy the oestrogen-beta, but not the oestrogen-alpha, receptors.

— **Using in situ hybridisation, significant reductions were found in brain-derived neurotrophic factor (BDNF) mRNA expression in the CA3 and CA4 region of the hippocampus and in the cerebral cortex in the rats fed the diet containing phytoestrogens, compared with those on the soya-free diet.**

— No changes in glutamic acid decarboxylase-67 or glial fibrillary acidic protein mRNA were found. This suggests a role for oestrogen-beta receptors in regulating BDNF mRNA expression.

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - genistein ... daidzein ... suggesting the possible involvement of mutagenicity in the initiation of ... “phytoestrogen-induced carcinogenesis.”

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12704663&dopt=Abstract .

2003 “Cell-transforming activity and mutagenicity of 5 phytoestrogens in cultured mammalian cells,” – Tsutsui T, Yagi E, and others, Int J Cancer 2003 Jun 20;105(3):312-20., Department of Pharmacology, Nippon Dental University, School of Dentistry Tokyo, Japan

— For the simultaneous assessment of in vitro **carcinogenicity and mutagenicity of phytoestrogens**, the abilities of 5 phytoestrogens, **daidzein, genistein**, biochanin A, prunetin, and coumestrol, to induce cell transformation and genetic effects were examined using the Syrian hamster embryo (SHE) cell model. Cellular growth was inhibited by all phytoestrogens in a concentration-related manner. The growth inhibitory effect of the compounds was ranked: genistein, prunetin > coumestrol > biochanin A > daidzein, which did not correspond to their apoptosis-inducing abilities. **Morphological transformation in SHE cells was elicited by all phytoestrogens, except, prunetin. The transforming activities were ranked as follows: genistein > coumestrol > daidzein > biochanin A. Somatic mutations in SHE cells at the Na(+)/K(+) ATPase and hprt loci were induced only by genistein, coumestrol, or daidzein. Chromosome aberrations were induced by genistein or coumestrol, and aneuploidy in the near diploid range was occurred by genistein or biochanin A. Genistein, biochanin A or daidzein induced DNA adduct formation in SHE cells with the abilities: genistein > biochanin A > daidzein. Prunetin was negative for any of these genetic endpoints.**

— **Our results provide evidence that ... genistein ... coumestrol ... daidzein ... and biochanin A ... induce cell transformation in SHE cells and that the transforming activities of these phytoestrogens correspond to at least 2 of the mutagenic effects by each phytoestrogen, i.e., gene mutations, chromosome aberrations, aneuploidy or DNA adduct formation, suggesting the possible involvement of mutagenicity in the initiation of phytoestrogen-induced carcinogenesis.**

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - Perinatal genistein exposure results in transient and lasting alterations in masculinization of the reproductive system.

- may have **implications for human health** in terms of potential relationships of endocrine disrupters and urogenital abnormalities thought to be increasing in incidence in boys and men.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12629420 .

2003 “Exposure to Genistein During Gestation and Lactation Demasculinizes the Reproductive System in Rats,” — Wisniewski AB, Klein SL and others., J Urol 2003 Apr;169(4):1582-1586, Division of Pediatric Endocrinology, Department of Pediatrics, The Johns Hopkins School of Medicine, Baltimore, Maryland, USA.

— **PURPOSE:** Exposure to the phytoestrogen genistein (Indofine Chemical Co., Somerville, New Jersey) can **disrupt normal male sexual differentiation.** To determine if perinatal (that is gestation and lactation) genistein exposure at doses common in human diets alters masculinization we examined the development of the external genitalia, testes, wolffian ducts and sexual behavior in male rats exposed to genistein supplemented diets during early development.

— **MATERIALS AND METHODS:** Female rats were fed a phytoestrogen-free diet supplemented with no genistein (free), a low genistein dose (low) or a high genistein dose (high) throughout gestation and lactation. Anogenital distance of male offspring was measured weekly from postnatal days 2 to 21. At puberty (postnatal day 40 to 45)

preputial separation, and testis length and width of male offspring were measured. At age 70 days reproductive organ masses, plasma testosterone concentration, sperm counts and sexual behavior were assessed in male offspring.

— **RESULTS:** Exposure to genistein resulted in temporary, prepubertal urogenital abnormalities at postnatal days 21 and 40. **Males exposed to genistein had smaller anogenital distance and testis size, and delayed preputial separation. Perinatal exposure to genistein also caused long-term dysfunction in reproductive behavior, in which adult males exposed to genistein were less likely to mount, intromit and ejaculate during mating tests. Males exposed to genistein also had lower testosterone concentrations in adulthood.**

; 1; --- **CONCLUSIONS:** Perinatal genistein exposure results in transient and lasting alterations in masculinization of the reproductive system. These results extend our knowledge of the effects of early genistein exposure on male development and **may have implications for human health in terms of potential relationships of endocrine disruptors and urogenital abnormalities thought to be increasing in incidence in boys and men.**

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2003 “**Phytoestrogen supplements for the treatment of hot flashes: the Isoflavone Clover Extract (ICE) study: a randomized controlled trial,**” — **Tice J.A., Ettinger B., Ensrud K., and others., JAMA. 2003 Jul 9;290(2):207-14., Division of General Internal Medicine, Department of Medicine, University of California, San Francisco 94143, USA.**

— **CONTEXT:** Clinical trials demonstrating increased risk of cardiovascular disease and breast cancer among women randomized to hormone replacement therapy have increased interest in other therapies for menopausal symptoms. Dietary supplements containing isoflavones are widely used as alternatives to hormonal therapies for hot flashes, but there is a paucity of data supporting their efficacy.

— **OBJECTIVE:** To compare the efficacy and safety of 2 dietary supplements derived from red clover with placebo in symptomatic menopausal women.

— **DESIGN, SETTING, AND PARTICIPANTS:** Randomized, double-blind, placebo-controlled trial of menopausal women, aged 45 to 60 years, who were experiencing at least 35 hot flashes per week. The study was conducted between November 1999 and March 2001 at 3 US medical centers and included women who were recently postmenopausal (mean [SD], 3.3 [4.5] years since menopause) experiencing 8.1 hot flashes per day. Women were excluded if they were vegetarians, consumed soy products more than once per week, or took medications affecting isoflavone absorption.

— **INTERVENTION:** After a 2-week placebo run-in, 252 participants were randomly assigned to Promensil (82 mg of total isoflavones per day), Rimostil (57 mg of total isoflavones per day), or an identical placebo, and followed-up for 12 weeks.

— **MAIN OUTCOME MEASURE:** The primary outcome measure was the change in frequency of hot flashes measured by participant daily diaries. Secondary outcome measures included changes in quality of life and adverse events.

— **RESULTS:** Of 252 participants, 246 (98%) completed the 12-week protocol. The reductions in mean daily hot flash count at 12 weeks were similar for the Promensil (5.1), Rimostil (5.4), and placebo (5.0) groups. In comparison with the placebo group, participants in the Promensil group (41%; 95% confidence interval [CI], 29%-51%; P =.03), but not in the Rimostil group (34%; 95% CI, 22%-46%; P =.74) reduced hot flashes more rapidly. Quality-of-life improvements and adverse events were comparable in the 3 groups.

— **CONCLUSION:** **Although the study provides some evidence for a biological effect of Promensil, neither supplement had a clinically important effect on hot flashes or other symptoms of menopause.**

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u u u, u u u, u u u, u u u, (+) u u u - **at levels comparable to the ranges of human exposure**
 - http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14709783 .

2004 “Effects of genistein or soy milk during late gestation and lactation on adult uterine organization in the rat,” – ***Hughes CL, Liu G, and others***, *Exp Biol Med (Maywood)*. **2004 Jan; 229(1):108-17.**, *Department of Medical and Scientific Services, Quintiles, Inc., Research Triangle Park, North Carolina 27709, USA.*

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Malnutrition ... from ... False Nutritional Beliefs

— **These experiments demonstrate that developmental exposure to dietary isoflavones**, at levels comparable to the ranges of human exposure, modify expression of the estrogen-regulated PR in the uterus of sexually mature rats weeks after exposure ended.

— In utero and lactational exposure to estrogenic agents has been shown to influence morphological and functional development of reproductive tissues. Thus, consumption of dietary phytoestrogens, such as isoflavones, during pregnancy and lactation could influence important periods of development, when the fetus and neonate are more sensitive to estrogen exposure.

— In this study, reproductive outcomes after developmental exposure to isoflavones were examined in Long-Evans rats maternally exposed to isoflavones via a commercial soy beverage or as the isolated isoflavone, genistein.

— Since the PR is essential for regulating key female reproductive processes, such as uterine proliferation, implantation, and maintenance of pregnancy, its increased expression suggests that soy phytoestrogen exposure during reproductive development may have long-term reproductive health consequences.

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 - http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15053944 .

2004 “Increased aggressive behavior and decreased affiliative behavior in adult male monkeys after long-term consumption of diets rich in soy protein and isoflavones,” — ***Simon NG, Kaplan JR, Hu S, and others***, *Horm Behav*. **2004 Apr;45(4):278-84.**, *Department of Biological Sciences, Lehigh University, Bethlehem, PA 18015, USA.*

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— **Estrogen produced by aromatization of gonadal androgen has an important facilitative role in male-typical aggressive behavior that is mediated through its interaction with estrogen receptors (ER) in the brain.**

— Isoflavones found in soybeans and soy-based dietary supplements bind ER and have dose- and tissue-dependent effects on estrogen-mediated responses. Yet, effects of isoflavone-rich diets on social and aggressive behavior have not been studied.

— **We studied the effects of long-term (15 months) consumption of diets rich in soy isoflavones on spontaneous social behavior among adult male cynomolgus macaques (*Macaca fascicularis*) (n = 44) living in nine stable social groups.**

— There were three experimental conditions which differed only by the source of dietary protein: casein and lactalbumin (no isoflavones), soy protein isolate containing 0.94 mg isoflavones/g protein, and soy protein isolate containing 1.88 mg isoflavones/g protein.

— **In the monkeys fed the higher amount of isoflavones, frequencies of intense aggressive (67% higher) and**

submissive (203% higher) behavior were elevated relative to monkeys fed the control diet (P's < 0.05). In addition, the proportion of time spent by these monkeys in physical contact with other monkeys was reduced by 68%, time spent in proximity to other monkeys was reduced 50%, and time spent alone was increased 30% (P's < 0.02). There were no effects of treatment on serum testosterone or estradiol concentrations or the response of plasma testosterone to exogenous gonadotropin-releasing hormone (GnRH).

— **The results indicate that ... long-term consumption of a diet rich in soy isoflavones can have marked influences on patterns of aggressive and social behavior.**

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t t t, t t t, t t t, t t t, (+) t t t - **Infants fed soy formula had prolonged increase of TSH when compared to infants fed non-soy formula.**

These infants need close monitoring of free thyroxine and TSH measurements, and they may need increased levothyroxine doses to achieve normal thyroid function tests.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14709499 .

2004 “Soy formula complicates management of congenital hypothyroidism,” — S.C. Conrad, H. Chiu and B.L. Silverman, *Archives of Disease in Childhood* 2004;89:37-40, Department of Pediatrics, Northwestern University Medical School, Chicago, IL, USA, sconrad@mail.cho.org

— **Aims:** To test the hypothesis that feeding soy formula to infants with congenital hypothyroidism (CH) leads to prolonged increase of thyroid stimulating hormone (TSH).

— **Methods:** The study was a review of 78 patients seen during their first year of life between 1990 and 1998. Data regarding clinical diagnosis, date of treatment initiation, TSH, levothyroxine dose, weight, length, and diet information from each visit were collected from the charts.

— **Results:** There were eight patients in the soy diet group and 70 in the non-soy diet group. There was no significant difference between the two groups in the starting dose of levothyroxine or the change in this dose over one year. **There was a significant difference between the two groups in the following areas:** time to TSH normalisation, first TSH on treatment, percentage with increased TSH at 4 months of age, percentage with increased TSH throughout the first year of life, **and** second, in the overall trend of TSH at each visit.

— **Conclusions ... Infants fed soy formula had prolonged increase of TSH when compared to infants fed non-soy formula. These infants need close monitoring of free thyroxine and TSH measurements, and they may need increased levothyroxine doses to achieve normal thyroid function tests.**

t t t, t t t, t t t, t t t, t t t - **Further evidence from current research that beta-Sitosterol, a compound common in soy oil, and also present in soy protein, can stimulate the growth of MCF-7 breast cancer cells"**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15113961 .

2004 “beta-Sitosterol, beta-Sitosterol Glucoside, and a Mixture of beta-Sitosterol and beta-Sitosterol Glucoside Modulate the Growth of Estrogen-Responsive Breast Cancer Cells In Vitro and in Ovariectomized Athymic Mice,” — Ju YH, Clausen LM, Allred KF, and others, *J Nutr.* 2004 May;134(5):1145-1151., Department of Food Science and Human Nutrition and Department of Animal Sciences, University of Illinois at Urbana-Champaign, Urbana, IL 61801 USA; and the Department of Physiology, University of Kentucky, Lexington, KY 40536; and the IMAGINutrition and MetaResponse Science, Laguna Niguel, CA 92677.

— **We hypothesized that** the phytosterols beta-sitosterol (BSS), beta-sitosterol glucoside (BSSG), and Moducare (MC; BSS:BSSG = 99:1) could modulate the growth of estrogen-dependent human breast cancer cells in vitro and in vivo ...

— **Dietary BSS, BSSG, and MC reduced E(2) - induced MCF-7 tumor growth by 38.9% (P < 0.05), 31.6% (P = 0.08), and 42.13% (P < 0.05), respectively ...**

; t; — **In summary ... BSS and MC stimulated MCF-7 cell growth in vitro. Although BSSG comprises only 1% of MC,**

BSSG made MC less estrogenic than BSS alone in vitro. However, dietary BSS and MC protected against E(2) - stimulated MCF-7 tumor growth and lowered circulating E(2) levels.

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at levels above those found in traditional diets
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by Soy Online Service ... <http://www.soyonlineservice.co.nz/>
“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

n

u u u, u u u, u u u, u u u - **Genistein produced higher percentage of proliferative cells in tumors,**
- Genistein can **stimulate** the growth of a mammary **carcinogen MNU-induced estrogen-dependent mammary tumors.**
- **Plasma genistein concentrations in animals fed the isoflavone-containing diet** were at physiological levels relevant to human exposure.
- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14578162 .

2004 “Dietary genistein results in larger MNU-induced, estrogen-dependent mammary tumors following ovariectomy of Sprague-Dawley rats,” — Allred C.D., Allred K.F., Ju Y.H., and others, *Carcinogenesis*. 2004 Feb;25(2):211-8. Epub 2003 Oct 24., Department of Food Science and Human Nutrition, University of Illinois, Urbana, IL, USA.

— Due to the estrogenic properties of soy-derived isoflavones, many postmenopausal women are using these compounds as a natural alternative to hormone replacement therapy (HRT).
— **Genistein at 750 p.p.m. increased the weight of estrogen-dependent adenocarcinomas** in ovariectomized rats compared with the negative-control animals.
— Genistein treatment also resulted in a higher percentage of proliferative cells in tumors and increased uterine weights when compared with negative-control animals.
— **Collectively**, these effects are probably due to the estrogenic activity of genistein.
— **Plasma genistein concentrations in animals fed the isoflavone-containing diet** were at physiological levels relevant to human exposure. **Estradiol concentrations** in ovariectomized animals not receiving an estradiol supplement were similar to those observed in postmenopausal women.

; u ; — **The data suggest that in an endogenous estrogen environment similar to that of a postmenopausal woman, dietary genistein can stimulate the growth of a mammary carcinogen MNU-induced estrogen-dependent mammary tumors.**

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“Frying The Brain With Soy” **(Subsection)**

First 2 abstracts on this page, and the next 4 pages, demonstrate Soy’s real hazards to the Brain and Nervous system from “placenta transfer to the foetal brain of the fetus in the womb” ... to the newly born baby ... into childhood, even on to late adulthood, (Also see thyroid problems). Soy’s connection to “Alzheimer’s and Parkinson’s Disease, M.S., and ADD / ADHD” is because genistein in Soy damages the “Myelin Sheath” that surrounds the nerves, spinal cord and brain tissue, and it also lowers cholesterol ... (The danger is that Soy can & does lower cholesterol, but to far for the proper development and “SUSTAINED” health of the myelin sheath), pages 64 – 67.
 Also see pages 6, 7, 10, 20(m.), 20(n.), 92, 113, 121.

; t ;

t t t, t t t, t t t, t t t - **significant reductions** were found in brain-derived neurotrophic factor (BDNF) mRNA expression in the CA3 and CA4 region of the hippocampus and in the cerebral cortex in the rats fed the diet containing phytoestrogens, compared with those on the soya-free diet.
 - http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12566171&dopt=Abstract .

2003 “Soya phytoestrogens change cortical and hippocampal expression of BDNF mRNA in male rats,” – File SE, Hartley DE, Alom N., Neurosci Lett 2003 Feb 27;338(2):135-38., Psychopharmacology Research Unit and Biochemical Neuropharmacology Group, Centre for Neuroscience Research, King's College London, Hodgkin Building, Guy's Campus, SE1 1UL, London, UK.

; t ; — **Adult male hooded Lister rats were either fed a diet containing 150 microg/g soya phytoestrogens or a soya-free diet for 18 days.** This concentration of phytoestrogens should have been sufficient to occupy the oestrogen-beta, but not the oestrogen-alpha, receptors. Using in situ hybridisation, **significant reductions were found in brain-derived neurotrophic factor (BDNF) mRNA expression in the CA3 and CA4 region of the hippocampus and in the cerebral cortex in the rats fed the diet containing phytoestrogens, compared with those on the soya-free diet.** No changes in glutamic acid decarboxylase-67 or glial fibrillary acidic protein mRNA were found. This suggests a role for oestrogen-beta receptors in regulating BDNF mRNA expression.

t t t, t t t, t t t, t t t - **BDNF mRNA is reduced** in the human Alzheimer's disease hippocampus and temporal cortex, and suggest that **a loss of BDNF** may contribute to the progressive atrophy of neurons in Alzheimer's disease.
 - http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9387865&dopt=Abstract .

1997 “Brain-derived neurotrophic factor is reduced in Alzheimer's disease,” – Connor B, Young D, Yan Q, and others., Brain Res Mol Brain Res., 1997 Oct3;49(1-2):71-81., Department of Pharmacology, Faculty of Medicine and Health Science, University of Auckland, New Zealand.

; t ; — **Alzheimer's disease may be due to a deficiency in neurotrophin protein or receptor expression.** Consistent with

this hypothesis, **a reduction in BDNF mRNA expression has been observed in human post-mortem Alzheimer's disease hippocampi.** To further investigate this observation, we examined whether the alteration in BDNF expression also occurred at the protein level in human post-mortem Alzheimer's disease hippocampi and temporal cortices using immunohistochemical techniques. We observed a reduction in the intensity and number of BDNF-immunoreactive cell bodies within both the Alzheimer's disease hippocampus and temporal cortex when compared to normal tissue. **These results support and extend previous findings that BDNF mRNA is reduced in the human Alzheimer's disease hippocampus and temporal cortex, and suggest that a loss of BDNF may contribute to the progressive atrophy of neurons in Alzheimer's disease.**

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .
Pet Food, farm animal foods

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Frying The Brain With Soy

... continued ...

u u u, u u u, u u u, u u u - Poor **cognitive** test performance ... low **brain** weight ... **brain** atrophy.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10763906&dopt=Abstract .

2000 "Brain aging and midlife tofu consumption," – ***White L.R., Petrovitch H., Ross G.W., and others, J Am Coll Nutr. 2000 Apr;19(2):242-55., National Institute on Aging, NIH, USA.***

- ; t ;
- **RESULTS:** Poor **cognitive** test performance... enlargement of ventricles... low **brain** weight... were each significantly & independently associated with **higher** mid-life tofu consumption.
 - A similar association of midlife tofu intake with poor late life cognitive test scores **was also observed among wives** of cohort members, using the husbands answers to food frequency questions as proxy for the wife's consumption.
 - Statistically significant associations were **consistently demonstrated** in linear and logistic **multivariate** regression models.
 - **CONCLUSIONS:** In this population, higher midlife tofu consumption was independently associated with indicators of **cognitive impairment** and **brain atrophy** in late life.

u u u, u u u, u u u, u u u - Also see ... **Frying the Brain With Soy** ... page 63

- Soya content of diet can have significant effects on **brain** and behaviour

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12618915&dopt=Abstract .

2003 "The soya isoflavone content of rat diet can increase anxiety and stress hormone release in the male rat," – ***Hartley D.E., Edwards J.E., & others, Psychopharmacology (Berl) 2003 Apr, 167(1):46-53., Epub Mar 05***
Psychopharmacology Research Unit, Centre for Neuroscience, Hodgkin Building, Kings College London, Guy's Campus, SE1 1UL, London, UK. david.2.hartley@kcl.ac.uk .

— **RATIONALE:** Most commercial rodent diets are formulated with soya protein and therefore contain **soya** isoflavones. **Isoflavones form one of the main classes of phytoestrogens and have been found to exert both oestrogenic and anti-oestrogenic effects on the central nervous system. The effects have not been limited to reproductive behaviour, but include effects on learning and anxiety and actions on the hypothalamo-pituitary axis. It is therefore possible that the soya content of diet could have significant effects on brain and behaviour and be an important source of between-laboratory variability.**

— **OBJECTIVES:** To determine whether behaviour in two animal tests of anxiety, and stress hormone production, would differ between rats that were fed a diet which was free of soya isoflavones and other phytoestrogens (iso-free) and those that were fed a diet which contained 150 &mgr;g/g of the isoflavones genistein and daidzein (iso-150). This controlled diet has an isoflavone concentration similar to that in the maintenance diet routinely used in our institution.

— **METHODS:** Male rats were randomly allocated to the iso-free and iso-150 diets and their body weights and food and water consumption were recorded for 14 days. They were then maintained on the same diets, but housed singly for 4 days, before testing in the social interaction and elevated plus-maze tests of anxiety. Corticosterone concentrations in both dietary groups were determined under basal conditions and after the stress of the two tests of anxiety. Vasopressin

and oxytocin concentrations were determined after brief handling stress.

— **RESULTS:** The groups did not differ in food or water intake, body weight or oxytocin concentrations. Compared with the rats fed the iso-free diet, **the rats fed the iso-150 diet spent significantly less time in active social interaction and made a significantly lower percentage of entries onto the open arms of the plus-maze, indicating anxiogenic effects in both animal tests.** The groups did not differ in their basal corticosterone concentrations, but the iso-150 group had significantly elevated stress-induced corticosterone concentrations. **Stress-induced plasma vasopressin concentrations were also significantly elevated in the iso-150 diet group compared with the iso-free rats.**

— **CONCLUSIONS:** **Major changes in behavioural measures of anxiety and in stress hormones can result from the soya isoflavone content of rat diet. These changes are as striking as those seen following drug administration and could form an important source of variation between laboratories.**

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Frying The Brain With Soy

PubMed Abstracts - Short List

... continued ...

----- Original Message -----

From: [Gerald Hernesmaa](#)
To: [Valerie & Richard James](#) ... [Soy Online Service](#) , S.O.S., New Zealand
Sent: Friday, November 21, 2003 10:32 AM
Subject: **Any abstracts [linking Soy to Parkinson's Disease](#) (Manganese poisoning)**

Reply ...

From: [Valerie & Richard James](#) , [Soy Online Service](#)
Sent: Saturday, November 21, 2003 3:35 AM , [New Zealand - time zone](#)
Hi Gerald. Not that we know of. No specific research has been done linking the two. **David Goodman** makes a very good circumstantial case for **manganese** causation. We are also convinced that **genistein**, being a **tyrosine kinase inhibitor**, could also cause it and other motor neurone diseases. Best regards, Dick

Reply ...

From: [Valerie & Richard James](#) , [Soy Online Service](#)
Sent: Saturday, November 21, 2003 3:48 AM
When I get time, maybe tomorrow, I'll search in PubMed for **“myelinisation”** etc. **Genistein** is reported to **destroy the myelin** that protects the nerves...leading to what is very like **“Parkinson’s.”** Dick

Reply ...

From: [Valerie & Richard James](#) , [Soy Online Service](#)
Sent: Saturday, November 22, 2003 12:24 AM
Subject: LOOKING THROUGH PUBMED AT MYELIN
Hi Gerald, What turns up time after time in rat and mice studies is that **Soy lowers cholesterol**. **Cholesterol** is necessary for development of **myelin to sheath the nerves**. It could lead to **Parkinson’s** and other neurologic diseases. **It sure is a bad idea to feed it to babies.**
Dick

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Results of S.O.S. search in PubMed

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23. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=2868833&dopt=Abstract .

1986 **“Effects of postnatal protein undernutrition on myelination in rat brain,”** – [Egwin P.O., Cho B.H.](#),

- ; 1 ; — Damages the myelin to sheath around the nerves.
— “A more pronounced retardation” in the initiation, progression and capacity of myelination in postnatal “Soy Protein under-nutrition” was indicated.”
— Pups were subjected, from birth, to - protein under-nutrition by feeding the lactating dams 8% casein (CS) or - 8% Soy Protein (SP) diet - up to weaning; the weanlings were fed the same diets until 6 weeks of age. At 3 and 6 weeks of age, myelin was isolated from the brains and characterized. The quantities of myelin and its content of cholesterol, galactolipids and phospholipids, were significantly depressed in the 8% CS and 8% SP groups but not when soy protein was fed at the same level as casein (25%) in the control. Furthermore, the severity of the deficits in myelination showed a differential pattern depending on the type of dietary protein fed. At weaning, the deficits with the 8% SP diet were 1.5-2.0-times greater than with the corresponding casein diet.
— “A more pronounced retardation” in the initiation, progression and capacity of myelination in postnatal “Soy Protein under-nutrition” was indicated.”

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Frying The Brain With Soy

PubMed Abstracts - in Short List

... continued ...

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24. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=7241137&dopt=Abstract .

1981 “Effects of altered thyroid states on myelinogenesis,” – Walters S.N., Morell P., J Neurochem. 1981 May,35(5):1792-801.

— Myelinogenesis was studied in controls and in rats treated since birth with Methimazole (hypothyroid) or thyroxine (hyperthyroid). The amount of myelin in forebrain and its protein composition were determined between 13 and 40 days of age, the period of most rapid myelin accumulation. Hypothyroid rats had reduced on both and brain weights relative to controls and the yield of myelin was reduced on both a per brain and a per milligram brain protein basis. Developmental changes in the protein composition of isolated myelin followed the pattern of control animals (the percentage of total myelin protein present as proteolipid protein, large basic protein, and small basic protein increased, as did the ratio of proteolipid/large basic protein) but were delayed temporally by 1-2 days. Hyperthyroid rats also had reduced body and brain weights. At 13 days myelin accumulation was greater than that of controls, corresponding to an earlier initiation of myelination. At later ages myelin yield was reduced on a per brain basis but not on a per milligram brain protein basis. The developmental pattern of myelin protein composition was accelerated temporally by 1-2 days. Myelination in optic nerve, assayed by proteolipid protein content, also was slightly delayed in hypothyroid animals and somewhat accelerated in hyperthyroid animals. The relative synthesis of myelin proteins (determined as incorporation of intracranially injected [(3)H]glycine into myelin protein relative to incorporation into whole brain protein), as well as distribution of radioactivity among individual myelin proteins, was determined.

— **THE RESULTS** supported the conclusion of the myelin protein accumulation study; hypo-thyroidism retards the developmental program for myelinogenesis, whereas in the hyper-thyroid state myelin synthesis is initiated earlier but is also terminated earlier.

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25. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=2432794&dopt=Abstract .

1986 “Effect of prenatal iron deficiency on myelination in rat pups,” – Yu G.S., Steinkirchner T.M. and others., Am J Pathol 1986 Dec; 125(3):620-4.

— In this study, a histopathologic examination of the brain from iron-deficient or iron-supplemented rat pups was carried out. Pups were obtained from female rats, which were fed an iron-deficient or iron-supplemented diet during both pregnancy and lactation. Immediately after anesthesia and the collection of blood, pups were fixed by intracardiac infusion of 2% glutaraldehyde. Brain and cervical spinal cord were fixed, embedded in paraffin, and cut at 6-mu thickness. Myelin was identified using Luxol fast blue stain. As compared with controls (hematocrit, 30.8%), 11-day-old iron-deficient pups (hematocrit, 11.9%) showed reduced myelination in the spinal cord.

— Although myelination increased somewhat in the iron-deficient 17-day-old pups (hematocrit, 8.5%), the amount of “myelin” in the spinal cord and white matter of cerebellar folds “was reduced” as compared with that of the corresponding controls.

; 1 ; — **THESE OBSERVATIONS SHOW** the importance of prenatal iron adequacy in myelinogenesis.

— (The unborn child also gets what the mother eats. Here is another good reason to avoid Soy in pregnancy.)

“Coconut Oil and Coconut Milk - General Discussion”

DC Nutrition - Health and Well-being

<http://www.dcnutrition.com/miscellaneous/Detail.CFM?RecordNumber=569> . Good information in the paragraph below, but can not find 1978 and 1980 abstracts in PubMed as references, probably not entered into the system yet, need to go directly to the original medical research library or medical text book.

"... **Brain tissue is very rich in complex forms of fats.** The experiment (around 1978) in which pregnant mice were given diets containing either coconut oil or unsaturated oil showed that brain development was superior in the young mice whose mothers ate coconut oil. Because coconut oil supports thyroid function, and thyroid governs brain development, **including myelination (the insulation around the nerves)**, the result might simply reflect the difference between normal and hypothyroid individuals. **However, in 1980, experimenters demonstrated that young rats fed milk containing soy oil incorporated the oil directly into their brain cells, and had structurally abnormal cells as a result ..."** ... / 67

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Frying The Brain With Soy

PubMed Abstracts - Short List
... continued ...

1 1 1, 1 1 1, 1 1 1, 1 1 1, (+) 1 1 1 - **The highest concentrations of daidzein and genistein were detected in a soy-based powdered infant formula.**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14971485 .

2004 “Trace determination of bisphenol A and phytoestrogens in infant formula powders by gas chromatography-mass spectrometry,” — **Kuo HW, Ding WH, J Chromatogr A. 2004 Feb 20;1027(1-2):67-74., Department of Chemistry, National Central University, Chung-Li 32054, Taiwan.**

— This investigation describes a reliable and sensitive method for simultaneously determining bisphenol A (BPA) and two major phytoestrogens, **daidzein** and **genistein**, in powdered milks and **infant formulas** by gas chromatography-mass spectrometric analysis after trimethylsilylation.

— To reduce the matrix interference associated with the constituents of the formulas, the dissolved formula solutions were firstly ultra-centrifuged and the analytes in the supernatant were then extracted using a C18 solid-phase extraction column. The accuracy and precision of the method were determined and the technique was successfully employed to measure trace concentrations of BPA, daidzein and genistein in powdered formulas.

— The results show that BPA, **daidzein** and **genistein** were detected in all the testing samples (n = 6) at concentrations from 45 to 113 ng/g (except one infant formula), 20 to 2050 ng/g and 21 to 6510 ng/g, respectively.

; 1 ;— **The highest concentrations of daidzein and genistein (i.e., 2050 and 6510 ng/g) were detected in a soy-based powdered infant formula. The quantitation limits were 1.0 ng/g for BPA, and 10 ng/g for daidzein and genistein using 0.5 g powdered milk samples.**

1 1 1, 1 1 1, 1 1 1, 1 1 1, (+) 1 1 1 - **Dietitians should discourage the use of soya protein in children with atopy or cow's milk allergy in the first six months**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14528647 .

2003 “Paediatric group position statement on the use of soya protein for infants,” — **The British Dietetic Association, J Fam Health Care. 2003;13(4):93.**

— Breast feeding should be strongly encouraged as providing the safest, most nutritionally adequate form of feeding for most infants. **Dietitians should discourage the use of soya protein in children** with atopy or cow's milk allergy in the first six months of life to avoid sensitisation to soya protein and exposure to phytoestrogens while organ systems remain at their most vulnerable. **This would include soy infant formula and soya products such as desserts etc.** When a soy-based infant formula is used, **parents should be informed** of current findings relating to phytoestrogens and health and on the clinical need for soy formula. **Any parent choosing to refuse soya for their infant should be supported in their decision.** More research into the long-term effects of phytoestrogen exposure in infants is needed and into whether any adverse effects are dose related. This position statement will be updated as further evidence becomes available.

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1 1 1, 1 1 1, 1 1 1, 1 1 1, (+) 1 1 1 - <http://www.soyonlineservice.co.nz/07abstract.htm> .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12919490 .

2003 “Review Article – Soy infant formula and phytoestrogens,” — [P.G. Tuohy](#), *Journal of Paediatrics and Child Health*; August 2003, Volume 39 Issue 6, Page 401-5

— **Soy infant formula** contains high levels of the isoflavones, genistein and daidzein, which are commonly referred to as phytoestrogens. These are non-steroidal chemicals with structural similarities to estrogen. **Infants consuming soy formula have high levels of circulating isoflavones.**

; 1 ;

— These are an order of magnitude greater than the levels of isoflavones which have been shown to produce physiological effects in adult women consuming a high soy diet. There is conflicting evidence about the risks and benefits of soy phytoestrogens, with research presenting a contradictory picture. Some reviewers suggest that early exposure to soy may prevent cancer and heart disease. However, there is very little research on the effects of consumption of soy phytoestrogens by human neonates. **Against this generally positive view there is an increasing number of recent reports that suggest that in experimental animals, phytoestrogens have ... adverse effects with respect to ... carcinogenesis ... reproductive function ... immune function ... and thyroid disease.**

— Despite the absence of adequate scientific research that quantifies the level of risk to infants, most would argue for a **“Precautionary Approach”** to be taken in situations where there are potential developmental effects from the consumption of pharmacologically active compounds in infancy and childhood.

1 1 1, 1 1 1, 1 1 1 - **The incidence of positive thyroid antibodies was two and one half times higher in formula-fed diabetic children than in breast-fed ones.**

- <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3155358 .

1986 “Breast feeding and insulin-dependent diabetes mellitus in children,” – [Fort P., Lanes R., Dahlem S. and others](#), *Journal of American College of Nutrition*. 5(5):439-41, 1986.

— We have evaluated the hypothesis of a protective effect of human milk on the development of insulin dependent diabetes mellitus (IDDM). We studied the feeding histories of 95 diabetic children and compared them with controls consisting of their non-diabetic siblings and a pair matched group of nondiabetic peers of the same age, sex, geographical location, and social background. The incidence of breast feeding in diabetic children was 18%. This was similar to the control group. The duration of breast feedings was also similar among all three groups. There was no difference in the age of introduction of solid food between diabetic and nondiabetic children. **Twice as many diabetic children, however, received soy containing formula in infancy as compared to control children.** The mean age of onset of IDDM was not related to the type of feeding during infancy. **The incidence of positive thyroid antibodies was two and one half times higher in formula-fed diabetic children than in breast-fed ones.** In our studies we were unable to document any relationship between the history of breast feeding and subsequent development of IDDM in children.

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - soy formula, preterm infant formula, and formulas for specific disorders are heavily contaminated with Aluminum.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=3292633&dopt=Abstract .

1988 “Aluminum and bone disorders: with specific reference to aluminum contamination of infant nutrients,” – Koo W.W., Kaplan L.A., *J Am Coll Nutr.* 1988 Jun;7(3):199-214., Department of Pediatrics, University of Alberta, Edmonton, Canada

; 1 ;— Aluminum (Al) impairment of bone matrix formation and mineralization may be mediated by its direct effect on bone cells or indirectly by its effect on parathyroid hormone and calcium metabolism. Its toxic effects are proportional to tissue Al load. Al contamination of nutrients depends on the amount of Al present naturally in chemicals or from the manufacturing process. Intravenous calcium, phosphorus, and albumin solutions have high Al (greater than 500 micrograms/L), whereas crystalline amino acid, sterile water, and dextrose water have low Al (less than 50 micrograms/L) content.

— **Enteral nutrients including human and whole cow milk have low Al, whereas highly processed infant formulas with multiple additives, such as soy formula, preterm infant formula, and formulas for specific disorders are heavily contaminated with Al.** Healthy adults are in zero balance for Al. The gastrointestinal tract excludes greater than 95% of dietary Al, and kidney is the dominant organ for Al excretion.

— **However, even with normal renal function, only 30-60% of an Al load from parenteral nutrition is excreted in the urine, resulting in tissue accumulation of Al.** The risk for Al toxicity is greatest in infants with chronic renal insufficiency, recipients of long term parenteral nutrition, i.e., no gut barrier to Al loading, and preterm infants with low Al binding capacity. The rapid growth of the infant would theoretically potentiate Al toxicity in all infants, although the critical level of Al loading causing bone disorders is not known.

— **To minimize tissue burden ... Al content of infant nutrients should be similar to "background" levels, i.e., similar to whole milk (less than 50 micrograms/L).**

1 1 1, 1 1 1, 1 1 1 - the frequency of feedings with soy-based milk formulas in early life was significantly higher in children with autoimmune thyroid disease. ; 1 ;

- <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2338464 .

1990 “Breast and soy-formula feedings in early infancy and the prevalence of autoimmune thyroid disease in children,” – Fort P., Moses N., Fasano M., and others., Department of Pediatrics, North Shore University Hospital-Cornell University Medical College, Manhasset, New York 11030. *Am Coll Nutr* 1990 Apr;9(2):164-7.

— It has been suggested that feeding practices in infancy may affect the development of various autoimmune diseases later in life.

— **Since thyroid alterations are among the most frequently encountered autoimmune conditions in children, we studied whether breast and soy-containing formula feedings in early life were associated with the subsequent development of autoimmune thyroid disease.** A detailed history of feeding practices was obtained in 59 children with autoimmune thyroid disease, their 76 healthy siblings, and 54 healthy nonrelated control children. There was no

difference in the frequency and duration of breast feeding in early life among the three groups of children.

— However, the frequency of feedings **with soy-based milk formulas in early life** was significantly higher in children with autoimmune thyroid disease (prevalence 31%) as compared with their siblings (prevalence 12%; $\chi^2 = 7.22$ with continuity factor; p less than 0.01), and healthy nonrelated control children (prevalence 13%, $\chi^2 = 5.03$ with continuity factor; p less than 0.02).

; t ;

— **Therefore**, this retrospective analysis **documents the association** of “**soy formula feedings in infancy**” and autoimmune thyroid disease.

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u u u, u u u, u u u, u u u - **DNA fragmentation and cell DEATH**,

- <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=8242767&dopt=Abstract .

1993 “Induction of mouse thymocyte apoptosis by inhibitors of tyrosine kinases is associated with dephosphorylation of nuclear proteins,” – Azuma Y., Onishi Y., Sato Y., Kizaki H., *Cell Immunol* 1993 Nov 152:(1) 271-8., Department of Biochemistry, Tokyo Dental College, Chiba, Japan.

— **DNA fragmentation and cell DEATH**

; t ; — **Incubation of mouse thymocytes with the protein tyrosine kinase inhibitors herbimycin A and methyl-2,5-dihydroxycinnamate induced a decreased and altered profile of nuclear phosphotyrosine proteins in parallel with an increase in internucleosomal DNA fragmentation and cell death dose-dependently.**

— **No change in the profile of cytoplasmic phosphotyrosine proteins was observed. DNA fragmentation was dependent on the synthesis of RNA and protein, suggesting that the inhibition of tyrosine phosphorylation of the nuclear proteins induces apoptosis.**

— **DNA fragmentation was enhanced by simultaneous incubation with phorbol esters capable of activating protein kinase C.**

— **Genistein, another inhibitor of protein tyrosine kinase, induced DNA fragmentation more rapidly than herbimycin A, but there was no predominant alteration of phosphotyrosine proteins in early incubation, suggesting that genistein may induce apoptosis by a mechanism other than direct inhibition of protein tyrosine kinase activity.**

u u u, u u u, u u u, u u u - **DNA strand breaks**, - <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=7892284&dopt=Abstract .

1995 “Genistein as an inducer of tumor cell differentiation: possible mechanisms of action,” – Constantinou A., Herberman E., *Proc Soc Exp Biol Med.* 1995 Jan 208: 1 109-15.

— Decreased activity of either topoisomerases or tyrosine kinases has been implicated in the differentiation of a number of cell types. It is therefore conceivable that genistein, because of its reported ability to inhibit these activities in vitro, may be an inducer of cellular differentiation. **We investigated this possibility in human promyelocytic HL-60 and erythroid K-562 leukemia cells and in human SK-MEL-131 melanoma cells. Our results indicated that genistein, in a dose-dependent manner, inhibited cell multiplication and induced cell differentiation.** The maturing HL-60 cells acquired granulocytic and monocytic markers. The differentiating K-562 cells stained positively with benzidine, which indicates the production of hemoglobin, an erythroid marker. Following genistein treatment, maturing SK-MEL-131 melanoma cells formed dendrite-like structures and exhibited increased tyrosinase activity and melanin content. Experiments were designed to identify the molecular mechanism of genistein's action.

--- **Data from our laboratory suggest that this isoflavone triggers the pathway that leads to cellular differentiation by stabilizing protein-linked DNA strand breakage. Other possible mechanisms reported in the literature are discussed.**

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - **high-temperature wok cooking with unrefined Chinese rapeseed oil may increase Lung cancer risk ... Canola ... Soy.**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=7791233&dopt=Abstract .

1995 “Mutagens from heated Chinese and U.S. cooking oils,” – Shields P.G., Xu G.X., Blot W.J., and others, *J Natl Cancer Inst* 1995 Jun 7;87(11):836-41, Laboratory of Human Carcinogenesis, National Cancer Institute, Bethesda, Md 20892, USA.

— **BACKGROUND:** The lung cancer incidence in Chinese women is among the highest in the world, but tobacco smoking accounts for only a minority of the cancers. Epidemiologic investigations of lung cancer among Chinese women have implicated exposure to indoor air pollution from wok cooking, where the volatile emissions from unrefined cooking oils are mutagenic.

— **PURPOSE:** This study was conducted to identify and quantify the potentially mutagenic substances emitted from a variety of cooking oils heated to the temperatures typically used in wok cooking.

— **RESULTS:** 1,3-Butadiene ... benzene ... acrolein ... formaldehyde ... and other related compounds were qualitatively and quantitatively detected, with emissions tending to be highest for unrefined Chinese rapeseed oil and lowest for peanut oil. The emission of 1,3-butadiene and benzene was approximately 22-fold and 12-fold higher, respectively, from heated unrefined Chinese rapeseed oil than from heated peanut oil. Lowering the cooking temperatures or adding an antioxidant, such as butylated hydroxyanisole, before cooking decreased the amount of these volatile emissions. Among the individual fatty acids tested, heated linolenic acid produced the greatest quantities of 1,3-butadiene, benzene, and acrolein. Separately, the mutagenicity of individual volatile emission condensates was correlated with linolenic acid content ($r = .83$; $P = .0004$). Condensates from heated linolenic acid, but not linoleic or erucic acid, were highly mutagenic.

; 1; — **CONCLUSIONS:** These studies, combined with experimental and epidemiologic findings, suggest that high-temperature wok cooking with unrefined Chinese rapeseed oil may increase lung cancer risk. This study indicates methods that may reduce that risk.

— **IMPLICATIONS:** The common use of wok cooking in China might be an important but controllable risk factor in the etiology of lung cancer. In the United States, where cooking oils are usually refined for purity, additional studies should be conducted to further quantify the potential risks of such methods of cooking.

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - **DNA damage ... <http://www.soyonlineservice.co.nz/04immunefunction.htm> .**

- **Genistein** has been previously reported to stabilize the covalent topo II-DNA cleavage complex and thus function as a “**topo II poison**”.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=7769390&dopt=Abstract .

1995 “Flavonoids as DNA topoisomerase antagonists and poisons: structure-activity relationships,” – Constantinou A., Mehta R. and others, *J Nat Prod* 1995 Feb 58:2 217-25.

— Selected flavonoids were tested for their ability to inhibit the catalytic activity of DNA topoisomerase (topo) I and II. Myricetin, quercetin, fisetin, and morin were found to inhibit both enzymes, while phloretin, kaempferol, and 4',6,7-trihydroxyisoflavone inhibited topo II without inhibiting topo I. Flavonoids demonstrating potent topo I and II inhibition required hydroxyl group substitution at the C-3, C-7, C-3', and C-4' positions and also required a keto group at C-4. Additional B-ring hydroxylation enhanced flavonoid topo I inhibitory action. A C-2, C-3 double bond was also required, but when the A ring is opened, the requirement for the double bond was eliminated.

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— **Genistein has been previously reported to stabilize the covalent topo II-DNA cleavage complex and thus function as a topo II poison. All flavonoids were tested for their ability to stabilize the cleavage complex between topo I or topo II and DNA. None of the agents stabilized the topo I-DNA cleavage complex, but prunetin, quercetin, kaempferol, and apigenin stabilized the topo II DNA-complex.**

— Competition experiments have shown that genistein-induced topo II-mediated DNA cleavage can be inhibited by myricetin, suggesting that both types of inhibitors (antagonists and poisons) interact with the same functional domain of their target enzyme. These results are of use for the selection of flavonoids that can inhibit specific topoisomerases at specific stages of the topoisomerization reaction.

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t t t, t t t, t t t, t t t - DNA strand breaks

- <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9225019&dopt=Abstract .

1996 “Induction of micronuclei, DNA strand breaks and HPRT mutations in cultured Chinese hamster V79 cells by the phytoestrogen coumestrol,” – Kulling S.E., Metzler M., *Food Chem Toxicol* 1996, 35:605-13.

— Coumestrol (COUM), genistein (GEN) and daidzein (DAI) are major phytoestrogens present in numerous plants eaten by humans and food-producing animals. **Little is known about the genotoxicity of these natural compounds.**

— The effects of COUM, GEN and DAI were studied in cultured Chinese hamster V79 cells at various endpoints. None of the substances affected the cytoplasmic microtubule complex or the mitotic spindle.

; t ;

— However, COUM and GEN but not DAI proved to be strong inducers of **DNA strand breaks and micronuclei containing acentric fragments**, as shown with antikinetochore antibodies. The clastogenicity of GEN may be due to its non-intercalative inhibitory effect on topoisomerase II, whereas COUM may act through topoisomerase II inhibition and/or DNA intercalation.

— COUM was also a clear inducer of hypoxanthine guanine phosphoribosyltransferase (HPRT) mutations in V79 cells; GEN was only marginally active and DAI inactive at this endpoint. This is the first report in the clastogenicity and mutagenicity of COUM in mammalian cells.

t t t, t t t, t t t, t t t - Hypocalcemia-hyperphosphatemia ... life-threatening hypocalcemic hyperphosphatemic spasms in the infant

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9064373 .

1996 “Hypocalcemic tetany in 'alternative' soy milk nutrition in the first months of life,” – Anil M, Demirakca S, Dotsch J, Kiess W., *Klin Padiatr.* 1996 Nov-Dec;208(6):323-6., *Abteilung Allgemeine Padiatrie und Neonatologie, Justus Liebig Universitat Giessen.*

; t ;

Malnutrition ... from ... False Nutritional Beliefs

— A 14 weeks old infant was admitted to the intensive care unit with **life-threatening hypocalcemic-hyperphosphatemic spasms**. Hypocalcemia -hyperphosphatemia was found to have been caused by feeding a high phosphate/ low calcium **soy milk**. The daily uptake of calcium was calculated to have been 3.3-6 mmol that of phosphate 30 mmol.

— **The parents strongly believed that soy milk formulas were equivalent to breast milk and cow's milk formulas and lived on a strictly vegetarian diet.** Therapy with calcium (at an initial dose of 2.25 mmol/kg/day) and 1.25 OH vitamin D3 (Rocaltrol, 0.25 microgram/day) normalized Ca, PO₄, vitamin D and parathyroid hormone levels rapidly.

— **We conclude:** Vegetarian feeding had led to **life-threatening hypocalcemic - hyperphosphatemic spasms in the infant, as well as, malnutrition and false nutritional beliefs have to be included as a potential cause of early**

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- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8932918 .

1996 “Maternal exposure to potential inhibitors of DNA topoisomerase II and infant leukemia (United States): a report from the Children's Cancer Group,” — Ross JA, Potter JD, Reaman GH, and others., *Cancer Causes Control*. 1996 Nov;7(6):581-90., Division of Pediatric Epidemiology and Clinical Research, University of Minnesota, Minneapolis, USA.

— Nearly 80 percent of infant leukemias present with an abnormality involving the MLL gene at 11q23. Moreover, secondary acute myeloid leukemias (AML) that occur as the result of chemotherapy agents, which are known to inhibit DNA topoisomerase II, often manifest the same MLL abnormalities.

; t ;

— **It has been hypothesized that de novo infant leukemias may occur as a result of maternal exposure to agents in diet and medications that inhibit DNA topoisomerase II.**

— Three epidemiologic studies of childhood leukemia with similar methodologies were conducted in the United States and Canada over the past 10 years by the Children's Cancer Group (CCG).

— **However, within the AML stratum, there was a statistically significant positive association (P trend = 0.04) with increasing consumption of DNA topoisomerase II-inhibitor containing foods (odds ratio [OR] = 9.8, 95 percent confidence interval [CI] = 1.1-84.8; OR = 10.2, CI = 1.1-96.4; for medium and high consumption, respectively).**

— **Results of this preliminary study, in combination with molecular data, should be used in future investigations of childhood leukemia (particularly, infant) to justify the incorporation of a detailed dietary history.**

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- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9710315&dopt=Abstract .

1998 “Xenoestrogens significantly enhance risk for breast cancer during growth and adolescence,” — Ardies C.M. and Dees C., *Med Hypotheses* 1998 Jun 50:6 457-64., Department of Biological and Exercise Sciences, Northeastern Illinois University, Chicago 60625-4699, USA.

— Breast cancer is one of the most common forms of cancer observed in women, and endogenous estrogen is thought to play a major role in its development. Because of this, any conditions or exposures which enhance estrogenic responses would result in an increased risk for breast cancer.

; t ;

— **The role of xenoestrogenic compounds**, such as **DDT**, in the etiology of breast cancer is still very controversial. In the following paper we discuss recently-published observations by ourselves and others which indicate that **xenoestrogens may play a significant role in the development of breast cancer.**

— Specifically, we hypothesize during periods of high growth rates & during breast development the sensitivity of breast cells to estrogenic compounds is sufficiently great for xenoestrogens to significantly enhance risk for breast cancer.

1 1 1, 1 1 1, 1 1 1, 1 1 1, (+) 1 1 1 - **Genistein** acts as an estrogen in utero, and may **increase** the incidence of **mammary tumors** if given through a **pregnant** mother.

1998 “Maternal genistein exposure mimics the effects of estrogen on mammary gland development in female mouse offspring,” — **Hilakivi-Clarke L, Cho E., *Oncol Rep.* 1998 May-Jun;5(3):609-16., Lombardi Cancer Center, Research Bldg., Room W405, Georgetown University, 3970 Reservoir Road, NW, Washington, DC, USA.**

— “Human and animal data indicate that a high maternal estrogen exposure during pregnancy **increases** breast cancer risk among daughters. This may reflect an increase in the epithelial structures that are the sites for malignant transformation, i.e., terminal end buds (TEBs), and a reduction in epithelial differentiation in the mammary gland. Some phytoestrogens, such as **genistein** which is a major component in **soy-based foods**, and zearalenone, a mycotoxin found in agricultural products, have estrogenic effects on the reproductive system, breast and brain.

— **These findings indicate** that maternal exposure to physiological doses of **genistein** mimics the effects of E2 on the mammary gland and reproductive systems in the offspring.

; 1 ; — Thus, our results suggest that **genistein** acts as an estrogen in utero, and may increase the incidence of mammary tumors if given through a **pregnant** mother. The estrogenic effects of zearalenone on the mammary gland, in contrast, are probably counteracted by the permanent changes in estrus cycling.”

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - <http://www.soyonlineservice.co.nz/articles/Helf.htm> .

- Also, see next to bottom page 37, 1997 ... **proliferation of cultured human breast cancer cells ... Dees concluded that “... women should not consume particular foods, (eg. Soy-derived products), to prevent breast cancer ...”.**

- Also, see next to bottom page 40, 1998 ...

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9731492 .

1998 “Estrogenic effects of genistein on the growth of estrogen receptor-positive human breast cancer (MCF-7) cells in vitro and in vivo,” — **Hsieh C.Y., Santell R.C., Haslam S.Z., Helferich W.G., *Cancer Res* 1998 Sep 1 58:17 3833-8., Department of Food Science and Human Nutrition, Michigan State University, East Lansing 48824, USA.**

— **Genistein, found in soy products**, is a phytochemical with several biological activities. **In the current study, our research focused on the estrogenic and proliferation-inducing activity of genistein.**

— We have demonstrated that **genistein enhanced the proliferation of estrogen-dependent human breast cancer (MCF-7) cells** in vitro at concentrations as low as 10 nM, with a concentration of 100 nM achieving proliferative effects similar to those of 1 nM estradiol. **Expression of the estrogen-responsive gene pS2** was also induced in MCF-7 cells in response to treatment with a concentration of genistein as low as 1 microM. At higher concentrations (above 20 microM), genistein inhibits MCF-7 cell growth. In vivo, we have shown that dietary treatment with genistein (750 ppm) for 5 days enhanced mammary gland growth in 28-day-old ovariectomized athymic mice, indicating that **genistein** acts as an estrogen in normal mammary tissue. **To evaluate whether the estrogenic effects observed in vitro** with MCF-7 cells could be reproduced in vivo, MCF-7 cells were implanted s.c. in ovariectomized athymic mice, and the growth of the estrogen-dependent tumors was measured weekly. Negative control animals received the American Institute of Nutrition (AIN)-93G diet, the positive control group received a new s.c. estradiol (2 mg) pellet plus the AIN-93G diet, and the third group received genistein at 750 ppm in the AIN-93G diet.

— **Tumors were larger in the genistein (750 ppm)-treated group than they were in the negative control group**, demonstrating that dietary genistein was able to enhance the growth of MCF-7 cell tumors in vivo. Increased uterine weights were also observed in the genistein-treated groups.

— **In summary, genistein** can act as an estrogen agonist in **vivo and in vitro**, resulting in the proliferation of cultured human breast cancer cells (MCF-7) and the induction of pS2 gene expression. **Here we present new information** that dietary **genistein** stimulates mammary gland growth and enhances the growth of MCF-7 cell tumors in ovariectomized athymic mice.

See page 37

1997

; 1 ; --- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9168007&dopt=Abstract .

“Dietary estrogens stimulate human breast cells to enter the cell cycle,” — **Dees C. and others,**

--- **Dr Craig Dees** of Oak Ridge National Laboratory has also found that soy isoflavones cause breast cancer

cells to grow. **He reported that** "... dietary estrogens at low concentrations, (genistein), do not act as antiestrogens, but like DDT to stimulate human breast cancer cells, (MC-7 cells), to enter the cell cycle ...".

-- **Note:** **At the end of this full research paper, Dees concluded that "... women should not consume particular foods, (eg. Soy-derived products), to prevent breast cancer ...".**

Also see **Dees C.**, on pages 37 and 73.

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- <http://www.soyonlineservice.co.nz/articles/Metzler.htm> ... and ... <http://www.soyonlineservice.co.nz/04soy&DES.htm> .

1998 "Genotoxicity of estrogens," – Metzler M., Kulling S.E. and others, Z Lebensm Unters Forsch A., 1998, 206: 367-73.

— Genotoxic effects of the endogenous mammalian estrogen 17-beta-estradiol and the synthetic estrogen diethylstilbestrol have recently been demonstrated, e.g. the induction of numerical **chromosome aberrations** (aneuploidy, i.e. the condition in which on or more whole chromosomes of a normal set are missing or present in more than the usual set of copies) and the formation of deoxyribonucleic acid (**DNA**) adducts.

— It is likely that the genotoxicity of the estrogens acts in concert with their hormonal activity to give rise to **carcinogenic** effects.

— **Many of the phytoestrogens that occur in plants and the numerous anthropogenic estrogens in our environment, which are ingested in food, have not yet been examined for their genotoxic potential.** Recent studies have demonstrated that some but not all of these estrogens exhibit genotoxicity.

— The type and strength of the genotoxicity strongly depends on the chemical structure and does not correlate with estrogenicity.

— **For example, coumestrol and genistein** are clastogenic in cultured mammalian cells and lead to gene mutations, whereas biochanin-A and bisphenol-A have the potential to aneuploidy.

— **Daidzein**, enterolactone, enterodiol and certain bisphenols are devoid of genotoxic effects. The genotoxicity should be determined individually for each estrogen & taken into account in assessment of - carcinogenic risk.

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- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10572627 .

1999 "Cytotoxic potential of the phytochemical genistein isoflavone (4',5',7-trihydroxyisoflavone) and certain environmental chemical compounds on testicular cells," — Kumi-Diaka J, Nguyen V, Butler A., Biol Cell 1999 Sep;91(7):515-23., Florida Atlantic University, Department of Biology, College of Liberal Arts & Sciences, Davie 33314, USA.

; 1 ;— The results from the data obtained demonstrated: 1.) that incubation of testis cells with each of the agents (Gn, dxm, naz) alone and in two combinations (Gn-dxm, and Gn-naz) induced significant testicular cell death; 2.) that both **genistein** and dexamethasone mostly and **significantly induced apoptotic cell death** while sodium azide induced necrotic cell death; 3.) that addition of dexamethasone to **genistein demonstrated synergism in apoptosis on testis cells**; and 4.) that combination of naz with Gn demonstrated synergism in necrosis on testis cells even though Gn alone did not induce significant necrosis.

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- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11034965&dopt=Abstract .

2000 “**Ecological study of the association between soy product intake and mortality from cancer and heart disease in Japan,**” – [Nagata C.](#), *Int J Epidemiol* 2000 Oct;29(5):832-6, Department of Public Health, Gifu University School of Medicine, Gifu, Japan.

— **Soy protein intake** was significantly correlated with **stomach cancer mortality rate in men** after controlling for total energy, alcohol and salt intake, the mean age and proportion of current smokers in the prefecture ($r = -0.31$, $P = 0.04$). Soy product intake estimated as total amount as well as isoflavone and soy protein intake were **significantly positively correlated with colorectal cancer mortality rates in both sexes** (for total amount, $r = 0.32$, $P = 0.03$ in men and $r = 0.44$, $P = 0.001$ in women) after controlling for covariates. **Inverse correlation between soy product intake (as total amount or soy protein) and heart disease mortality rate was statistically significant in women** after controlling for covariates.

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- http://www.eurekalert.org/pub_releases/2001-05/NIoE-Iucs-3005101.php .

2001 “**Increased uterine cancer seen in mice injected with genistein, a soy estrogen, as newborns,**” – [Newbold, Wendy, Jefferson and Elizabeth Padilla; Bill C.I. Bullock,](#) *US. National Institute of Environmental Health Sciences, NIH; EurekAlert, May 31, 2001.*

— “The data suggest that **genistein is carcinogenic** if exposure occurs during critical periods in a young animal’s development”. The finding is similar to work Newbold did with **diethylstilbestrol-(DES)** exposure in unborn mice. **DES** is a powerful synthetic estrogen, while genistein is a much weaker estrogenic agent made by plants. **DES** was previously given to pregnant mothers to prevent miscarriages and was used as a food additive to fatten chickens and cattle.

— **All uses of DES in the United States have been discontinued because some children of mothers who took the drug during pregnancy developed rare cancers.**

1 1 1, 1 1 1, 1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11714112&dopt=Abstract .

2001 “**Incidence of squamous neoplasia of the cervix and vagina in women exposed prenatally to diethylstilbestrol (United States),**” – [Hatch E.E., Herbst A.L., Hoover R.N., and others.](#), *Cancer Causes & Control.* 12(9):837-845, 2001 Nov., Division of Cancer Epidemiology and Genetics, National Cancer Institute, Bethesda, MD, USA.

; 1 ; — Women exposed prenatally to diethylstilbestrol (**DES**) have an **excess risk of clear-cell adenocarcinoma of the vagina and cervix.** The findings support an association between in-utero DES exposure and high-grade squamous neoplasia.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - genistein, alone or in combination with dxm, significantly interfered

with percentage sperm motility and **caused significant detachment of sperm heads**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12639286 .

2001 “**Effects of Genistein Isoflavone (4',5',7-Trihydroxyisoflavone) and Dexamethasone on Functional Characteristics of Spermatozoa,**” – [Kumi-Diaka J, Townsend J,](#) *J Med Food* 2001 Spring;4(1):39-47, Florida Atlantic University, Department of Biological Sciences, College of Liberal Arts and Sciences, 2912 College Avenue, Davie, FL, 33314.

— **Caudal epididymal spermatozoa were used to study the influence of genistein isoflavone and dexamethasone (dxm) on the functional characteristics of spermatozoa ...**

— **The overall results indicated, (1-5), that (4) higher doses of genistein, alone or in combination with dxm,**

significantly interfered with percentage sperm motility and caused significant **detachment of sperm heads** but did not cause morphological defects; and (5) higher doses of genistein caused significant decrease in sperm acrosome reactivity with long duration of exposure.

; 1 ; — In view of the fact that sperm capacitation and AcR are physiological prerequisites for successful fertilization of oocytes, the findings suggest that chronic exposure of spermatozoa to **high doses of genistein** could be associated with **infertility problems** through suppression/inhibition of AcR and sperm motility.

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - **Malnutrition ... from ... False nutritional beliefs.**

Infants on Soy milk and Rice milk with severe nutritional deficiencies

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11335767 .

2001 **“Severe nutritional deficiencies in toddlers resulting from health food milk alternatives,”** – *Carvalho NF, Kenney RD, Carrington PH, Hall DE., Pediatrics. 2001 Apr;107(4):E45., Scottish Rite Pediatric and Adolescent Consultants, Childrens Healthcare of Atlanta, Atlanta, Georgia 30342-1600, USA. drnorm@aol.com*

; 1 ;

Malnutrition ... from ... False Nutritional Beliefs

Infants on Soy milk and Rice milk with severe nutritional deficiencies

— **Because nutritional deficiencies are uncommon in the United States**, US physicians may be unfamiliar with their clinical features. It is widely appreciated that health food beverages are not appropriate for infants. Because of continued growth, children beyond infancy remain susceptible to nutritional disorders. Here we report on 2 cases of severe nutritional deficiency caused by consumption of health food beverages. In both cases, the parents were well-educated, appeared conscientious, and their children received regular medical care. Diagnoses were delayed by a low index of suspicion.

— **Case (1.)** a 22-month-old male child, with a history of chronic eczema and perceived milk intolerance. He was started on a **rice beverage** after weaning.

— Kwashiorkor impairs cellular immune defenses and electrolyte imbalances with ongoing diarrhea. Observed typical features of kwashiorkor: generalized edema, hyperpigmented and hypopigmented skin lesions, abdominal distention, irritability, and thin, sparse hair.

— **Case (2.)** a 17-month-old black male, Growth and height arrest after 9 months on **soy milk**. Reported regression in gross motor milestones, patient was unable to crawl or roll over. Generalized hypotonia, weakness, and decreased muscle bulk were present.

— **Patient was diagnosed with rickets.** Clinical features of rickets present on examination included: frontal bossing, an obvious rachitic rosary (photographed), genu varus, flaring of the wrists, and lumbar kyphoscoliosis. The published radiographs are diagnostic of advanced rickets, showing diffuse osteopenia, frayed metaphyses, widened epiphyseal plates, and a pathologic fracture of the ulna.

— **In addition**, the serum alkaline phosphatase and parathyroid hormone level were markedly elevated, and Phosphorus and the 25-hydroxy-vitamin D level were low, Calcium was low normal.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - **“Caution is warranted ... for women with breast cancer”**

- http://www.eurekalert.org/pub_releases/2001-11%20uoia-efi110101.php , and ...

- <http://search.eurekalert.org/e3/query.html?col=ev3rel&qc=ev3rel&qt=estrogen+found+in+soy+stimulates+human+breast-cancer+cells&x=21&y=6> .

2001 “Estrogen found in soy stimulates human breast-cancer cells in mice,” – William G. Helferich, *J Nutr - (Nov.), Carcinogenesis - (Oct.), Cancer Res - (July)*, 3 studies funded by National Institute of Health, an ElurekAlert Press Release., Nov 1, 2001.

— **Results demonstrate that genistein in various forms stimulates tumor growth.** In Journal of Nutrition, Heiferich and colleagues show that the estrogen-dependent tumors implanted into experimental mice models **grow at a rate in proportion to the levels of genistein consumed.** Genistein at or above 250 parts per million, a dosage that produces blood levels similar to what is observed in women consuming soy diets.

— The researchers, Cancer Research, found that estrogen-dependent tumor growth increased as the isoflavone content increased in the soy-containing diet, and that the conversion of genistin to genistein in the body begins with contact - with saliva in the mouth.

; 1 ;— “Our pre-clinical laboratory animal data suggest that **caution is warranted** regarding the use of soy supplements high in isoflavones for women with breast cancer, particularly if they are menopausal.”

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1 1 1, 1 1 1, 1 1 1 - results in **decreased** absorption of levothyroxine

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11421567&dopt=Abstract .

2001 “Use of Soy protein supplement **and** resultant need for increased dose of levothyroxine,” – Bell D.S., Ovalle F., *Endocr Pract May-June 2001; 7(3):193-4, Division of Endocrinology and Metabolism, Univ. of Alabama at Birmingham, School of Medicine, Alabama, USA.*

— **OBJECTIVE:** To report a case of difficulty in achieving suppressive serum levels of thyroid hormone because of malabsorption of exogenous levothyroxine attributable to daily ingestion in close temporal relationship to the intake of a soy protein-containing food supplement.

— **CONCLUSION:** Administration of levothyroxine concurrently with a soy protein dietary supplement **results in decreased absorption of levothyroxine** and the need for higher oral doses of levothyroxine to attain therapeutic serum thyroid hormone levels.

1 1 1, 1 1 1, 1 1 1 - Visual spatial memory is enhanced in female rats ... inhibited in males

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11801187&dopt=Abstract .

2001 “Visual spatial memory is enhanced in female rats (but inhibited in males) by dietary Soy phytoestrogens,” – Lund T.D., West T.W., and others, *BMC Neurosci., 2001;2(1).Epub 2001 Dec 17., Neuroscience Center Brigham Young Univ., Provo, Utah, USA. Neuroscience@byu.edu*

— **BACKGROUND:** In learning and memory tasks, requiring visual spatial memory (VSM), males exhibit superior performance to females (a difference attributed to the hormonal influence of estrogen). This study examined the influence of **phytoestrogens** (estrogen-like plant compounds) on VSM, utilizing radial arm-maze methods to **examine varying aspects of memory.** Additionally, brain phytoestrogen, calbindin (CALB), and cyclooxygenase-2 (COX-2) levels were determined.

— **RESULTS:** Female rats receiving lifelong exposure to a high-phytoestrogen containing diet (Phyto-600) acquired the maze faster than females fed a phytoestrogen-free diet (Phyto-free); in males the opposite diet effect was identified. In a separate experiment, at 80 days-of-age, animals fed the Phyto-600 diet lifelong either remained on the Phyto-600 or were changed to the Phyto-free diet until 120 days-of-age. Following the diet change Phyto-600 females outperformed females switched to the Phyto-free diet, while in males the opposite diet effect was identified. Furthermore, males fed the Phyto-600 diet had significantly higher phytoestrogen concentrations in a number of brain regions (frontal cortex, amygdala & cerebellum); in frontal cortex, expression of CALB (a neuroprotective calcium-binding protein) decreased while COX-2 (an inducible inflammatory factor prevalent in **Alzheimer's** disease) increased.

— **CONCLUSIONS:** Results suggest that **dietary phytoestrogens** significantly sex-reversed the normal sexually dimorphic expression of VSM. Specifically, in tasks requiring the use of reference, but not working, memory, VSM was

enhanced in females fed the Phyto-600 diet, whereas, in males VSM was inhibited by the same diet. These findings suggest that dietary soy derived phytoestrogens can influence learning and memory & alter the expression of proteins involved in neural protection and inflammation in rats.

; t ; My question is ... ?? ... Should male airplane pilots be prohibited, forbidden, from eating soy, or should male pilots be replaced with women pilots, and then the men could become the stewardess, and the stewardess could become the better pilots ??.

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t t t, t t t, t t t, t t t, (+) t t t - **estrogenic substances should also be considered "male hormones."**

- <http://www.soyonlineservice.co.nz/07abstract.htm> .

- <http://www.soyonlineservice.co.nz/07abstract.htm#ODonne!%20et%20al%202001> .

2001 "Estrogen and spermatogenesis," — O'Donnell L, Robertson KM, and others, *Endocr Rev* 2001 Jun;22(3):289-318 Prince Henry's Institute of Medical Research, Victoria, Australia. liza.odonnell@med.monash.edu.au

— Although it has been known for many years that estrogen administration has deleterious effects on male fertility, data from transgenic mice deficient in estrogen receptors or aromatase point to an essential physiological role for estrogen in male fertility.

— **This review summarizes the current knowledge on the localization of estrogen receptors and aromatase in the testis in an effort to understand the likely sites of estrogen action.**

— **The review also discusses the many studies that have used models employing the administration of estrogenic substances to show that male fertility is responsive to estrogen, thus providing a mechanism by which inappropriate exposure to estrogenic substances may cause adverse effects on spermatogenesis and male fertility.** The reproductive phenotypes of mice deficient in estrogen receptors alpha and/or beta and aromatase are also compared to evaluate the physiological role of estrogen in male fertility.

— **The review focuses on the effects of estrogen administration or deprivation, primarily in rodents, on ... the hypothalamo-pituitary-testis axis ... testicular function (including Leydig cell ... Sertoli cell ... and germ cell development and function) ... and in the development and function of the efferent ductules and epididymis.** The requirement for estrogen in normal male sexual behavior is also reviewed, along with the somewhat limited data on the fertility of men who lack either the capacity to produce or respond to estrogen.

; t ; — **This review highlights the ability of exogenous estrogen exposure to perturb spermatogenesis and male fertility, as well as the emerging physiological role of estrogens in male fertility, suggesting that, in this local context, estrogenic substances should also be considered "male hormones."**

t t t, t t t, t t t, t t t - **Wildlife experience and animal studies have provided evidence ...**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12064894&dopt=Abstract .

2002 "Impact of exposure to endocrine disrupters in utero and in childhood on adult reproduction," — Norgil Damgaard I, Main K.M., and others, *Best Pract Res Clin Endocrinol Metab* 2002 Jun;16(2):289-309. Department of Growth and Reproduction, Copenhagen University Hospital, Rigshospitalet, Blegdamsvej 9, 2100, Copenhagen, Denmark.

— **Recent reports have demonstrated a decline in human male reproductive health: high and probably increasing prevalence of cryptorchidism and hypospadias, low and probably decreasing semen quality, a rising incidence of testicular cancer and a growing demand for assisted reproduction.**

— These changes seem to be interrelated and may be symptoms of a common underlying entity, the testicular dysgenesis syndrome, with foundations in fetal life due to adverse environmental influences.

— **Wildlife experience and animal studies have provided evidence that fetal or perinatal exposure to endocrine disrupters results in disturbed sexual differentiation and urogenital malformations followed by decreased reproductive health in adult life.**

— This chapter reviews existing evidence for a connection between ...

(1.) exposure to endocrine disrupters in fetal life and childhood and

(2.) adult reproductive health in humans.

— This topic is not only relevant to basic scientists but also to clinical endocrinologists, who should also be encouraged to participate in research concerning this problem.

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1 1 1, 1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12297547&dopt=Abstract .

2002 “Neonatal exposure to genistein induces estrogen receptor (ER)alpha expression and multiocyte follicles in the maturing mouse ovary: evidence for ERbeta-mediated and nonestrogenic actions,” – ***Jefferson W.N., Couse J.F., and others, Bio Reprod 2002 Oct;67(4): 1285-96.*** Developmental Endocrinology Section, Laboratory of Molecular Toxicology, Environmental Toxicology Program, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709, USA.

— These data taken together demonstrate alterations in the ovary following neonatal exposure to genistein. **Given that human infants are exposed to high levels of genistein in soy-based foods, this study indicates that the effects of such exposure on the developing reproductive tract warrant further investigation.**

1 1 1 1 1 1, 1 1 - <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12520091&dopt=Abstract .

2002 “Early exposure to genistein exerts long-lasting effects on the endocrine and immune systems in rats,” – ***Klein S.L., Wisniewski A.B., Marson A.L., and others, Mol Med 2002 Nov;8(11):742-9.*** The W. Harry Feinstone Department of Molecular Microbiology and Immunology, The Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland 21205, USA.

— Discussion: These data illustrate that exposure to genistein **during pregnancy and lactation exerts long-lasting effects on the endocrine and immune systems in adulthood.** Whether exposure to phytoestrogens during early development affects responses to infectious or autoimmune diseases, as well as cancers, later in life requires investigation.

1 1 1, 1 1 1, 1 1 1, 1 1 1, 1 - **Risks versus Benefits ... breast cancer patients should be informed that phytoestrogens have the potential to stimulate tumor growth.**

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12089239&dopt=Abstract .

2002 “Safety Issues of Soy Phytoestrogens in Breast Cancer Patients,” — ***de Lemos M., J Clin Oncol, Volume 20(13), July 1, 2002, 3040-3041.*** Vancouver, BC Canada

— **Risks versus Benefits ... breast cancer patients should be informed that phytoestrogens have the potential to stimulate tumor growth.**

— <http://www.jco.org/cgi/content/full/20/13/3040> ... **Safety Issues of Soy Phytoestrogens in Breast Cancer Patients**

Mário de Lemos

Vancouver, British Columbia, Canada

To the Editor:

; 1 ; — The results of Van Patten et al ¹ confirmed previous findings ² that soy phytoestrogens have minimal efficacy for menopausal symptoms in breast cancer patients. **However, I am concerned that patients in neither study were apparently (not) informed of the potential stimulatory effects of phytoestrogens on breast tumor.** ³ Similar omission would have raised ethical concerns if pharmaceutical drugs were involved.

— At concentrations below 10 Φ mol/L, phytoestrogens can stimulate breast tumor growth ⁴⁻¹⁵ and antagonize the antitumor effects of tamoxifen, ^{7,9} particularly in an environment of low endogenous estrogen. ^{3,11} In contrast, phytoestrogens inhibit breast tumor growth and enhance the antitumor effects of tamoxifen at concentrations above 10 Φ mol/L. ^{5,6,8,9,11} In humans, serum phytoestrogen concentrations attained after acute or chronic intake of phytoestrogens were much lower than 10 Φ mol/L. ^{1,16,17}

— **Without long-term human data, cancer risk assessments need to be cautious and assume that substances that promote tumor growth in preclinical studies may pose similar risks clinically.** ¹⁸ Hence, to weigh the potential **risks versus benefits** before using phytoestrogens for unproven indications, breast cancer patients should be informed that phytoestrogens have the potential to stimulate tumor growth.

Mário de Lemos

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1 1 1, 1 1 1, 1 1 1, 1 1 1 - **Bladder Cancer** - (Soy industry is not promoting the results of this study !)

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12496060&dopt=Abstract .

2002 “Dietary soy and increased risk of bladder cancer: the Singapore Chinese Health Study,” – Sun C.L., Yuan J.M., Arakawa K., and others, *Cancer Epidemiol Biomarkers Prev.* 2002 Dec;11(12):1674-7. USC/Norris Comprehensive Cancer Center, University of Southern California Keck School of Medicine, Los Angeles, California 90089, USA., canlan@hsc.usc.edu .

; 1 ; — The association between Soyfood consumption and subsequent bladder cancer risk was investigated in a population-based cohort study, the “Singapore Chinese Health Study”. As of December 31, 2000, 329,848 person-years of follow-up were accrued. Sixty-one historically confirmed incident bladder cancer cases were identified ... **High intake of Soyfood was statistically significantly related to an elevated RISK of bladder cancer** ... after adjustment for cigarette smoking and level of education.

— Similar results were obtained for intakes of Soy protein and Soy isoflavones. **The Soyfood–bladder cancer risk association did not differ significantly between men and women and was not explained by other dietary factors. The Soy–cancer relationship became stronger when the analysis was restricted to subjects with longer (> or =3 years) duration of follow-up. To our knowledge, this is the FIRST epidemiological report on the effect of dietary Soy on bladder cancer risk.**

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DNA double strand breaks leading to chromosomal aberrations and leukemia’s.

Further studies on the role of dietary topoisomerase II-poisons are **urgently** required.

- <http://www.giftinfo.uni-mainz.de/EXCLI/volumes/Vol1/2002volume1pp8-14.pdf> .

2002 “Dietary topoisomerase II-poisons: contribution of soy products to infant leukemia ?,” – Jan G. Hengstler, Carolin K. Heimerdinger and others, *EXCLI Journal* 2002;1:8-14 (ISSN 1611-2156), received: Dec 19, 2002, accepted Dec 29, 2002, published Dec 30, 2002. Institute of Legal Medicine, Department of Molecular Toxicology, University of Leipzig, Johannisallee 28, 04103 Leipzig, Germany; Institute of Toxicology and Department of Gynecology, University of Mainz, Mainz, Germany

— DNA topoisomerases are nuclear enzymes inducing transient breaks in DNA allowing DNA strands or double helices to pass through each other. Clinically used DNA topoisomerase II-poison etoposide is known to induce DNA double strand breaks leading to chromosomal aberrations and leukemias.

— Recently, some alarming studies have been published, suggesting that maternal exposure to low doses of dietary topoisomerase II-poisons, including bioflavonoids such as **genistein** or **quercetin**, may contribute to the development of infant leukemia: approximately 80% of infants with acute myelogenous leukemia (AML) and acute

lymphoblastic leukemia (ALL) have chromosome translocations involving the MLL (mixed lineage leukemia) gene ... **These observations are relevant, since many foods contain topoisomerase II-poisons**, predominantly soy and **Soy** products, but also coffee, wine, tea, cocoa, as well as some fruits and vegetables.

— **Further studies on the role of dietary topoisomerase II-poisons are urgently required.** If the casual relationship between dietary exposure and topoisomerase II-poisons and infant leukemia will be confirmed, care should be taken to reduce exposure to critical foods during pregnancy.

; 1 ; — **What this study and its abstract does not say is that soy is of many magnitude greater danger** scientifically than coffee, wine, tea, cocoa and some fruits and vegetables. By leaving this fact out, the inexperienced reader may/will become confused and/ or misinformed, and this info can be used to unduly sway the wrong belief to the public.

Google Search ... **Dietary bioflavonoids induce cleavage in the MLL gene and may contribute** to infant

- <http://www.google.com/search?sourceid=navclient&q=dietary+bioflavonoids+induce+cleavage+MLL+gene+may+contribute>

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- <http://www.soyonlineservice.co.nz/07abstract.htm> ... **Scientific Investigations**

2002 “Serum plant sterols as a potential risk factor for coronary heart disease,” — **Sudhop T, Gottwald BM, von Bergmann K.,** *Metabolism.* 2002 Dec;51(12):1519-21., *Department of Clinical Pharmacology, University of Bonn, Bonn, Germany.*

; 1 ; — **In patients with the inherited disease of phytosterolemia, elevated concentrations of plant sterols (eg, campesterol and sitosterol) have been implicated as a risk factor for premature atherosclerosis.** Whether plasma concentrations of campesterol and sitosterol are risk factors for coronary heart disease (CHD) in nonphytosterolemia subjects has not been established.

— **Therefore**, the present study examined the role of plant sterols in patients admitted for elective artery coronary bypass graft (ACBG). Serum concentrations of campesterol and sitosterol, as well as lathosterol, desmosterol, cholestanol, and lipoproteins were analyzed in 42 men and 11 women without lipid-lowering treatment during the past. Twenty-six patients reported a positive family history in their first-degree relatives for CHD. Lipid profile and other risk factors were comparable in both groups.

— **Patients with a positive family history for CHD had significant higher plasma levels of campesterol (.50 +/- .17 v. .38 +/- .16 mg/dL; P = .011), sitosterol (.40 +/- .11 v. .31 +/- .11 mg/dL; P = .004) and their ratios to cholesterol. Lathosterol, desmosterol, cholestanol, and their ratios to cholesterol were not significantly different.** Analysis of covariance (ANCOVA) analysis showed no influence of sex, age, triglycerides, total-, low-density lipoprotein (LDL)-, and high-density lipoprotein (HDL)-cholesterol on the results, but **confirmed a strong influence of plant sterols.**

— **These findings support the hypothesis that plant sterols might be an additional risk factor for CHD.**

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- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12270217 .

2002 “Estrogen receptor expression in the prostate of rats treated with dietary genistein,” — **Dalu A., Blaydes B.S., Bryant C.W., and others,** *J Chromatogr B Analyt Technol Biomed Life Sci.* 2002 Sep 25;777(1-2):249-60., *Division of Biochemical Toxicology, National Center for Toxicological Research, Food and Drug Administration, 3900 NCTR Road, Jefferson, AR 72079, USA.*

— **Steroid hormones and their receptors play critical roles in the growth, development, and maintenance of the male reproductive tract. Genistein, a naturally occurring isoflavonoid primarily found in soybeans, interacts with estrogen receptors alpha and beta (ER alpha and beta), with preferential affinity for ER beta.**

— This is one mechanism whereby genistein may affect growth and development and potentially alter susceptibility to carcinogenesis. Previous studies have indicated effects of soy and/or genistein in the male rodent reproductive tract

under certain exposure conditions. The current study was undertaken to determine if modulation of the expression of ER alpha and ER beta by dietary genistein may contribute to those effects.

— **Rats in a two-generation study** were fed 0, 5, 100, or 500 ppm genistein prior to mating and through pregnancy and lactation. At weaning, male pups were selected in each of the F(1) and F(2) generations and half of the pups continued on the same diet as their dams (G/G, continuous exposure) while their litter mates were placed on control chow (G/C, gestational and lactational exposure) until sacrifice on PND 140. Male reproductive organ weights, serum levels of testosterone and dihydrotestosterone (DHT), and ER alpha and ER beta protein levels in the ventral and dorsolateral prostate were the endpoints measured. Prostate sections were also evaluated microscopically.

— **Statistically significant elevations in testosterone and DHT were observed in PND 140 animals from the F(1) generation, but they were not accompanied by organ weight changes.** Body weight in the continuously dosed 500 ppm F(1) PND 140 animals was depressed relative to control, but organ weights in animals of either generation showed few treatment-related effects. While estrogen receptor levels were quite variable, levels of ER beta in the dorsolateral prostate were significantly depressed in all dose groups in the G/C exposure and the high dose group of the G/G exposure in F(1) rats, but not in F(2) rats.

— **Given the growing body of knowledge on the significance of ER beta in the prostate, the evidence for apparent down regulation of this receptor by genistein may have implications for reproductive toxicity and carcinogenesis that warrant further investigation.**

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Study only done for one week, not the **“at least three months”** required by the WHO

u u u, u u u, u u u, u u u, (+) u u u - as needed and required by WHO/CODEX Standard for Soy ... See page 6.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12416261 .

2002 “Regulation of male sex hormone levels by soy isoflavones in rats,” — Yi M.A., Son H.M., Lee J.S., and others, *Nutr Cancer* 2002 ;42(2):206-10., Department of Animal Science and Biotechnology, Kyungpook National University, Taegu 702-701, South Korea.

— Several studies have suggested that soybean intake is associated with a lower risk of **prostate cancer**. However, the mechanism of **prostate cancer** prevention by **soybeans** remains unclear.

— **Because prostate cancer** is reported to have an association with an increased level of dihydrotestosterone (DHT) and **soybean isoflavones** are known to inhibit 5 alpha-reductase, which is involved in the conversion of testosterone to DHT, the effects of **soybean extract and isoflavones** on the plasma levels of male sex hormones were investigated using male rats. In Experiment I, Sprague-Dawley rats were fed diets with and without soy flour; in Experiment II, rats were fed diets containing 2% soy methanol extract or 0.2% semipurified isoflavones or a control diet.

— **The study showed a reduction of plasma DHT along with an increase in total plasma androgen in rats fed soy flour or semipurified isoflavones for 1 wk.** These results suggest that **soy isoflavone intake may reduce plasma DHT level.**

u u u, u u u, u u u, u u u, (+) u u u - **GEE WHIZ !!** ... But never -- never ever tell the consumer this truth !!.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12607743 .

2003 Determination of isoflavones in ready-to-feed soy-based infant formula. — Johns P, Dowlati L, Wargo W., *J AOAC Int.* 2003 Jan-Feb;86(1):72-8., Abbott Laboratories, Ross Products Division, 3300 Stelzer Rd, Columbus, OH 43219, USA. paul.johns@rossnutrition.com

— An alkaline hydrolysis/liquid chromatography (LC) method was developed for determination of isoflavones in ready-to-feed soy-based infant formula. The method consists of a 15 min methanol extraction, 10 min alkaline hydrolysis, HCl neutralization, gravity filtration, aqueous dilution, and 50 min LC analysis with UV detection at 262 and 250 nm to quantify 6 isoflavone analytes: daidzin, glycitin, **genistin, daidzein**, glycitein, and **genistein**. The concentration averages for 10 commercial batches (microg aglycone/g formula) were **daidzein**, 6.12 +/- 1.23; glycitein, 1.19 +/- 0.16; **genistein**, 12.8 +/- 2.35; and total, 20.1 +/- 3.61. Validation experiments demonstrated extraction completion and analyte stability to alkaline hydrolysis. Spike recoveries ranged from 97.6 to 104.1%, and a series of accuracy assessments showed that isoflavone concentration determined by the method was within 5% of the true value. The relative standard deviation values for repeatability ranged from 0.4 to 2.2% (n = 10), and from 0.3 to 2.7% (n = 4) for intermediate precision. Isoflavone peak purity was verified by comparing sample and standard peak area ratios (262/250 nm). The limits of detection and quantitation (microg/ formula) ranged from 0.02 to 0.05 and 0.08 to 0.18 microg/g, respectively.

— The difference between our concentrations and those reported by others in 1995-1998 **is attributable to the well-**

established seasonal variation in soybean isoflavone levels. Although the method was applied exclusively to ready-to-feed formula in the present study, it is equally suitable for powder and concentrated liquid infant formulas.

n - Website below was last up-dated on Nov 2004

1 1 1, 1 1 1, 1 1 1, 1 1 1, (+) 1 1 1 - **Poisonous Plant database** - Center For Food Safety, Applied Nutrition
- <http://www.cfsan.fda.gov/~djm/plantox.html> ... <http://www.cfsan.fda.gov/~djm/pltx.cgi?QUERY=soy> ... see Items # 165, 192, 246

1907 ... “Plant names scientific and popular,” --- **Lyons, A.B.**, Nelson, Baker Co, Detroit, [English]

1911 ... “A manual of poisonous plants,” --- **Pammel, I. H.**, Torch Press. Cedar Rapids, Iowa [English]

1916 ... “Cases of poisoning in cattle by feeding on meal from SOYA bean after extraction of the oil,” — **S. Stockman**, *J Comp Pathol Exp Therapeut*, 29, 2, 95-107, US FDA Poisonous Plant Database, See scientific abstract item #246 out of 271 listed, last up-dated Nov 2004, (FDA file #: F06318), Center For Food Safety And Applied Nutrition, CFSAN / Office of Plant and Dairy Foods.

; 1 ; — **This US FDA database** contains references to the scientific literature describing studies of the toxic properties and effects of plants and plant parts.

— Information herein is in the public domain, and is continually increasing.

— For information or concerns about the toxicity of plants, contact the local Poison Control Center in your area. A directory of these is available from “[The American Association of Poison Control Centers](http://www.aapcc.org/)” at ... <http://www.aapcc.org/>.

— For a poisoning emergency, call 1-800 - 222 - 1222. If the victim has collapsed or is not breathing, call 911.

--- Also see page 126

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

The Risks Of Abandoning “The Precautionary Principle”

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

Please note: the 1 does not indicate magnitude of importance scientifically, it only indicates order of importance to me, Gerald Hernesmaa, volunteer, Health Action Network Society and S.O.S. ... healthwise933@shaw.ca

Also see links ... <http://www.soyonlineservice.co.nz/abstracts.htm#Abstract%205> ... Abstracts - **Scientific Investigation**,
and ... <http://www.soyonlineservice.co.nz/abstracts%202.htm> ... Abstracts - **Scientific Investigations - 2** (Cont.)

and ... <http://www.soyonlineservice.co.nz/abstracts%204.htm> ... Abstracts - **Scientific Investigations - 3** (Cont.)

* **New Website format** ... Fall 2005 - **abstract** pages have been consolidated into ... <http://www.soyonlineservice.co.nz/07abstract.htm> ...

and ... Birth Defects ... Infertility ... Cancer ... Immune – DNA Damage ... Brain Damage ... Toxins – Osteoporosis ... etc.

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Osteoporosis and Soy Abstracts

Soy Toxins

. <http://www.soyonlineservice.co.nz/03toxins.htm> .

; 1 ;

Soy contains several **naturally** occurring compounds that are **toxic** to humans and animals. The soy industry frequently refers to these toxins as ... **anti-nutrients** ... which implies that they somehow act to **prevent** the body getting the complete nutrition it needs from a food. Soy toxins (such as phytic acid) can certainly act in this manner, but they also have the ability to target specific organs, cells and enzyme pathways and their effects can be devastating.

The Soy **toxins** that Soy Online Service have concerns about are ... protease inhibitors ... phytic acid ... soy lectins (or haemagglutins) ... nitrosamines ... manganese concentrations ... and the mysterious soyatoxin. Nitrosamines are not naturally occurring in soybeans but form during the processing of products such as isolated soy protein (ISP), (SPI).

... Protease-(enzymes) Inhibitors ...

Perhaps the best known of the soy toxins are the protease inhibitors (also referred to as [trypsin inhibitors](#)) which, as the name suggests, are able to inhibit the action of [proteases](#) (including trypsin) which **are enzymes that are involved in the process of dismantling proteins for use by the body.**

“High levels” of exposure to [protease inhibitors](#) (such as that found in raw soy flour) **cause pancreatic cancer**, whereas **“moderate levels”** **cause rat pancreas to be more susceptible to cancer-causing agents.** Validity of the rat model to humans has been questioned & the US FDA have examined effects of protease inhibitors on Cebus monkey (JP Harwood et al., Adv Exp Med Biol 1986 199: 223-37).

The parameters of the Cebus Monkey study were as follows

| <u>Group</u> | <u>Number of monkeys</u> | <u>Dietary Protein</u> | <u>Trypsin Inhibitor (mg/g of diet)</u> |
|--------------|--------------------------|------------------------|---|
| 1 | 8 | Lactalbumin | 0.12 |
| 2 | 10 | Soy Isolate | 0.54 |
| 3 | 6 | Casein | 0.08 |
| 4 | 2 | Soy Concentrate | 2.41 |

Note: Make sure the [label](#) on your vitamins, minerals, [and](#) medications says ... [contains no Soy ... or ... contains no Soy ingredients](#) .
Pet Food, farm animal foods ... / 85

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

The Risks Of Abandoning “The Precautionary Principle”

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

Osteoporosis and Soy Abstracts

. <http://www.soyonlineservice.co.nz/03toxins.htm> .

Phytates

Continued

After 5 years of chronic ingestion to low levels of trypsin inhibitors, there was no discernible pancreatic damage effect in monkeys from groups 1-3. **However**, one monkey in group 4 exhibited moderate diffuse acinar atrophy, moderate diffuse interstitial fibrosis & moderate chronic pancreatitis in all three sections of tissue examined. Minimal lymphoid hyperplasia was noted in the other group 4 monkey.

Therefore, there is good reason to question claims that low levels of soy protease inhibitors pose no threat to human health.

Soy Online Service has noted that there is considerable variability in the levels of protease inhibitors in commercially available foods and that there is little to protect consumers from exposure to high levels of protease inhibitors. For example, a study entitled 'Trypsin inhibitor levels in soy-based infant formulas & commercial soy protein isolates & concentrates (RW Peace et al., 1992, Food Res Int, 25: 137-141) found trypsin inhibitor levels were as high as 2.72 mg/g in ready to feed soy formulas and 7.30 mg/g in soy protein concentrate.

There is no established acceptable levels of protease inhibitors in foods and no protection from short-term high level (acute) exposures or long term low level (chronic) exposures.

Phytates

The term phytate refers to several compounds that are based on [phytic acid](#) (inositol hexaphosphate). It is the presence of multiple phosphates in phytates that makes them effective chelating agents, i.e. they have the ability to bind to certain metal ions. Obviously if metals are bound up in a phytate-complex, they are less available to the body (i.e. less bio-available) for nutritive purposes.

Phytates are particularly adept at binding metals in their so-called divalent state, metal ions such as ... **calcium (Ca²⁺)** ... **copper (Cu²⁺)** ... **iron (Fe²⁺)** ... **manganese (Mn²⁺)** ... **zinc (Zn²⁺)**.

Soybeans contain very high levels of phytates ... <http://www.soyonlineservice.co.nz/articles/Phytate.htm> .

and there is numerous reports of reduced bio-availability of various metals from foods containing soy; this has particular significance for vegetarians and infants fed soy-formulas.

1986 “New Chromophore for Phytic Acid Determination,” – **Mohamed A.I., Ponnampereuma A.J.P., Hafez Y.S.**, *Cereal Chem* **1986**, 63:6 475-8.

— Among the legumes investigated, **soybean has the highest value of (23.35 mg/g of meal)**, whereas black-eyed pea had the lowest (8.74 mg/g of meal).

1982 “Analysis of Phytic Acid in Foods by HPLC,” – **Camire AL, Clydesdale FM**, *J Food Sci* **1982**, 47: 575-8

1995 “Variability in Phytic Acid Content and Protein Digestibility of Grain Legumes,” – **Chitra U, Vimala V, Singh U, Geervani P.**, *Plant Foods Hum Nutr* **1995 Feb.**, 47:2 163-72.

Vegetarians, particularly young women vegetarians, need to be aware that **soy products** affect their iron and zinc requirements and it has been recommended that they utilize strategies that minimize the intake of dietary phytate.

See ... <http://www.soyonlineservice.co.nz/articles/Veges.htm> .

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

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Osteoporosis and Soy Abstracts

<http://www.soyonlineservice.co.nz/03toxins.htm> .

Phytates

Continued

Minimize the intake of dietary phytate ... <http://www.soyonlineservice.co.nz/articles/Veges.htm> ...

1997 “Dietary strategies to improve the iron & zinc nutriture of young women following a vegetarian diet,” – **Gibson R.S., Donovan U.M., Health A.L.**, *Plant Foods Hum Nutr* **1997 51:1** 1-16

— Dietary strategies to enhance the content and bioavailability of iron and zinc in vegetarian diets were compiled. Strategies included increasing promoters and decreasing antagonists of iron and zinc absorption, adopting food preparation and processing methods which hydrolyze the phytate content of cereals and legumes, and using iron cookware. These strategies were used to devise two vegetarian menus based on food consumption patterns derived from three day weighed food records of 78 Canadian lacto-ovo-vegetarian adolescents. The iron and zinc, as well as calcium, phosphorus, thiamin, riboflavin, niacin, vitamin A, protein and energy content of the devised menus were all higher than the actual intakes and the corresponding Canadian recommended nutrient intakes.

— **Results show ...** the overall nutrient adequacy of the recommended vegetarian menus and indicate that young lacto-vegetarian women can potentially meet their estimated dietary requirements for absorbed iron and zinc through modest modifications to the diet. Laboratory studies designed to measure the total amount of iron and zinc absorbed from these diets by young vegetarian women are needed to verify the efficacy of the devised menus.

The effects of phytate in infant soy-formulas are a great concern

Iron & zinc requirements of developing infants are well documented, particularly those that relate cognitive function, see Cognitive Function (Iron Absorption) ... <http://www.soyonlineservice.co.nz/03toxins.htm> ... There is no question that infants fed soy-formulas are at greater risk of reduced up-take of various essential minerals compared with breast-fed infants or infants fed other formulas.

High levels of phytate ... <http://www.soyonlineservice.co.nz/articles/Phytate.htm> ... **Soybeans are highest.**

1986 “New Chromophore for Phytic Acid Determination,” – Mohamed A.I., Ponnampersuma A.J.P., Hafez Y.S., Cereal Chem 1986 63:6 475-8,

— A direct spectrometric method was developed to analyze phytic acid without acid digestion. The method was based on the precipitation of phytate as ferric phytate followed by conversion to sodium phytate. On heating, phytate reacted with a chromogenic agent and a blue molybdenum complex was formed. The new chromophore was used to determine phytic acid in 8 legume seeds.

— Among legumes investigated, **soybean has the highest value** (23.35 mg/g of meal), whereas black-eyed pea had the lowest (8.74 mg/g of meal)

1982 “Analysis of Phytic Acid in Foods by HPLC.,” – Camire AL, Clydesdale F.M, J Food Sci 1982 47: 575- 8

— A quantitative HPLC method for the analysis of phytic acid in foods was developed based on the precipitation of phytic acid with ferric chloride followed by conversion to sodium phytate before injection onto a C-18 reversed phase column.

Results

| <u>Foodstuff</u> | <u>Phytic Acid (mg/g)</u> | <u>Foodstuff</u> | <u>Phytic Acid (mg/g)</u> |
|-----------------------------|---------------------------|------------------------|---------------------------|
| Hard red wheat bran | 68.8 ∇ 1.85 | Parsnips | 8.18 ∇ 0.18 |
| Soft white wheat bran | 50.27 ∇ 1.45 | Split peas | 16.79 ∇ 1.02 |
| Soy flour (defatted) | 22.45 ∇ 1.15 | Broccoli | Not detected |
| Refined corn bran | 15.77 ∇ 2.51 | Brown rice | 15.55 ∇ 1.92 |

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

The Risks Of Abandoning “The Precautionary Principle”

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

Osteoporosis and Soy Abstracts

<http://www.soyonlineservice.co.nz/03toxins.htm>

Phytates

Continued

1995 “Variability in phytic acid content and protein digestibility of grain legumes,” – Chitra U., Vimala V., Singh U., Geervani P., Plant Foods Hum Nutr 1995 Feb 47:2 163-72.

— Several genotypes, number given within parenthesis, of chickpea, pigeonpea, urd bean, mung bean and **soybean**, differing in seed characteristics were analyzed for phytic acid, in vitro protein digestibility (IVPD), protein, total phosphorus, and seed size. **Phytic acid** contents and IVPD values differed significantly among and within these species. **Phytic acid** content (mg/g) was the highest in soybean (36.4) followed by urd bean (13.7), pigeonpea (12.7), mung bean (12.0) and chickpea (9.6). **On an average, phytic acid constituted 78.2 percent of the total phosphorus content and this percentage figure was the highest in soybean and the lowest in mung bean.** In vitro protein digestibility (IVPD) of pigeonpea and chickpea genotypes varied from 60.4 to 74.4 percent and 65.3 to 79.4 percent, respectively. The IVPD values of genotypes of mung bean, urd bean and soybean ranged from 67.2 to 72.2 percent, 55.7 to 63.3 percent and 62.7 to 71.6 percent, respectively.

— **There was a significant (-)negative correlation** between phytic acid and IVPD of these genotypes. Phytic acid was significantly and positively correlated with protein but the magnitude of correlation was very low in chickpea and pigeonpea. Results indicate that the genotypes of pulses with low phytic acid content could be identified and used in breeding program to improve their nutritive value and utilization.

Cognitive function, see ... Iron absorption ... <http://www.soyonlineservice.co.nz/articles/iron.htm>

Copper bioavailability ... <http://www.soyonlineservice.co.nz/articles/Copper.htm>

Is significantly lower in rhesus monkeys fed low-phytate soy formula from 2 to 4 months.

1999 “Effect of reducing the phytate content and of partially hydrolyzing the protein in soy formula on zinc and copper absorption and status in infant rhesus monkeys and rat pups,” – Lönnerdal B.,

Jayawickrama L., Lien E.L., Am J Clin Nutr 1999 Mar 69:3 490-6.

- **BACKGROUND:** Although soy formulas have been designed to meet the nutrient requirements of human infants, they also contain phytate, which may negatively affect trace element absorption.
- **OBJECTIVE:** We evaluated the effect of removing phytate on zinc and copper absorption and status in infant rhesus monkeys and suckling rat pups and evaluated differences between intact and partially hydrolyzed soy protein.
- **DESIGN:** In monkeys, regular and low-phytate soy formulas were fed exclusively for 4 mo and whole-body absorption and retention of ⁶⁵Zn, ⁶⁷Cu, ⁵⁹Fe, ⁵⁴Mn, and ⁴⁷Ca were determined at different time points with a whole-body counter. Subsequently, zinc and copper absorption from several human infant formulas and the effect of phytate concentration were evaluated in suckling rat pups by using ⁶⁵Zn and ⁶⁴Cu. Finally, infant rhesus monkeys were fed low-phytate formulas with intact or hydrolyzed soy protein for 4 mo and plasma zinc and copper were measured monthly.
- **RESULTS:** In the first monkey study, zinc absorption at 1 mo was higher from low-phytate soy formula (36%) than from regular soy formula (22%), whereas there was no significant difference between groups in the absorption of other minerals. Plasma copper was significantly lower in monkeys fed low-phytate soy formula from 2 to 4 mo. In rat pups, zinc absorption was significantly higher from low-phytate soy formula (78%) than from regular soy formula (51%) and hydrolysis of the protein had no significant effect. Phytate content or protein hydrolysis did not significantly affect copper absorption. In the second monkey study, plasma copper concentrations were highest in monkeys fed low-phytate, hydrolyzed-protein soy formula.
- **CONCLUSION:** Reducing the phytate content and partially hydrolyzing the protein in soy formula had a beneficial effect on zinc and copper absorption and status in infant rhesus monkeys. ... / 88

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

The Risks Of Abandoning “The Precautionary Principle”

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“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

Osteoporosis and Soy Abstracts

<http://www.soyonlineservice.co.nz/03toxins.htm> .

Phytates

Continued

Iron absorption ... <http://www.soyonlineservice.co.nz/articles/iron.htm> ... (Cognitive Function)

In infants is approximately doubled by the removal of phytate from soy formula; a similar effect is observed by doubling the ascorbic acid content of a soy formula.

111,111,111,111 - Also see ... **Frying the Brain With Soy** ... page 63

1989 “Search for nutritional confounding factors in the relationship between iron deficiency & brain function,” – Hallberg L., Am J Clin Nutr 1989 Sep 50:3 Suppl 598-604; discussion 604-6.

- This paper on confounding factors in the relationship between iron deficiency and brain function is mainly limited to nutritional factors, primarily factors that can contribute to the development of iron deficiency and that may have an independent direct action on brain function.
- Three theoretically possible confounders were found in a systematic search for dietary factors:
 - 1) low intake of ascorbic acid,
 - 2) excess of phytates, and
 - 3) increased absorption of lead.
- Ascorbic acid has a marked effect on the bioavailability of dietary iron and is also known to directly influence various metabolic processes in the brain.
- Phytates inhibit the absorption not only of iron but also of zinc. An iron deficiency may thus be accompanied by a zinc deficiency which may affect mental performance.
- A state of iron deficiency may increase the absorption of lead from the diet, which in turn may affect brain function.

1992 “Soy protein, phytate, and iron absorption in humans,” – Hurrell R.F., Juillerat M.A., Reddy M.B., and others, Am J Clin Nutr 1992 Sep 56:3 573-8.

- The effect of **reducing the phytate in soy-protein isolates on nonheme-iron absorption** was examined in 32

human subjects. Iron absorption was measured by using an extrinsic radioiron label in liquid-formula meals containing hydrolyzed corn starch, corn oil, and either egg white or one of a series of soy-protein isolates with different phytate contents. **Iron absorption increased four- to fivefold when phytic acid was reduced from its native amount of 4.9-8.4 to less than 0.01 mg/g of isolate.** Even relatively small quantities of residual phytate were strongly inhibitory and phytic acid had to be reduced to less than 0.3 mg/g of isolate (corresponding to less than 10 mg phytic acid/meal) before a meaningful increase in iron absorption was observed. However, even after removal of virtually all the phytic acid, iron absorption from the soy-protein meal was still only half that of the egg white control.

— **It is concluded that phytic acid is a major inhibitory factor of iron absorption in soy-protein isolates but that other factors contribute to the poor bioavailability of iron from these products.**

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Osteoporosis and Soy Abstracts
<http://www.soyonlineservice.co.nz/03toxins.htm> .

Phytates **Continued**

Iron absorption ... cont.

1994 “Iron bioavailability studied in infants: the influence of phytic acid and ascorbic acid in infant formulas based on soy isolate,” – Davidsson L., Galan P., Kastenmayer P., and others, *Pediatr Res* 1994 Dec 36:6 816-22.

— The influence of **phytic acid and ascorbic acid content of soy formula on iron (Fe) bioavailability** was investigated in infants by analysis of the incorporation of stable isotopes of Fe into red blood cells 14 d after administration using a double stable isotope technique. Paired comparisons were made with each infant acting as his or her own control. The geometric mean fractional Fe incorporation into red blood cells increased from 5.5 to 6.8% ($p < 0.05$) when soy formula with the native content of phytic acid was compared with a 83% dephytinized formula. A more pronounced effect was shown with soy formula containing no phytic acid; the mean fractional Fe incorporation increased from 3.9 (native phytic acid) to 8.7% (zero phytic acid; $p < 0.001$). A significant ($p < 0.01$) effect was also demonstrated when the Fe:ascorbic acid molar ratio in the native phytate-containing formula was increased from 1:2.1 to 1:4.2; mean fractional Fe incorporation increased from 5.9 to 9.6% .

— **These results demonstrate that the Fe bioavailability from soy-based infant formulas can be similarly increased by either removing phytic acid or increasing the ascorbic acid content.**

1998 “A comparison of iron absorption in adults and infants consuming identical infant formulas,” – Hurrell R.F., Davidsson L., and others, *Br J Nutr* 1998 Jan 79:1 31-6

— Fe absorption was estimated in adults and infants from the erythrocyte incorporation of Fe isotopes added to infant formula. Fe absorption was measured in adults using radioisotopes, and in infants with a stable-isotope technique. In adults, the geometric mean Fe absorption from a ready-to-feed soya formula with its native phytic acid content was 2.4%. This increased to 6.0% ($P < 0.05$) after almost complete dephytinization. In infants, mean Fe absorption values were 3.9 and 8.7% respectively from the same products ($P < 0.05$). In adults, mean Fe absorption from a spray-dried

soya formula containing 110 mg ascorbic acid/l was 4.1%, increasing to 5.3% (P < 0.05) when ascorbic acid was doubled to 220 mg/l. In infants, mean Fe absorption values were 5.7 and 9.5% (P < 0.05) from the same products. Mean Fe absorption from a milk-based formula was 6.5% in adults compared with 6.7% in infants. All meals in the adult and infant studies were fed using an identical meal size of 217 g.

— Increasing the meal size threefold in adults did not change fractional Fe absorption. Mean Fe absorption values for each meal were lower in adults than in infants but the relative inhibitory effect of phytic acid and the enhancing effect of ascorbic acid were similar.

— **We conclude** that Fe absorption studies in adults can be used to assess the influence of enhancers and inhibitors of Fe absorption in infant formulas fed to infants. Further studies, however, are required to extend these findings to weaning foods and complete meals.

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Osteoporosis and Soy Abstracts
<http://www.soyonlineservice.co.nz/03toxins.htm> .

Phytates Continued

Zinc bioavailability and absorption ... <http://www.soyonlineservice.co.nz/articles/Zinc.htm> .

- Zinc from soy formulas is also reduced by phytate. In rhesus monkeys, zinc absorption was ...
- **2.0 times greater from monkey milk** compared with soy formula,
- **2.2 times greater from whey-predominant formula** compared with soy formula, and
- **1.7 times greater from casein-predominant formula** compared with soy formula.
- **Zinc absorption from dephytinized soy formula** was approximately the same as that from casein-predominant formula.
- **Soybeans are high in phytic acid**, present in the bran or hulls of all seeds. It's a substance that can block the uptake of the essential minerals ... calcium ... magnesium ... copper ... iron ... and especially **zinc** - in the intestinal tract. **Phytates found in soy products interfere with zinc absorption more completely than with other minerals.**

— **Zinc** is called the **intelligence mineral** because it is needed for optimal development and functioning of the **brain** and nervous system. **Zinc** plays a role in

- ... (1.) protein synthesis and collagen formation
- ... (2.) it is involved in the blood-sugar control mechanism and thus protects against diabetes
- ... (3.) it is needed for a healthy reproductive system
- ... (4.) it is a key component in numerous vital enzymes and plays a key role in the immune system,
(see ... http://www.mercola.com/article/soy/avoid_soy.htm ... **“Newest Research On Why You Should Avoid Soy”**, Apr.9, 2000).

; 1 ;

; 1 ; --- **Vegetarians** who consume tofu & bean curd as a **substitute** for meat & dairy products **-risk-** severe mineral deficiencies
See -- **Malnutrition ... from ... False Nutritional Beliefs ...** pages 60, 72, 77, and **Vitamin B-12 Deficiency** pages 93 to 95.

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l l l, l l l, l l l, l l l - Lower Zinc absorption, also see... **Frying the Brain With Soy ...** page 63

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=3559747&dopt=Abstract .

1987 “Absorption of zinc from soy protein meals in humans,” – [Sandström B., Kivistö B., Cederblad A., J Nutr 1987 Feb 117:2 321-7.](#)

— absorption of **zinc** from soy protein-containing meals was studied in healthy human subjects by means of extrinsic labelling with ⁶⁵Zn and whole body counting. Three types of soy protein, a soy flour, a soy concentrate and a soy isolate, were used in two types of meals: one consisting of rice and meat sauce and the other of white or whole-meal bread. Thirty and 100% of the protein of the meat sauce and 50% of the protein of bread was replaced with the **soy protein products**. Replacement of 30% of the protein in meat sauce had a marginal effect on the percentage absorption of zinc, whereas the absolute amount of zinc absorbed was **lower** due to lower zinc content in soy products than in meat.

— **total replacement of the meat protein (with soy), a significantly lower percentage and absolute absorption of zinc was observed.**

— **A lower absorption of zinc was observed when soy protein was added to white bread.** The absorption of zinc from the whole-meal bread was low and did not change when 50% of the flour protein was replaced by soy protein.

— **We conclude that the effect of soy protein on zinc absorption depends on the degree of replacement, the phytic acid and zinc content of the soy product and the protein content of the meal.**

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no soy ... or ... contains no soy ingredients
Pet Food, farm animal foods ... / 91

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Osteoporosis and Soy Abstracts

<http://www.soyonlineservice.co.nz/03toxins.htm> .

Phytates

Continued

Zinc bioavailability & absorption ... continued

Phytates found in soy products interfere with zinc absorption more completely than with other minerals.

l l l, l l l, l l l, l l l -

1988 “Effect of phytate removal on zinc (Zn) absorption from soy formula,” – [Lönnerdal B., Bell J.G., Hendrickx A.G., and others., Am J Clin Nutr 1988 Nov 48:5 1301-6.](#)

— Low zinc bioavailability from soy formula may be the result of the formula's phytate content. We assessed the effect of phytate removal from soy formula on Zn absorption using infant rhesus monkeys and suckling rat pups as animal models. Zn absorption in monkeys, as determined by whole-body counting, was 65% from human milk, 54% from monkey milk, 60% from whey-predominant formula, 46% from casein-predominant formula, and only 27% from conventional soy formula (0.621 mmol phytate/L). In contrast, Zn absorption from dephytinized soy formula (0.067 mmol phytate/L) was 45%. In suckling rats, Zn absorption from conventional soy formula was only 16% vs 47% from dephytinized soy formula.

— **Phytate concentration in a variety of experimental soy formulas was inversely correlated to Zn absorption.**

— **These results suggest that the low bioavailability of Zn from soy formula is a function of its phytate concentration and can be overcome by the removal of phytate.**

Soy formulas are typically over-supplemented with minerals and vitamins to account for the deficiencies caused by phytate, but it is evident that this does not take care of the problems. Removal of phytate from soy formulas is altogether a better solution but manufacturers have not shown any inclination to do this. Why not ?? Phytate removal will cost \$\$\$ and it seems to us that soy formula manufacturers consider economics to be more important than the well being of infants.

* * *

Manganese absorption ... <http://www.soyonlineservice.co.nz/articles/Mang.htm> .

Is also doubled by the removal of phytate from soy formula, but increasing the ascorbic acid content of a soy formula containing the native amount of phytic acid did not improve manganese absorption.

1995 “Manganese absorption in humans: the effect of phytic acid and ascorbic acid in soy formula,” – Davidsson L., Almgren A., and others, *Am J Clin Nutr* 1995 Nov 62:5 984-7.

— **The absorption of manganese from soy formula was studied in adult volunteers** by extrinsic labeling of test meals with ⁵⁴Mn, followed by whole-body retention measurements for approximately 30 d after intake. Eight subjects participated twice in each of the two studies, acting as his or her own control. Soy formula containing the native content of phytic acid was compared with a similar dephytinized formula: geometric mean manganese absorption increased 2.3-fold from 0.7% (range: 0.2-1.1%) to 1.6% (range: 1.0-7.2%) (P < 0.01) with the dephytinized formula. In addition, the effect of the ascorbic acid content of the phytic acid-containing formula was investigated. Manganese absorption was not influenced by an increase in the ascorbic acid from 625 μmol/L (110 mg/L) to 1250 μmol/L (220 mg/L): the geometric mean manganese absorption was 0.6% (range: 0.3-1.0%) and 0.6% (range: 0.3-1.1%), respectively.

— **In conclusion, fractional manganese absorption was approximately doubled by the dephytinization of soy formula but was not influenced by an increase in the ascorbic acid content of a soy formula containing the native amount of phytic acid.**

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Osteoporosis and Soy Abstracts

. <http://www.soyonlineservice.co.nz/03toxins.htm> .

Phytates

Continued

Manganese

; ;

The soybean plant has the ability to absorb manganese from the soil and concentrate it to an extent that soy-based infant formulas can contain as much as 200 times the level of manganese found in natural breast milk. In babies, excess manganese that cannot be metabolised is stored in body organs. Around eight percent of the excess manganese in the diet is stored in the **brain** in close proximity to the dopamine-bearing neurons responsible, in part, for adolescent neurological development. The implications are that the one in 8 infants raised on soy formula during the first 6 months of life may be at risk of **brain** and behavioral disorders that don't become evident until adolescence.

! ! ! , ! ! ! , ! ! ! , ! ! - Also see ... **“Frying the Brain With Soy”** ... page 63.

The following 3 links discuss the issue of manganese toxicity further.

Is soy-based infant formula **brain damaging ?** ... <http://www.soyonlineservice.co.nz/articles/goodman.htm> . Press Release, by David Goodman, Ph.D.

— **For eighteen years**, newborn babies have been fed by infant formula high in the toxic metal manganese. Common sense teaches that a **brain-damaging** substance cannot be fed by bottle to our most vulnerable citizens. Yet research ongoing for a decade at two University of California campuses affirms that manganese in infant formula may damage the infant **brain** and trigger aberrant behavior in adolescents.

— **This week's INSIGHT MAGAZINE ONLINE** (www.insightmag.com) in a special report by David Goodman affirms that the soy infant formula currently on shelves permits an estimated safe manganese dose of 0.6 mgs. about 120 times the amount found in mother's milk. Excess manganese that the baby cannot metabolize is stored in body organs, about eight percent in the

brain, in proximity to dopamine-bearing neurons responsible, in part, for adolescent neurological development.

— **Under the direction of** Carl Keen, Ph.D. and Bo Lonnerdahl, Ph.D. at UC Davis and Frank Crinella, Ph.D. and Louis Gottschalk, MD, Ph.D. at UC Irvine, UC professors have tracked migration of manganese from the digestive track to the **brain**, in particular to nerve cells in the basal ganglia bearing the neurotransmitter dopamine. Evidence for damage to these critical basal ganglia cells active during adolescence in rats was reported at a Fall 2000 conference at UCI by Dr. Francis Crinella and Trin Tranh, has been replicated this month at the UC Davis laboratories.

— **The implications are that the one of eight infants during the first six months of life given soy formula may be at risk for brain and behavioral disorders not evident until adolescence, a charge denied by the soy industry.** **Highly suggestive**, the results of **brain damage** from “**Soy infant formula**” cannot yet be accepted as applicable to human infants until further lab studies are carried out in the laboratory on primates, and epidemiological studies on human children. Nonetheless, the findings remain provocative and should be widely discussed, **especially since thousands of poor mothers receive soy formula from the government-funded WIC program.**

How Safe is Soy Infant Formula ... http://www.mercola.com/2001/jun/13/soy_formula.htm ... **Mercola**, June 13, **2001**, **and** the “**Parkinson’s Disease - Manganese - Soy Infant Formula**” connection, June **2001** Press Release at ... <http://www.insightmag.com/main.cfm/include/detail/storyid/161117.html> .

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Dangers of Dietary Isoflavones
at levels above those found in traditional diets
The Risks Of Abandoning “The Precautionary Principle”
by Soy Online Service ... <http://www.soyonlineservice.co.nz/>
“**Soy - Abundance Of Health Hazards**” ... <http://www.mayanmajix.com/soy01.html>

Osteoporosis and Soy Abstracts

. <http://www.soyonlineservice.co.nz/03toxins.htm> .

Continued

Vitamin B-12 Deficiency

Vitamin B 12 deficiency has been recognized as a serious result of soy consumption for many years. For instance ... this issue is discussed and examined in the following 2 abstracts ...

1974 “**Biological and Physiological Factors in Soybeans’**,” – **JJ Rackis**, *J. Am. Oil Chemists Soc*, **1974 Jan**; pp 161.

1994 “**Implications of Anti-Nutritional Components in Soybean Foods in Soybean**,” – **Irvin E Liener**, examines this issue in **1994** in *Critical Reviews in Food Science and Nutrition*.

There is a simple explanation of some of the physical effects that can result from Vitamin B-12 deficiency ... see ... http://www.mercola.com/2002/jul/17/vegan_risk.htm **Mercola**

Vegans Deficient in Nutrients

http://www.mercola.com/2002/jul/17/vegan_risk.htm

Veganism is an extreme form of vegetarianism. Because vegans shun all animal products, such as meat, fish, and eggs, they may get too little of some nutrients found in meat and dairy products, such as calcium and vitamin B-12.

Such deficiencies are of particular concern when it comes to growing teens. The dietary habits of the vegans varied considerably and did not comply with the average requirements for some essential nutrients.

Specifically, the researchers report that vegans had dietary intakes lower than the average requirements of ... Riboflavin (vitamin B-2) ... Vitamin B-12 ... Vitamin D ... Calcium ... Selenium.

Even after the researchers included dietary supplements in their analysis, the vegans' intake of calcium and selenium remained low. [American Journal of Clinical Nutrition](#) , July 2002;76:100-106,
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12081822&dopt=Abstract ... Dietary intake and nutritional status of young vegans and omnivores in Sweden

2002 “Dietary intake and nutritional status of young vegans and omnivores in Sweden,” – [Larsson CL, Johansson Gk](#), *Am J Clin Nutr.*, 2002 Jul; 76(1):100-106, Department of Food and Nutrition, Umea University, Umea, Sweden.

— **CONCLUSION:** The dietary habits of the vegans varied considerably and did not comply with the average requirements for some essential nutrients.

[American Journal of Clinical Nutrition](#) July 2002;76:100-106

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“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

Osteoporosis and Soy Abstracts

<http://www.soyonlineservice.co.nz/03toxins.htm> .

Continued

Vitamin B-12 Deficiency

Continued

Vitamin B-12 deficiency

Vegans Deficient in Nutrients

http://www.mercola.com/2002/jul/17/vegan_risk.htm

[American Journal of Clinical Nutrition](#) July 2002;76:100-106

DR. MERCOLA'S COMMENT:

This study echoes [one published last year](#) , <http://www.mercola.com/2001/dec/29/vegetarian.htm> Dangers of a Vegetarian Diet in Teens.

Of the many nutrients vegans lack, vitamin B12 is the most significant because it can have permanent neurological complications and even result in [blindness](#) ,

1 1 1 , 1 1 1 , 1 1 1 , 1 1 - Also see ... **“Frying the Brain With Soy”** ... page 63

http://www.mercola.com/2000/mar/26/vegetarians_blindness.htm Strict Vegetarians Can Develop [Blindness](#) and [Brain Damage](#) ...

Contrary to what many vegetarians believe, vitamin B12 is not absorbed very well, if at all, from [plant sources](#) ,
http://www.mercola.com/2002/jan/26/vegetarianism_myths_02.htm **You Can't Get All the Vitamin B12 You Need From Plant Sources, By Stephen Byrnes, PhD, RNCP, Part 2 of 15.**

Previous studies have consistently shown low B12 levels in [vegetarians and vegans](#) because they do not eat meat and other animal by products. http://www.mercola.com/2000/nov/5/vegetarian_homocysteine.htm Vegetarians and Vegans Have Elevated Homocysteine Levels

For further information please review the comprehensive [vitamin B12 page](#) http://www.mercola.com/2002/jan/30/vitamin_b12.htm
Vitamin B12: Are You Getting It ?.

These studies do not document some of the major dangers with choosing to be a vegetarian. For those of you who have a teenage vegetarian or who are health care practitioners treating these individuals, this is very important information. You can view the list below for that information.

One clearly needs to be sensitive to the fact that a teenager showing sudden changes in their eating patterns may have an eating disorder and would benefit from an effective intervention. My current recommendation for an intervention for an eating disorder would be [EFT](#).
http://www.mercola.com/article/eft_videos.htm **Learn the Secrets of a Powerful Healing Tool to Transform Your Health**

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[Osteoporosis and Soy Abstracts](#)

<http://www.soyonlineservice.co.nz/03toxins.htm> .

Continued

[Vitamin B-12 Deficiency](#)

Continued

Vitamin B-12 deficiency

[Vegans Deficient in Nutrients](#)

http://www.mercola.com/2002/jul/17/vegan_risk.htm

DR. MERCOLA'S COMMENT

Continued

You can find EFT practitioners on the Gary Craig's [EFT Referral page](#) , to EFT practitioners <http://www.emofree.com/Practitioners/referralMain.asp> or you can use my [free EFT manual](#) ,
<http://www.mercola.com/forms/eftcourse.htm> EFT Manual: The Basic Steps to Your Emotional Freedom, to start the process.

If you are a health care practitioner and are interested in attending one of the top energy training events of **2002**, you will want to be certain to come to Chicago in September for Dr. Larry Nims's [BSFF course](#) , <http://www.mercola.com/2002/may/29/bsff.htm> Quickly Eliminate Your Self-Limiting Beliefs and Emotional Distresses with BE SET FREE FAST

[Related Articles:](#)

Vegetarian Diet In Pregnancy Linked To Birth Defect ... http://www.mercola.com/2000/feb/6/vegetarian_pregnancy.htm ,
The Myths of Vegetarianism ... http://www.mercola.com/2000/apr/2/vegetarian_myths.htm ,
Is Being a Vegetarian Part of Living Healthy and Longer ? ... <http://www.mercola.com/2001/jul/21/vegetarian.htm> ,
Vegetarian Diet May Increase Alzheimer's Risk ... <http://www.mercola.com/2001/may/19/alzheimers.htm> ,
Vegetarian Diet Can Cause Repeat Miscarriages ... http://www.mercola.com/2001/may/12/vitamin_b12.htm ,
Dangers of a Vegetarian Diet in Teens ... <http://www.mercola.com/2001/dec/29/vegetarian.htm> .

*** **

Guilty of manslaughter ??

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If the Moorhead trial judge had known this, would these people now be serving a jail term for the death of their child ? . Read about the Seventh Day Adventist Moorheads The New Zealand Herald, June 15, 2003, at ...
at ... <http://www.nzherald.co.nz/storydisplay.cfm?thesection=news&thesubsection=&storyID=2046794> , and,
at ... <http://www.nzherald.co.nz/storydisplay.cfm?thesection=news&thesubsection=&storyID=2045066> .

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Osteoporosis and Soy Abstracts

. <http://www.soyonlineservice.co.nz/03toxins.htm> .

Continued

Other Toxins

. <http://www.soyonlineservice.co.nz/03toxins.htm> .

Continued

Letter to FDA CONSUMER magazine, Aug 2000 ... http://www.fda.gov/fdac/departs/2000/400_ltrs.html

Comment below on the FDA Consumer article by William Jarvis, Ph.D. FDA Consumer article on soy spoke of the possible risks of plant estrogens, but made no mention of the 1980 research, below, on carcinogenic effects of protease inhibitors found in soy.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Cancer of the pancreas.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7192012 .

1980 "The effects of long-term feeding of soya flour on the rat pancreas," — McGuinness E.E, Morgan R.G., Levison D.A. and others, *Scandinavian Journal of Gastroenterology*, 1980; 15:497-502

; 1 ; — **Pancreatic cancer**

— Rats were fed raw and heated soya flour for up to 2 years.

— The rats fed raw soya flour all developed pancreatic hypertrophy and hyperplastic and adenomatous nodules. Four of 26 rats fed raw soya flour continuously and 1 of 5 rats fed raw soya flour for 2 days each week developed pancreatic cancer.

— Preheating the soya flour seemed to protect against the pancreatic hyperplastic and neoplastic changes.

— But long periods of heat and pressure also required (130 degrees Celsius) to deactivate the carcinogenic trypsin inhibitors in soya flour denatures the soy proteins to the point that they become virtually useless.

; 1 ;

— Then one either chooses less heating, resulting in more surviving trypsin inhibitors, or more heating, resulting in useless protein. William Jarvis, Ph.D., Department of Health Promotion and Education, Loma Linda University, Loma Linda, California, USA.

l l l, l l l, l l l, l l l, (+) l l l - Also see page 2.

- <http://www.soyonlineservice.co.nz/Refs/Soyatox.htm> ...

1994 “Purification and physicochemical characterization of soyatoxin, a novel toxic protein isolated from soybeans (*Glycine max*),” – *Vasconcelos I.M., Trentim A., Carlini C.R., and others*, *Arch Biochem Biophys* 1994 Aug 1 312:2 357-66, *Depart. Of Biochemistry & Molecular Biology, Unversidade Federal do Ceara, Fortaleza, Brazil*.

— Physicochemical characterization and biological properties of a new toxic protein isolated from soybeans (*Glycine max*) is reported. The purification procedure consisted basically of ammonium sulfate fractionation, ion exchange, and affinity chromatographies, the latter being used for the removal of the seed's lectin and of its trypsin inhibitor. The highly purified protein, designated soya-toxin, is a single chain acidic protein (pI 4.4-4.6) of 21 kDa, dependent on reduced thiol groups to maintain its solubility and biological activities. The toxin is a metallo-protein containing iron, calcium, zinc, and magnesium. Soya-toxin is highly toxic to mice (LD50 7-8 mg/kg mouse body wt upon intraperitoneal injection).

— It produces dyspnoea, tonic-clonic convulsions, and flaccid paralysis prior to Death of intraperitoneally injected mice. Furthermore, soya-toxin is immunologically related to another toxic protein (canatoxin), isolated from *Canavalia ensiformis* seeds, which is distinct from soya-toxin in containing 18 x 10 kDa noncovalently bound subunits.

— Some biological properties including acute intraperitoneal toxicity, canatoxin-like ... immunoreactivity ... hemagglutination ... trypsin inhibitory activity ... induction of platelet release reaction ... and aggregation displayed by soya-toxin were studied & used to distinguish soya-toxin from soybean lectin and trypsin inhibitors.

* * *

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

The Risks Of Abandoning “The Precautionary Principle”

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

To protect yourself and the ones you ♥ Love, be sure to read the “ingredient labels” on all of the foods you buy & just switch brands as & when necessary.

Also, “especially” if you have cancer, be very, very careful about eating in “Restaurants”, “Hotels”, at “parties” and in “Hospitals”, as they do not list the ingredients in their foods.

; 1 ;

Be careful ... be careful !!. ... be careful I said ... be careful !!. ... “Vegetable oil” has not been real vegetable oil, that is, actually made from a variety of vegetables, **NOT** including soy, since the early 1970’s. Since then - till now, courtesy of **Monsanto**, it has been and still is either “Soy” or “Canola” or both, and it rarely includes cottonseed, peanut, or palm oil. (Notice, cottonseed, peanut and palm are not vegetables, but they are referred to as vegetables on food ingredient lists)

See Pages 8 and 24 for – “Safe Alternatives”

class=Section2>

P.S. Check your vitamin supplements. Most “Vitamin E” comes in a “Soy based carrier oil”. See pages 3, 12, 18, 98, 121, 124. Soy is also put in ... vitamins & mineral pills as fillers and binders ... prescription medications ... dairy products ... soft drinks ... processed foods ... ground beef ... women’s make-up an personal care products ... fruit juice (as an emulsifier to blend and suspend ingredients for visual esthetics) ... pet foods ... etc., etc., etc.

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“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

Crimes Against Humanity ... Crimes Against Nature.

Soy Is Being Used As A Weapon Of Mass Destruction, WMD

This is only some of the growing body of scientific research available on the many “health hazards” of soy. Think about all of those ignored “side-effects” listed on page one. Now, you can begin to start counting the number of people, worldwide, likely to be seriously hurt and/or dying from eating soy simply because of what these people were told, were “persuaded” to believe ... “using” soy is going to help them, even help save their life” ... when in reality, soy is slowly and “violently killing them”. The US FDA’s “Poisonous Plant Database” ... <http://vm.cfsan.fda.gov/~djw/pltx.cgi?QUERY=SOY> ... *lists Soy, (Flax, Canola) as “poisonous plants,”* and recommends that if you are injured to contact your local “Poison Control Center” in your area, (at ... <http://www.aapcc.org/>), or 911.

With reference to “The Precautionary Principle”, “Humanitarianism”, basic human “ethics”, and on the bases of the “Preponderance of Evidence” of the information and the scientific history presented in this research paper, I charge the “accused”, (being the Soy Industry, the Food Industry and many Government agencies around the world), in accordance with the internationally accepted legal terms as defined here by BLACK’S LAW DICTIONARY, 6th Edition, 1990, of inflicting untold, incalculable, “unimaginable” and needless pain, suffering, agony and torture onto innocent people around the world. The scientific history presented here reveals and illustrates the means by which the accused has perpetrated this unimaginable pain and needless suffering as a direct result of their actions, which include, but are not limited to ... “Willful Misconduct” ... “Misrepresentation” ... “Conspiracy” ... “Criminal Conspiracy” ... “Conspiracy of Silence” ... “Quasi Crimes” ... “Criminal Homicide” ... “Criminal Gross Negligence”-(also see “Color of Law and Color of Office”) ... “Fraudulent Concealment” ... “Fraudulent Intent”. All of these actions, past and present, is having the direct result of “Defrauding” people of their “Wealth”, which I define as, but not limited to, our:

- 1.) Physical Health and Financial wealth,
- 2.) Ability to pursue happiness and Peace of mind,
- 3.) Life and Liberty,
- 4.) The continued enjoyment of family, friends and of all life forms on earth.

Social Justice ... Socrates ... (469 - 399 BC) ... <http://www.philosophypages.com/ph/socr.htm> ,

Socrates said about ... “Courage” ... “Examine your thoughts, statements and actions by pursuing their implications, on the

assumption that if they are true, they would not lead to false consequences,” and about ...
“Humanitarian Action” ... “Choose wisdom so that society is incapable of doing wrong.”

The American College Dictionary, 1964

“**Humanitarian**” ... **adj.** 1.) Having regard to the interests of all mankind; broadly philanthropic.
2.) Pertaining to ethical or theological humanitarianism.

“**Philanthropy**” ... **noun** 1.) Love of mankind, especially as manifested in deeds of practical beneficence.
2.) A philanthropic action, work, institution or the like.

“**Ethics**” ... **n. pl.** 1.) The principles of morality, including both the science of the good and the science of right.

* * * ; \$; * * *

In a very interesting article on Cancer in the Vancouver Sun News paper, in May 2004, here in Van. BC, it said that ... with 1 in 3 women and 1 in 2 men currently dying from cancer each year, it is now estimated that dying from cancer will be the leading cause of death by the year 2020 . Adding more soy to our food supply will only increase the yearly cancer deaths, along with all of its unimaginable pain, suffering, and heartache. Since soy also causes cancer & cancer cells to grow, you can see no one is safe from the very many known, ignored, denied, harmful and sometimes deadly side-effects of eating soy. It is very easy to conclude that if soy is recommend to anyone, many for people will also be faced with cancer and a reoccurrence of cancer from eating soy. Recommend soy, a poison, to anyone and you will very likely be giving them an automatic death sentence, and participating in mass murder. Why do we say this ?? Dr. Samuel Epstein, MD, founder of the “Cancer Prevention Coalition” and Professor of Environmental and Occupational Medicine at the School of Public Health, University of Illinois Medical Center, says in the 2003 movie “The Corporation” ... <http://www.thecorporation.com/>, and ... <http://www.thecorporation.tv/about/> (Synopsis), that ... dying from chemical poisoning is really no different than if a gun was put to your head and someone else pulled the trigger. Chemical poisoning is just a little slower, that’s all ... Murder is still Murder. ... / 99

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at levels above those found in traditional diets

The Risks Of Abandoning “The Precautionary Principle”

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

“**Soy - Abundance Of Health Hazards**” ... <http://www.mayanmajix.com/soy01.html>

“... Over the past few decades, the USA and Canadian farmers have grown more and more Rapeseed, Canola, {and Soy}, for use by food manufacturers world wide. They ship it for use in thousands of processed foods, (and also in our vitamins & mineral supplements, and medications as fillers and binders), with the blessings of our governments and their watchdog agencies, particularly the powerful and corrupt FDA. I do say “corrupt” for several reasons, the least of which are ...

- (1) the FDA “fast-tracks” for approval costly, proven toxic and sometimes deadly drugs, as well as, toxic experimental drugs for cancer and aids patients, ...
- (2) the FDA allows “junk foods” to be sold with multiple ingredients that are “scientifically proven” to cause a variety of serious health hazards to children, included cancer, (some ingredients banned in Europe), ...
- (3) the FDA knowingly condons and allows distribution of “regular processed foods” with toxic and poisonous canola, soy and other toxic and poisonous ingredients, ...
- (4) all the while, the FDA is persecuting those selling virtually harmless vitamins & herbs with scientifically proven very valuable, and in many cases extremely valuable, health benefits...”

Essence of above quote on page 74–75 in ... “Healing Celebrations”, © 2000, by Dr. Leonard G. Horowitz

“... A sad plight in North America are the elderly. They are constantly told by their doctors, “well, you can expect to be ill at your age” thereby sapping {depleting} them continually of life force. Add to this the fact that we have been brainwashed into thinking that anyone of 70 years is old, {nothing could be further from the truth}, and then the fact that if they do get ill, their whole life savings goes immediately to the doctor, hospital and pharmaceutical companies; so that, even if they recover from this whole (-)negative attitude they have been put under, then all they have to look forward to is a meagre old age pension, where they can’t even afford the proper nutritious foods. **As we are all only too aware, junk food, {and yes, also foods with toxic ingredients}, are cheap, but nutritious food is almost out of reach for all of us.** I wonder if anyone will ever do something about this tragedy. After living in the east, I feel that our elderly are dying 30

years before their time, just because they have been told that it is expected ...”.

From ... **“Killing Cancer, The Jason Winters Story”**, © 1993, by Benjamin R. Smythe, Sir Jason Winters

After the 2nd World War, Canada and the U.S.A. were two countries that signed both the **“Declaration of Helsinki”** and the **“Nuremberg Code”**. These agreements state that countries and industry will not and can not use people as **“Guinea Pigs”** ... **A person can not be experimented on without the person(s) permission**; they **“must tell”** the person(s) **“in advance”** about ... **“a reasonable chance of harm”** ... **“A person has the right to be informed ... to be given the opportunity to CHOOSE”** ... so that the person(s) is allowed the right to exercise their free will to participate or not. (**i.e.:** Dr. Nancy Olivieri wins her legal battle with Apotex Pharmaceutical Company, **1998-2002**, Children’s Hospital, Toronto, Ont.).

In the case of soy, this research paper clearly documents scientifically that **these international agreements have been knowingly and willfully violated** for over 80 years by the **“Participants,”** which includes but is not limited to ... the mainstream and the natural health food industries-(manufactures, sellers) ... the soy industry and their industry scientists, **Monsanto, DuPont, Dow, pharmaceutical industry** ... merchants-(vitamin companies, retail stores) ... publicists-(almost all authors of books on nutrition, food writers) ... US FDA ... the advertising media and news media ... USDA ... the main stream medical system ... Naturopaths ... the Alternative Health Care System ... bureaucrats, (in various positions of authority and regulatory authority), in almost all countries. Because of the **“Participants”** actions, the victims can charge them with **“Criminal Homicide,”** Criminal Gross Negligence, Deceit and Deception through Fraudulent Intent and Concealment of the many serious health hazards imposed onto the world population from putting soy in our food supply) . See pages 101 – 104

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“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

“...Imagine having drugs added to our food which have been scientifically proven to be carcinogenic for at least 40 years and to also cause DNA and chromosome damage for more than 25 years in both humans & in animals. Also, imagine these drugs being prescribed and administered through our food supply without the individual’s prior knowledge or understanding of these dangers, or prior consent to be exposed to these dangers. Now, imagine the entire population in many countries around the world, including ours, consuming these foods ... with no medical way of tracking dosage, individual reactions, or harmful side-effects, and, without any concern for some people’s increased vulnerability from being exposed to these drugs, such as cancer patients. Does all this sound a little crazy ??. Well, I’ll tell yeah, this is exactly what is happening to us when Soy is added to our food supply. Soy contains the **“naturally toxic” ingredients **genistein** and **daidzein** which have been scientifically documented, proven, to be carcinogenic, **cause** DNA and chromosome damage, and to **cause** cancer cells to grow. Soy can also **cause** non-cancerous tumors to turn cancerous ...”. Soy does all this and more, as these are only some of the many **health hazards** associated with eating soy. **To protect your health and your families health, be sure to read the ingredient labels on all of the foods you buy. Also, be very, very careful about eating in “Restaurants” and in “Hospitals”, as they do not list the ingredients in their foods. Vegetable oil is no longer vegetable oil ... it’s either “Soy”, or “Canola”, or both.****

Soy acts like fertilizer and fertilizes, feeds, cancer cells to help them grow.

US FDA’s **“Poisonous Plant Database”** ... <http://vm.cfsan.fda.gov/~djw/pltx.cgi?QUERY=SOY> ... *lists Soy, as a “poisonous plant,”* and it recommends if you are injured to contact your local **“Poison Control Center”** in your area, (at ... <http://www.aapcc.org/>), or 911.

“... All Truth passes through 3 phases: first it is ridiculed; next it is violently opposed; and finally it is accepted as self evident ...”, from the German philosopher Arthur Schopenhauer, 1788 - 1860.

“... Money, not truth, drives science – even at the expense of the health and lives of the nation's citizens ...”, by Dr. Phyllis Mullenix, Ph.D., formerly of Harvard University, Dept. of Neuropathology and Psychiatry, See ... http://www.lef.org/fda-museum/8_water/intarticles/fluoride-01-98.html ... **Did Government Approve Citizens as Toxic Waste Sites ??, Are We Being Poisoned ?? ... and it is no mistake !!** and <http://www.whale.to/b/fl2.html>.

Einstein said, “...the world is a dangerous place to live in, not because of the people who are evil, but because of the people who don’t do anything about it...”.

P.S. “The Truth Marches On” ... [Emile Zola](#) ... and “The Dreyfus Affair,” in France, 1894 - 1898 ... at ... <http://www.georgetown.edu/faculty/guieu/j/libproj.htm> ... http://www.dreyfuscase.com/html/dreyfus_affair.html , and others

Blacks Law Dictionary, 6th Edition, 1990

<http://www.trufax.org/reports/legal.html>

Legal Definitions

While reading the following definitions, think of the topics ... Aspartame ... Food irradiation ... GMO food ... Vaccinations ... Soy ... Canola ... Fluoride ... EMF hazards-(microwaves) ... Pesticides ... etc., etc., etc.

Belief

Conflict of Interest

Conspiracy in Restraint of Trade

Suppressio Veri, Expressio Falsi

Truth

Fact

Fraud

Fraudulent Concealment

Fraudulent Intend

Deceit

Misrepresentation

Proof

Positive Proof

Informed Consent

Convincing Proof

Those who control & manipulate others, Def.

Criminal Conspiracy

Color of Law

Color of Office

Criminal Grass Negligence

Criminal Behavior

“Last Train From Gun Hill,” 1959, Kirk Douglas, Paramount Pictures

Quasi Crimes

Criminal Homicide

Monopoly

Monopoly Power

Monopolization

Negligence

Preponderance of evidence

Willful Misconduct

Malicious Abuse of Legal Process

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

The Risks Of Abandoning “The Precautionary Principle”

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

Leading Edge Research: Blacks Legal Definitions

See Also, Corporate Research Page

Blacks Law Dictionary, 6th Edition, 1990

Legal Definitions

<http://www.trufax.org/reports/legal.html>

Belief: A *subjective condition* that is a *conviction of the truth of a proposition, induced into existence within the mind.* (**Note:** that belief does not involve truth, but only the conviction of it).

Conflict of Interest: Term used in connection with public officials, fiduciaries and their relationship to matters of private interest or gain to them; a clash between public interest and the private pecuniary interest of the individual or individuals concerned; a conflict of interest arise when a person's personal or financial interest conflicts or appears to conflict with his official responsibility. 18 U.S.C.A. §203 et seq. **Examples:** An FDA official takes a job with a company producing a product over whom he has had regulatory influence; a company official takes a job at the FDA where he or she is in a position to rule over products created by his former employer or extensions of products or processes thereof.

Conspiracy in Restraint of Trade: All forms of illegal agreements which have as their object interference with free flow of commerce and trade.

Suppressio Veri, Expressio Falsi: Suppression of the truth is equivalent to expression or suggestion of what is false.

Truth: That which is conformable to the actual state of things. (**Note:** not subjective)

Fact: Reality of events or things the actual occurrence or existence of which is to be determined by evidence. An actual happening in time and space or a mental or physical event.

Fraud: An intentional perversion of the truth for the purpose of inducing another in reliance upon it to part with some valuable thing or to surrender a legal right; a false representation of a matter of fact, whether by words or conduct, by false or misleading allegations, or by concealment of that which should have been disclosed, which deceives and is intended to deceive another so that he shall act upon it to his legal inquiry; anything calculated to deceive, whether by a single act or combination, or by suppression of truth, or suggestion of what is false, whether it be by direct falsehood or innuendo, by speech or silence, word of mouth, or look or gesture; fraud comprises all acts, omissions, and concealments involving a breach of legal or equitable duty and resulting in damage to another.

Fraudulent Concealment: The hiding or suppression of a material fact or circumstance which the party is legally or morally bound to disclose, in order to prevent inquiry, escape investigation, or to mislead or hinder the acquisition of information disclosing a right of action.

Fraudulent Intent: Such intent exists where one, either with a view of benefitting oneself or misleading another into a course of action, makes a representation which one knows to be false or which one does not believe to be true.

Deceit: A fraudulent and deceptive misrepresentation, artifice, or device, used by one or more persons to deceive and trick another, who is ignorant of the true facts.

<http://www.trufax.org/reports/legal.html> .

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Cont.

Misrepresentation: Any manifestation by words or other conduct not in accordance with the facts; an untrue statement of fact; an incorrect or false representation which, if accepted, leads the mind to an apprehension of a condition other and different from that which exists.

Proof: The result or effect of evidence, the means by which a fact is proven.

Positive Proof: That which establishes the fact in question, as opposed to negative proof, which establishes the fact by showing that its opposite is not or cannot be true.

Informed Consent: A person's agreement to allow something to happen, based on full disclosure of the facts needed to make the decision intelligently; i.e., knowledge of risks involved, alternatives, etc.; the general principle of law embodying the duty to disclose to another whatever risks might be incurred from a proposed course of treatment, so that a person, exercising ordinary care for his own welfare, and faced with a choice of undergoing the proposed treatment, or alternative treatment, or none at all, may intelligently exercise his judgment by reasonably balancing the probable or possible risks against the probable or possible benefits.

Convincing Proof: Such as is sufficient to establish the proposition beyond reasonable doubt in an unprejudiced mind. (**Note:** a mind is not unprejudiced *where a belief already exists*).

(Keep the following in mind relative to those entities who herein control and manipulate others):

Criminal Conspiracy: A combination or confederation between two or more persons, formed for the purpose of committing, by their joint efforts, some unlawful or criminal act, or some act which is lawful in itself, but becomes unlawful when done by the concerted action of the conspirators, or for the purpose of using criminal or unlawful means to the commission of an act not in itself unlawful. A person is guilty of conspiracy if that person agrees to aid other persons in the planning or commission of such crime, or of an attempt or solicitation of such a crime. **A conspiracy may be a continuing one;** actors may drop out, and others drop in; the details of operation may change from time to time; the members need not know each other or the part played by others; a member need not know all the details of the plan or the operation; he must, however, know the purpose of the conspiracy and agree to become a party to a plan to effectuate that purpose. A **chain-conspiracy** is characterized by different activities carried on with the same subject of conspiracy in chain-like manner that each conspirator in chain-like manner performs a separate function which serves in the accomplishment of the overall conspiracy. A **civil conspiracy** is a concert or combination to defraud or cause other injury to person or property, which results in damage to the person or property. **Conspiracy in restraint of trade** describes all forms of illegal agreements such as boycotts, price-fixing, etc., which have as their object interference with the free flow of commerce and trade. One cannot agree or conspire with another who does not agree or conspire with him.

Color of Law: Misuse of power, possessed by virtue of law, and made possible only because the wrongdoer is clothed with authority of State. Misuse of power by an official because the person is an official. Unlawful acts under color of law would not have occurred but for the fact that the person committing them was an official then, and there exercising power outside the bounds of lawful authority.

Color of Office: Pretense of official right to do an act made by one has no such right conferred by any authority.

<http://www.trufax.org/reports/legal.html> .

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Legal Definitions

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Cont.

Criminal Gross Negligence: Negligence that is accompanied by acts of commission, or omission of a wanton or willful nature, showing a reckless or indifferent disregard of the rights of others, under circumstances reasonably calculated to produce injury, or which make it probable that injury will be occasioned, and the offender knows or is charged with knowledge of the probable results of his acts.

Criminal Behavior: Conduct which causes any social harm which is defined and made punishable by law, presuming the law exists which covers the action.

Quasi Crimes: All offenses not crimes or misdemeanors, but that are in the nature of crimes; a class of offenses against the public which have not been declared crimes, but wrongs against the general or local public which should be punished by penalties.

Criminal Homicide: Criminal homicide constitutes murder when it is committed purposely or knowingly, or committed recklessly under circumstances manifesting extreme indifference to the value of human life.

Malicious Abuse of Legal Process: Perversion of court process to accomplish some end which the process was not designed to accomplish, and does not arise from the regular use of process, even with ulterior motives. Intent is to secure ends other than those intended by law through willfull application of court process.

Monopoly: A privilege or peculiar advantage vested in one or more persons or companies, consisting in the exclusive right (or power) to carry on a particular business or trade, manufacture a particular article, or control the sale of the whole supply of a particular commodity. A form of market structure in which one or only a few firms dominate the total sales of a product or service; the two main elements of the Sherman Antitrust Act are: possession of monopoly power and willful acquisition or maintenance of that power, as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.

Monopoly Power: That which must exist to establish a violation of the Sherman Anti-Trust Act. The power to fix prices, to exclude competitors, or to control the market in the geographical area in question.

Monopolization: It is monopolization for persons to combine or conspire to acquire or maintain power to exclude competitors from any part of trade or commerce, provided they also have such power that they are able, as group, to exclude actual or potential competition, and provided they have intent and purpose to exercise that power.

Negligence: Omission which a reasonable person, guided by ordinary considerations which ordinarily regulate human affairs, would do, or the doing of something which a reasonable and prudent person would not do; conduct which falls below the standard established by law for the protection of others from unreasonable risk of harm.

Preponderance of evidence: Evidence which is of greater weight or more convincing than the evidence which is offered in opposition to it; it may not be determined by the number of witnesses, but by the greater weight of all evidence, the opportunity for knowledge, information possessed.

Willful Misconduct: Conduct committed with an intentional or reckless disregard for the safety of others, or with an intentional disregard of a duty necessary to the safety of another's property.

<http://www.trufax.org/reports/legal.html>

End of Definitions

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“The Corporation”

<http://www.thecorporation.tv/splash>

A documentary film delves into the “nature” of an Institution

Feature documentary by Mark Achbar, Jennifer Abbott and Joel Bakan

Film release Van., BC., Jan 16 - 23, 2004 ... Book release March 2004

Synopsis of the film at ... <http://www.thecorporation.tv/synopsis.php> , <http://www.thecorporation.tv/about/> .

Based on the book by Joel Bakan

“The Corporation - The Pathological Pursuit of Profit & Power”

<http://gallery.bcentral.com/Gallery/ProductListing.aspx?GID=5059307&Dept=358159&searchString=&page=1> .

Joel Bakan, Vancouver University of BC **law professor** urges restoration of corporation's **original** purpose, **to serve the public interest**, calls for **re-establishment** of democratic control over the institution. Concrete, pragmatic, realistic reforms are proposed

Personality Diagnostic Checklist

WHO, World Health Organization ICD - 10

Manual of Mental Disorders DSM - IV

In law, the corporation is a “person” ... **But**, what kind of person is it ??.

Subject: The Corporation, (and its distinguishable characteristics)

- Y** Callous unconcern for the feelings of others. **Y** Deceitfulness: repeated lying and conning others for profit
- Y** Incapacity to maintain enduring relationships. **Y** Incapacity to experience guilt.
- Y** Reckless disregard for the safety of others.
- Y** Failure to conform to social norms with respect to lawful behaviours.

The Diagnosis: **Psychopath** Personality Disorder

(**Also**, see pages 17 **and** 109 – 112 and 119)



The 1958 Delaney Amendment, pdf

<http://www.pcdf.org/meadows/delaney.htm>

Essay Sept. 26, 1996.

“... Over centuries we have written innumerable laws to protect ourselves from each other's foolishness, negligence, incompetence, or evil. Few of those laws forbid anything absolutely. Murder we can get away with, in self-defense or insanity. We can build on flood plains, if we really want to. The law is strict about robbing banks, but there are plenty of legal ways to rob the public treasury. Most environmental laws allow us to poison people just a bit, as long as we claim to create an economic benefit in the process.

“... But there were until recently two laws that said flatly No, this you cannot do. One was the Endangered Species Act, which didn't let you push a creature into extinction. The other was the "Delaney amendment," which forbade you from adding to foods anything that might cause cancer.

“... **Hated** by industry but **loved** by the public, these laws withstood steady attack by lobbyists, until recently.

The Delaney clause, named after Congressman James Delaney of New York, said, “the Secretary [of the Food and Drug Administration] shall not approve for use in food any chemical additive found to induce cancer in man, or, after tests, found to induce cancer in animals.” **Not any. Zero, none, nil, zip.**

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“... If you tell a lie **big enough and keep repeating it, people will eventually come to believe it ...”**

“... The lie can be maintained only for such time as the State, (or Corporation, Medical System, or Religion), can shield the people from the political, economic and/or military consequences of the lie. It thus becomes vitally important for the State to use all of its powers to repress dissent, for the truth is the mortal enemy of the lie, and thus by extension, the truth is the greatest enemy of the State ...”.

by Joseph Goebbels, German Minister of Propaganda, 1933 -1945

*** * * *

... **More On Soy's Fraudulent History** ...

Also see pages 4, 5, 6, 7, 18 and 11, as well as (12, 100, 107, 121)

; † ;

The original petition submitted by Protein Technologies International, PTI, requested that the health claim be made for the soy

isoflavones, the plant estrogens found abundantly in soybeans. Provided with only weak and conflicting proofs that isoflavones lower cholesterol and besieged by strong evidence of toxicity and hormone disruption, the FDA should have thrown out the PTA petition. It had a duty to do so.

Instead, 1998, the FDA took the unprecedented step of rewriting PTI's petition & substituting a claim for soy protein. This step violated the industry's own regulations. Then the FDA speeded the decision-making process by reducing the time in which members of the public could protest to only 30 days. In doing so, they disregarded the testimony of ... top scientists at the FDA's own National Center of Toxicological Research ... British government researchers (1998) ... and other qualified experts ... all of which were providing strong evidence of danger from allergens, protease, inhibitors, and other soy components as well as the plant hormones.

It's all the more shocking because the FDA never had good evidence of soy's cholesterol lowering effect to begin with !. It relied almost entirely on just one study — a 1995 meta analysis of 29 studies by James W. Anderson that was sponsored by Protein Technologies International. Then on Oct. 25, 1999, US FDA allowed a health claim for soy.

P.S. For next important quote, see middle of pages 18, and 119, "... The FDA and its employees have legislative immunity and can lie with no fear of being held accountable, which is what they did in approving a "health claim" for soy ...".

Also, the USA's FDA has a unique procedure ... It was designed by industry, which lobbied for its substitution in place of normal GRAS requirements. It is called "self-determination," meaning that a manufacturer provides its own evaluation of the "safety" of its product. The FDA then advertises in the Federal Register, which is not really a widely read document. If no citizen objects, the FDA rubber stamp its approval & a multi-million-dollar win is showered on the applicant. This then becomes the benchmark for every other promotion of similar products. The US Center for Food Safety and Applied Nutrition (CF-SAN) does not investigate for itself, and there rarely is an objection because the ultimate consumer does not have a clue about the procedure.

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Want to know why you don't hear about the many health hazards of Soy ??

These next 4 stories, (following 4 pages below), provides good examples of just some of the documented proof of - and the types of - methods used in the attempted and mostly successful suppression and cover-up of the truth; specifically as it applies to and about the harmful side-effects to human and animal health of GM foods.

The same methods of cover-up and suppression of the truth can also be very easily proven with respect to the cover-up and suppression of the information about the scientific research on the many harmful side-effects of eating Soy. These 4 examples below illustrate and show why - 99% - of the research and its information about the many health hazards of eating soy does not reach the news media or get past the news media in order to inform the public.

? Freedom Of The Press ?

<http://www.nexusmagazine.com>
<http://www.ranknfile-ue.org/untold.html>

; 1 ;

"One night, probably in 1880, John Swinton, then the preeminent New York journalist, was the guest of honour at a banquet given him by the leaders of his craft. Someone who knew neither the press nor Swinton offered a toast to the independent press. Swinton outraged his colleagues by replying:

"There is no such thing, at this date of the world's history, in America, as an independent press. You know it and I know it.

There is not one of you who dares to write your honest opinions, and if you did, you know beforehand that it would never appear in print. I am paid weekly for keeping my honest opinion out of the paper I am connected with. Others of you are paid similar salaries for similar things, and any of you who would be so foolish as to write honest opinions would be out on the streets looking for another job. If I

allowed my honest opinions to appear in one issue of my paper, before twenty-four hours my occupation would be gone.

The business of the journalists is to destroy the truth, to lie outright, to pervert, to vilify, to fawn at the feet of mammon, and to sell his country and his race for his daily bread.

You know it and I know it, and what folly is this toasting an independent press ?.

We are the tools and vassals of rich men behind the scenes. We are the jumping jacks, they pull the strings and we dance. Our talents, our possibilities and our lives are all the property of other men. We are intellectual prostitutes."

(Source: Labor's Untold Story, by Richard O. Boyer and Herbert M. Morais, published by United Electrical, Radio and Machine Workers of America, NY, 1955/1979.).

* * *

The weed of crime bears bitter fruit. Does the soy industry and all of its supporters really think they'll all get away with it ?? Do they really think I wouldn't know ??.

Einstein said, "...the world is a dangerous place to live in, not because of the people who are evil, but because of the people who don't do anything about it...".

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Want to know why you don't hear about the many health hazards of Soy ??

This 2001 news research story below from Project Censored, reporting "The 25 most censored media stories each year," provides a clear and undeniable example of the documented proof of the attempted and mostly successful suppression & cover-up of the truth about the harmful side-effects to human and animal health of GM foods. The same type of cover-up can easily be proven with respect to the information about the harmful side-effects of eating Soy. This is why 99% of the research & its information on the many health hazards of eating soy does not reach or get past the news media in order to inform the public.

"Independent Study Points to Dangers of Genetically Altered Foods" (Dismissed by Media and Biotech Industry)

**Hiding The Health Hazards of GMO, (2001)
<http://www.projectcensored.org/publications/2001/7.html>
Project Censored, "The 25 most censored media stories each year."**

; ! ;

"... **In 1998**, Arpad Pusztai, a researcher at Rowett Research Institute in Aberdeen, Scotland, preformed the first independent non-industry sponsored study analyzing genetically engineered food and its effects on mammals. The study had been undertaken to determine whether or not the spliced genes themselves could be damaging to the mammal ingesting them. However, preliminary data from the study suggests something even more startling.

"... **The actual process of genetic alteration itself may cause damage to the mammalian digestive and immune systems.**

"... **Pusztai's study found** that rats fed transgenic potatoes (artificially bio-engineered to include a gene from another species) **showed evidence of** organ damage, thickening of the small intestine, & poor brain development.

"... **In August 1998**, Pusztai appeared on the British television program "**The World in Action**" to report on the findings of his study. In an attempt to quell the resulting public furor, Rowett Institute director Mr. Philip James (who had approved Pusztai's TV appearance) said the research didn't exist. He fired Pusztai, broke up his research team, seized the data, and halted 6 other similar projects ...".

"... It came out later that **Monsanto**, a leading U.S. biotech firm, had give the Rowett Institute a **\$224,000 grant prior to** Pusztai's TV interview and subsequent firing ...".

"... The research that Mr. Philip James claimed did not exist "**showed up**" during an internal audit ...", which then resulted in the further investigation and publication of this news story.

* * *

"**Meta - Analysis**"... http://www.mercola.com/article/soy/avoid_soy.htm ... A **meta-analysis** is a review and summary of the results of many clinical studies on the same subject. The use of meta-analyses to draw general conclusions has come under sharp criticism by members of the scientific community. "... Researchers substituting meta-analysis for more rigorous trials risk making **faulty assumptions and indulging in creative accounting** ...", says Sir John Scott, President of the Royal Society of New Zealand. "... Like is not being lumped with like. Little lumps and big lumps of data are being gathered together by various groups ...". 34.

There is the added **temptation** for researchers, particularly researchers funded by a company like **Protein Technologies International**, to **leave out** studies that would **prevent** the desired conclusions. Dr Anderson discarded eight studies for various reasons, leaving a remainder of twenty-nine.

For example, it was a 1994 **meta-analysis** by Mark Messina, published in Nutrition and Cancer, that fueled **False** speculation on soy's **anti-carcinogenic properties**. 43. (And yet, this paper proves that Soy has been known, in the scientific community, to be carcinogenic for over 40 years, and to cause DNA and Chromosome damage for more than 25 years)

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Project Censored

<http://www.projectcensored.org/default.html>

#2 - Chemical Companies Profit off of Breast Cancer

Reported in 1999 ... "Story #2 of The Top 25 Censored Media Stories of 1998"

; 1 ;

"... In one of the more cynical examples of corporate profit-making ingenuity, leaders in cancer treatment and information **are the same** chemical companies that also produce carcinogenic products.

Breast Cancer Awareness Month, initiated in 1985 by the chemical conglomerate Imperial Chemical Industries, currently called **Zeneca Pharmaceuticals**, reveals an uncomfortably close connection between the chemical industry and the cancer research establishment. **As the controlling sponsor of Breast Cancer Awareness Month (BCAM)**, Zeneca is able to approve--or veto--any promotional or informational materials, posters, advertisements, etc. that BCAM uses. The focus is strictly limited to information regarding early detection and treatment, **with an avoidance of the topic of prevention**. Critics have begun to question why.

With revenues of \$14 billion, Zeneca is among the world's largest manufacturers of pesticides, plastics, and pharmaceuticals. Zeneca was instrumental in convincing the FDA to approve tamoxifen as a "prevention" measure to reduce the incidence of breast cancer in healthy women at risk. **However, World Health Organization's, WHO International Agency for Research on Cancer considers - tamoxifen - a "probable human carcinogen "**.

Sources: RACHEL'S ENVIRONMENT AND HEALTH WEEKLY, "The Truth About Breast Cancer," Dec. 4, 1997, by Peter Montague; THE GREEN GUIDE, "Profiting Off Breast Cancer" Oct. 1998, by Allison Sloan and Tracy Baxter.

The Primary Objective of Project Censored ... is to explore and publicize the extent of censorship in our society by locating stories about significant issues of which the public should be aware, but is not, for one reason or another. Thereby, the project hopes to stimulate responsible journalists to provide more mass media coverage of those issues and to encourage the general public to demand mass media coverage of those issues or to seek information from other sources.

The Essential Issue raised by the project ... is the failure of the mass media to provide the people with all the information they need to make informed decisions concerning their own lives and in the voting booth.

Criteria For News Story Nominations

- 1.) A censored news story is information that the general United States population has a right and need to know, but has had limited access to the story.
- 2.) The news story is timely, on-going, and has implications for a significant number of residents in the United States.
- 3.) The story has clearly defined concepts and is backed up with solid verifiable documentation.
- * * 4.) The news story has been publicly published, either electronically or in print, in a circulated newspaper, journal, magazine, newsletter, or similar publication from either a foreign or domestic source.
- 5.) The news story has direct connections to and implications for people in the United States, which can include activities that U.S. citizens are doing abroad.

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----- Original Message -----

From: Gerald Hernesmaa

To: Lorna Hancock , [Health Action Network Society ... www.hans.org](http://www.hans.org)

Cc: Cathrine Gabriel

Sent: Tuesday, June 25, 2002 10:51 PM

Subject: [corp-focus] Rotten to the Core ... Corporate Dishonesty ... officially promoted !! ... taught in University classes

Hi ... Cathrine

From ... Gerald and Deonaa Hernesmaa

healthwise933@shaw.ca

Short and sweet. Easy and fast reading. Just sit back, relax and enjoy this one.

Monsanto and the Soy industry is at the top of the list on this one for sure, along with the mainstream medical system, ... As you are enjoying this, also think of scientifically known hazards ... GMO Foods ... food irradiation ... MSG ... Vaccinations ... Fluoride ... Canola ... Soy ... Mercury in teeth fillings ... etc., etc. ...

Here are just a couple of colourful highlights from below. This explains what we, HANS, and we the people, are up against in a nut shell.

.....

Rotten to the Core ... “Dishonesty 'officially' promoted !!,”

Quotes below - from this website article - below,

“... Frank Easterbrook and Daniel Fischel are University of Chicago 'law professors' who believe that, when it comes to making profits, **nothing -- not even the law --** should stand in the way ...

“... both professors at the University of Chicago, wrote that managers not only may, but should, violate the rules when it is profitable to do so ...

“... We're talking about **fraud, corruption, pollution, price-fixing, occupational disease, bribery ...**, **cancer ...** and even death ... **and the list goes on ...** and on ... and on ... and on ...

“... The Chicago School says these are "externalities" and related fines and penalties should simply be viewed as the "costs of doing business ..."

.....

“Know your enemy.”

“The Truth Marches On” ... Emile Zola ... and the Dreyfus Affair, France 1898 ... and author of many good books ... <http://www.georgetown.edu/faculty/guieu/jlibproj.htm> .

Have a nice day,
Gerald

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Website address below is ... <http://lists.essential.org/pipermail/corp-focus/2002/000105.html> .

.....

[corp-focus] Rotten to the Core

Robert Weissman rob@essential.org

Thu, 21 Feb 2002 10:22:37 -0800

Previous message: [corp-focus] Resisting the Assassins' Power

Next message: [corp-focus] Wired for Business or Democracy?

Messages sorted by: [date] [thread] [subject] [author]

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Rotten to the Core

Corporate "Dishonesty 'Officially' Promoted !."

by Russell Mokhiber and Robert Weissman

Frank Easterbrook and Daniel Fischel are University of Chicago law professors who believe that, when it comes to making profits, **nothing – not even the law --** should stand in the way.
(For almost two decades, Easterbrook has also been a federal appeals court judge.)

Twenty years ago, writing about antitrust crimes in the Michigan Law Review, Easterbrook and Fischel, then **both professors at the University of Chicago**, wrote that managers not only may, but should,

violate the rules when it is profitable to do so. And it is clear that they believed that this rule should apply beyond just antitrust.

In a nutshell, this is the Chicago School view of corporate law that has taken hold over the past 20 years.

Under this view, if a Fed Ex truck needs to double park to make a delivery -- double park. No problem. **Pay the \$20 fine. Just as long as you are still making money, violate the law.**

Of course, when it comes to corporate crime and violence, we aren't talking about just double parking.

We're talking about fraud, corruption, pollution, price-fixing, occupational disease, and bribery.

The Chicago School says these are "**externalities**" and related fines and penalties should simply be viewed as the "**costs of doing business.**"

Externalities ... <http://economics.about.com/cs/economicsglossary/g/externality.htm> .

We call these activities crimes, and we believe society imposes penalties for committing these crimes to deter and socially sanction those who would violate society's proscription.

Lawmakers of both parties are shamelessly portraying Enron and Arthur Andersen as rotten apples, even though those same lawmakers were just until recently on the take from both corporations, and doing the dirty work of defeating laws that would have governed both.

Continued ...

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**Dangers of Dietary Isoflavones
at levels above those found in traditional diets**

The Risks Of Abandoning "The Precautionary Principle"

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

"Soy - Abundance Of Health Hazards" ... <http://www.mayanmajix.com/soy01.html>

Rotten to the Core

Corporate "Dishonesty 'Officially' Promoted !."

Cont ...

But of course we **are not** talking about a couple of rotten apples here.

As Easterbrook and Fischel so clearly show, the corporate world is now governed by an ideology that is rotten to the core. After all, as the great Chicago professors teach us, it is the duty of managers to violate the law when it is profitable to do so.

Now, the stink has risen. And slowly, but surely, and hardly noticed, a counter-Chicago movement in corporate law is bubbling up from law schools around the country.

At Boston College Law School, Professor Kent Greenfield points out that it used to be that corporations were created by the state to achieve specified public goals. The corporation was created to build a canal, for example. And then it was to go out of business.

If the corporation decided to sell hot dogs instead, it was acting beyond its powers, and a shareholder or the attorney general could file an injunction under the "ultra vires" (beyond its powers) doctrine – forcing the company to drop the dogs.

Then, the states started to compete with each other for more corporate business -- the infamous race to the bottom. As a part of that race, states stopped imposing strict limitations on corporate powers.

The corporate lawyers set up Delaware as the Las Vegas of corporate chartering. And as a result, virtually no corporate activity was beyond a company's defined activity. Ultra vires was dead, was the common view.

Greenfield steps in and says -- wait a minute -- illegal activity is still "beyond the power" of corporations. State incorporation statutes and articles of incorporation almost invariably charter corporations only

Externalities ... is an effect of a purchase or use decision by one set of parties on others **who did not** have a choice **and** whose interests **were not** taken into account.

for "lawful" purposes.

He wants attorneys general and trial lawyers to look carefully at the possibility of bringing ultra vires lawsuits against officers and directors of corporate criminals.

At Washington and Lee University, law professor David Millon says that underlying the assorted debates over the nature of the corporation are differences of political opinion.

o, those who see the corporation as a creation of the state do so because we want to see strong public control.

Those who see in a corporation nexus of private contracts (the Chicago School) see it that way because they want to defeat public regulation. (The charter of incorporation is like a birth certificate, and nothing more, they argue.)

This new breed of corporate law reformers, represented by the likes of Greenfield, Millon and Lawrence Mitchell of George Washington University Law School, does not go as far as we would in sending the corporation back to the public woodshed.

But it is good to note that, after years of bowing in subservience to the giant corporatists of the Midwest, a handful of law professors are beginning to agitate against the regressive theories of their Chicago School colleagues.

Continued ...

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Cont.

Their task is simultaneously difficult and easy. Difficult, because the Chicago School has been so successful in winning the academic -- and eventually legal -- debate about what corporations are and how they should be governed. Easy, because the Chicago School claims are so extreme that the reformers can win the debate -- or at least significantly shift the pendulum in the field -- by convincingly arguing simply that corporations should follow the law.

Russell Mokhiber is editor of the Washington, D.C.-based Corporate Crime Reporter. Robert Weissman is editor of the Washington, D.C.-based Multinational Monitor, <http://www.essential.org/monitor>. They are co-authors of Corporate Predators: The Hunt for MegaProfits and the Attack on Democracy (Monroe, Maine: Common Courage Press, 1999; <http://www.corporatepredators.org>).

(c) Russell Mokhiber and Robert Weissman

This article is posted at: <http://lists.essential.org/pipermail/corp-focus/2002/000105.html>

.....
You have to have an extremely scheming, brutal, vicious, cruel and un-loving mind to even think in those terms.
.....



More Reasons
"Why" You Don't Hear About The Many Dangers Of (aspartame) Soy.

General theme from ... http://www.mercola.com/article/aspartame/hidden_dangers.htm.

- 1.) **The lack of knowledge and awareness of the problem by the general population.** From pressure from the Soy Industry and Monsanto, the many scientifically documented harmful side-effects **are not reported** in the news media, newspapers, TV, food industry, by popular authors of health and diet books, etc., etc. What does make the news is a lot of misinformation.
- 2.) Because of this **lack of knowledge and awareness** of the many health hazards and the symptoms these hazards produce, people **don't associate** their symptoms and illness with the short or long term negative side-effects they experience while eating Soy.

How Soy came into our food supply is a lesson in ...

1. **How the soy industry and the United Soybean Board can manipulate** government agencies around the world, such as the FDA, to turn a blind eye to the many serious health dangers of eating soy. The industry has aggressively lobbied in Washington and has invested millions in medical research. They spent more than a million dollars on establishing the FDA's spurious cholesterol lowering heart claim alone. Their campaign has been nothing less than brilliant.
2. **How the industry targets key influences** as... food manufacturers... chefs... dietitians... editors... writers... Naturopaths... the FDA ... Health Food Industry... MD's... Schools of Nutrition... TV, radio, magazine advertisements... USA & Canadian Cancer Societies
3. **How to bribe organizations** such as... University research scientists & institutions... Health Food Industry... soy industry scientists
4. **How to flood the scientific community with flawed and fraudulent industry-sponsored studies** funded by the soy industry.

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The Precautionary Principle

"Error on the side of caution"

Website links below

"Education is the most powerful weapon you can use to change the world," by Nelson Mandela.

Google Search <http://www.google.com/search?hl=en&q=precautionary+principle&spell=1>
<http://www.partnersforchildren.org/Pages/gp.html> ... Partnership for Children's Health and the Environment
<http://www.mindfully.org/Precaution/precaution.htm> ... Mindfully , Great list of Links
http://www.biotech-info.net/rachels_586.html ... AG BioTech - Rachel's Weekly #586
<http://www.monitor.net/rachel/r586.html> ... Rachel's Environment, Health Weekly # 586, Feb. 19, 1998,
by Peter Montague, National Writers Union.

The Principle of Precautionary Action has 4 Parts ...

- 1.) People have a duty to take anticipatory action to prevent harm. (As one participant at the Wingspread meeting summarized the essence of the precautionary principle, "If you have a reasonable suspicion that something bad might be going to happen, you have an **obligation** to try to stop it."). **Einstein said**, "...the world is a dangerous place to live in, **not** because of the people who are evil, but because of the people who don't do anything about it...".
- 2.) The burden of proof of harmlessness of a new technology, process, activity, or chemical lies with the proponents, not with the general public.
- 3.) Before using a new technology, process, or chemical, or starting a new activity, people have an obligation to examine "a full range of alternatives" **including ... the alternative of doing nothing**, (in order to protect the well-being of everyone.).
- 4.) Decisions applying the precautionary principle must be "open, informed, and democratic" **and** "must include affected parties."

“The Precautionary Principle” is not really new. The essence of the principle is captured in common-sense aphorisms, such as **“An ounce of prevention is worth a pound of cure”** ... **“Better safe than sorry”** ... **“Look before you leap”** ... **“Error on the side of caution”** ... etc., etc.

The US FDA’s **“Poisonous Plant Database”** ... <http://vm.cfsan.fda.gov/~djw/pltx.cgi?QUERY=SOY> ... *lists Soy, and (Flax and Linseed), and (Canola and Rapeseed) as “poisonous plants,”* and the FDA recommends that if you are injured by them, to contact your local **“Poison Control Center”** in your area, (at ... <http://www.aapcc.org/>), or call 911.

“The Precautionary Principle and Corporate Disclosure” ... <http://gnp.enviroweb.org/precaution.htm> ,
<http://www.cpeo.org/lists/brownfields/2000/msg00079.html> ,
<http://www.millermicro.com/PrecPrin.html> , http://www.mphaweb.org/init_princ.html .

Feb. 20, 1998, by Sanford Lewis

An attorney who provides strategic counseling on corporate accountability to environmental, community, labor organizations

Scientific Uncertainty ... vs ... “Smokescreen Uncertainty” ... the corporate language

- A New Corporate Initiative(Legal) Against Disclosure
- Cloud the issues, confuse in order to create indecision and delay.

The Precautionary Principle ... http://en.wikipedia.org/wiki/Precautionary_principle ... **Wikipedia, the free encyclopedia ...** if the consequences of an action are unknown, but are judged to have some potential for major or irreversible negative consequences, then it is better to avoid that action ... **Origins and Theory** – Hippocrates – First do no harm – beyond reasonable doubt – Criminal Law - uncertainty ... **Application** – Civil and Criminal Law – beyond a reasonable doubt – cost and benefit analysis ... **International agreements and declarations** ... **Environment and Health** – Public Health - Toxicity - Drugs - bio-safety – Risk - informed consent ... **Criticisms** – GMO – Vaccinatsins - Hippocratic Oath .

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The Precautionary Principle ... Continued,

Precautionary Principle ... <http://www.ratical.org/co-globalize/MaeWanHo/PrecautionP.html>

Institute of Science in Society

“Use and Abuse Of the Precautionary Principle”

ISIS submission to US Advisory Committee on International Economic Policy
(ACIEP) Biotech. Working Group, 13 July, 2000

Precautionary Principle ... <http://www.mindfully.org/Precaution/precaution.htm> ... **Mindfully**

Great list of Links

Precautionary Principle ... <http://www.bio-integrity.org/> ... **Alliance For Bio-Integrity**, Steven M. Druker - Executive Director
<http://www.bio-integrity.org/health-risks/health-risks-ge-foods.htm> **WHY CONCERNS ABOUT HEALTH RISKS OF G.E. FOOD ARE SCIENTIFICALLY JUSTIFIED**

<http://www.bio-integrity.org/Advisory.html> **How USA Law Mandates Precautionary Principle and How the FDA is Violating it.**

ADVISORY ON U.S. LAW AND GENETICALLY ENGINEERED FOOD ... by Steven M. Druker, J.D., Executive Director.

- 1.) *How the Food, Drug and Cosmetic Act **Mandates** the Precautionary Principle*
- 2.) *How the Food and Drug Administration Is Violating the Law and Misrepresenting the Facts*

Coalition against BAYER <http://www.cbgnetwork.org/home/Campaigns/Charter/charter.html> **Charter of Rights, Charter of Rights Against Industrial Hazards**, Use with The Precautionary Principle.

Massachusetts Public Health Association ... http://www.mphaweb.org/init_princ.html ,

Definition ... The Precautionary Principle is a policy principle that states "When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically."

The issues ... As you likely know, rates of childhood illness for a range of chronic disorders have been rising. Many of these disorders, including some childhood cancers, asthma, learning disabilities and behavioral disorders, have been linked to environmental factors. Research increasingly indicates that children are not adequately protected from pollutants in air, water, food and household products.

The Precautionary Principle ... An estimated 75,000 chemicals are used in commerce today and released into the environment, eventually reaching our bodies through the food we eat, the water we drink, and the air we breathe. Despite known exposures to these substances, the US Environmental Protection Agency has estimated that less than 10% of the industrial chemicals produced in the largest quantities (over one million pounds per year) have a full complement of publicly available basic toxicological screening data. Only 12 chemicals have had full testing for impact on the developing nervous system (as of 1998).

Research in recent years has demonstrated that children & developing fetuses are especially vulnerable to health damage from toxic chemicals. Children are not little adults. Their organs & physiological processes are still developing, and toxic chemicals can disrupt this development, causing long-term irreversible damage. Even exposure of parents to some substances can result in health problems for their children. Unfortunately, our laws and policies still focus on limiting chemical risks for healthy adults to so-called "acceptable" levels, rather than preventing harm to children.

The ABC's of Confusion As A Weapon, (The Arsenal of Confusion) by Brain Leibovitz, PhD, 1994 ... http://www.laleva.cc/supplements/abc_confusion.html ... When confronted with conflicting information, many people simply give up believing anything on the topic of discussion: "If the experts can't even agree, why should I bother to listen to any of them?"

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... Some Things To Think About Below and On The Next 4 - Pages ...

The metabolism, physiology and biochemistry of a ... fetus ... infant ... or child ... is fundamentally different from that of an adult. A host of vital organ systems continue to grow and mature from conception throughout childhood. At critical periods of developmental change, these systems are susceptible to the toxic effects of pesticides and toxic chemicals, both individually and "in mixtures." Many organ systems, for example the nervous system and brain, can be permanently, and subtly damaged by exposures to toxic substances in-utero or throughout early childhood that, at the same level, cause no measurable harm to adults (**Jacobson 1996, CDC 1997, NRC 2000**).

The endocrine (hormone) system , and immune system, is perhaps even more sensitive to toxic exposure than the nervous system, over the past decade, enormous effort has been put into the study of how pesticides and toxic chemicals interfere with normal endocrine signaling and function.

A significant body of research in animals now shows that ... "ultra-low doses"... toxic chemicals on critical days of development can cause changes in hormone function and effects on organ development and function that often only appear later in life. A growing number of these studies show that low doses at a susceptible moment of development can cause more of an effect than high doses (**vom Saal 1997, Alworth 2002, Hayes 2003**). This is particularly relevant to childhood and fetal exposures via food & water where the timing of the exposure is at least as important as dose. See the website, **Environmental Working Group, EWG** at ... <http://www.ewg.org/issues/home/index.php> .

In the pregnant women, toxic ingredient in soy cross the placenta, blood-brain barrier, "teratogenic," causing birth defects. The placenta does not represent a barrier to these poisons. See abstracts in this research paper for documentation. Pregnant women and their unborn child, infants, and young children are at great risk to their health, both from short and long exposure to soy ingredients in our food supply.

Remember, when the Titanic sank early Monday morning of April 15th, 1912. **It was women and children and the elderly who were put into the life boats first.** Well, it is kind of in the same way with soy being put into our food supply without our consent. It is also women, children, the pregnant women and her fetus and the elderly who are harmed first, injured first, and injured the worst from soy being put in our food supply. Kind of psychopathic don't you think. See reference to the 2003 movie "**The Corporation**,"

The **1998** meta-analysis report below points out that "**... there is no direct evidence for the beneficial effects of phytoestrogens in humans ...**". **Since 1998**, there is still no direct medical evidence proving the need for soy in our food supply, nothing has changed and

this is still exactly the case today as it has been for the last several thousand years.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10022277&dopt=Abstract .

Toxicol Lett. 1998 Dec 28;102-103:349-54.

1998 “Dietary phytoestrogens and their role in hormonally dependent disease,” — Strauss L., Santti R., Saarinen N., Streng T., Joshi S., Makela S., Institute of Biomedicine and Medicity Research Laboratory, University of Turku, Finland.

— “... there is no direct evidence for the beneficial effects of phytoestrogens in humans. ... All information is based on consumption of phytoestrogen-rich diets, and the causal relationship and the mechanisms of phytoestrogen action in humans still remain to be demonstrated ... **In addition, the possible adverse effects of phytoestrogens have not been evaluated ... It is plausible that phytoestrogens, as any exogenous hormonally active agent, might also cause adverse effects in the endocrine system, i.e. act as endocrine disrupters ...”.**

Again, in 2003, The United Kingdom Chief Medical Officer, the highest medical officer in the UK has issued a “Health Protection Advisory” about the long term reproductive harm to children from soy protein. He has drawn on the findings of at least four expert committees, going back to July 1996. In his Health Protection Advisory,” he has warned all doctors that ...

... soy - based infant formulas should be used only in exceptional circumstances, because of “... a risk to long term reproductive health ...”.

Further information on the UK Expert Committee’s findings is in a March **2003** Report called, “Committee on Toxicity of Chemicals in Food, Consumer Products and The Environment, Report on Phtoestrogens and Health,” and is at ... <http://www.food.gov.uk/multimedia/pdfs/2003-03.pdf> , and it says by pointing out that ...

“... After reviewing the data and conclusions in this report relating to soy-based infant formula, SACN considered that there is cause for concern about the use of soy-based infant formula. **Additionally, there is neither substantive medical need for, nor health benefit arising from, the use soy-based infant formulae ...”**

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----- Original Message -----

From: [Valerie & Richard James](#) , Soy Online Service
To: [Gerald Hernesmaa](#)
Sent: Monday, June 21, 2004 4:14 AM
Subject: Fw: [God bless you for having this page.](#)

----- Original Message -----

From: Leannji@aol.com
To: webmaster@soyonlineservice.co.nz
Sent: Monday, June 21, 2004 3:08 AM
Subject: [God bless you for having this page.](#)

Hi

I'm a 48 year old female who has been a vegetarian for 33 years. Of course, this means I have consumed large amount s of soy products during my life. When I was 39 years old, I went from being a slim, athletic woman to gaining 10 -20lbs per year average. I dieted and exercised and controlled this weight with difficulty, but I am still 40 pounds overweight. I have also been extremely depressed. **My doctor insists**(and has over the last 7 years) that my physical condition is all due to depression, but I disagree. **I think my depression is due to my physical condition.**

Finally., last week, after 8 YEARS, I got a different **diagnosis--hypothyroidism.** Then a week later, she tested further and found that it was **thyroiditis(hashi.)**

After reading your site, I am giving up soy forever. I had been taking quite a bit of isoflavones after menopause(which coincided exactly with the onset of these symptoms)., which didn't help at all, **but I just kept taking them anyway, not knowing what else to do.**

I really don't want to ingest animals, either for their thyroid hormones, or for protein from their flesh. **This is for religious reasons.**

Do you have any suggestions for me?

Thank you so very much. You don't know how much it means to me to have found your page.
Leanne

----- Original Message -----

From: [Valerie & Richard James](#) , Soy Online Service

To: [Gerald Hernesmaa](#)

Sent: Monday, June 05, 2004 1:06 PM

Subject: Fw: Re: Thyroid .

Hello Toni.

We help the www.soyonlineservice.co.nz webmaster with his mail. What a horrible tale you recount!

From the bottom up. >>>> **No, soy protein does not have GRAS determination.** Soy protein was slipped into the food chain about 1959 even though the developmental research (funded by ADM and Mead Johnson) demonstrated that it caused serious infertility problems in laboratory rats and their offspring. This is recorded in a series of papers in the Journal of Nutrition by Schultze, Liener et al in the 1950's. The only evaluation was in 1979 by the Life Sciences section of FASEB, and **soy protein failed because of the risk of nitrosamines forming in the heat treatment.** FASEB assumed the heat treatment was removing the **natural** poisons & did not evaluate their safety at all.

You will find a fuller discussion of GRAS in the Home Page of www.soyonlineservice.co.nz "**Trouble for Soy Protein**", including Dr Fitzpatrick's opposition to the grant of health claim labelling by the FDA

The material in www.soyonlineservice.co.nz "**Doses Simplified**" gives an idea of how toxic the levels of isoflavones in the products your husband was consuming were.

We cannot give medical advice. Your husband's Graves disease may not be reversible. **In both your cases the obvious strategy is to avoid ALL soy (see SOS Guidance) and other estrogenic exposures like alfalfa and soy oil and flaxseed.**

Best Wishes Valerie.

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----- Original Message -----

From: [Toni Fairchild](#)

To: divulge@xtra.co.nz , Soy Online Service

Sent: Tuesday, January 06, 2004 7:23 AM

Subject: Thyroid

I would like to know how to reverse the ravages of soy on ourselves?

My husband has hyperthyroid Grave's disease since last Nov 02....and not been able to take the drugs to slow it down. He did not take the radioactive iodine either, since his eyes were already protruding. His health has diminished severely. I do feed him the Weston A Price diet, low carbs, moderate protein and higher fat diet....when he eats more carbs, he is in big trouble. He lost about 15-20 pounds in the beginning, but has gained it all back now....the last 3 months or so. We are working with a naturopathic doctor here in Orlando, FL....

For me, I have low thyroid (Oct 03) and starting taking 1 grain Armour per day plus Mon & Thur taking 2 grains.....this helped with some increased energy but my body temp was still low, so my naturopath got me some T-100 (dulse, thyroid, adrenal gland l-tyrosine, bladderwrack, Irish moss, pituitary gland, spleen gland, thymus gland, calcarea fluorica, lycopodium virginicum) from Dynamic Nutritional Associates, Inc. to get my body temperature up and this has been very beneficial. I live here in FL and most months, not just the summer I got cold to the bone every time I went into the grocery store & that was with a jacket....This winter it's been great. I have been suffering with this for a lot of years, but my thyroid #'s from my bloodwork have been in the normal ranges....now I know what normal is....

My husband & I have sold Nutrilite Products for over 25 years and we liked to use the products and promote them. I used to make a protein shake at least 3-4 times a week (soy protein isolate from Nutrilite), thinking I was fixing something great. Nutrilite has a well recognized name, and I have always trusted them. In the last several years they have been releasing new products....i.e.. protein bars, meal replacement bars, weight management products, low carb stuff because of the craze the last few years, well, I was never able to eat those bars but my husband was able to....he always had an iron stomach, and thought he was doing himself a favor by not stopping by a fast food restaurant, or buying a candy bar when away from home. He used to eat at least 1 a day. Just about all these products have soy in them. I've listed the ingredients on their newest bar.

Also, did 'soy' ever get the gov't GRAS status, if so, when. I've asked this to one of the scientist there at Nutrilite and have not got a reply

back from them yet. I've been studying for quite some time, some things fall into place and other things will eventually, I'm sure.

Thank you so much for your insight!

Toni Fairchild

TRIM ADVANTAGE® Meal Replacement Bar -- Chocolate Cherry Flavor, 9 Bars

Great taste, balanced nutrition **Full Description** , Rich chocolate drizzles across a crunchy bar bursting with sweet cherry flavor and real fruit bits. Try this classic, candy-box combination for a satisfying and delicious way to get the nutrients you need.

A Chocolate Cherry Flavor TRIM ADVANTAGE Bar is a meal replacement that tastes so good, you'll forget you're "refueling." It's one of the high-performance products designed to help you get even more from the clinically proven, patented TRIM ADVANTAGE Weight Management Program. One TRIM ADVANTAGE Chocolate Cherry Flavor Meal Replacement Bar:

Provides 35% of the Daily Value for 24 essential vitamins and minerals ... Has 16 g of protein -- more than twice the amount of Slim-Fast® meal replacement bars ... a good source of fiber -- at least three times more than Myoplex® and one-and-one-half times more than Slim-Fast ... Has 220 calories and only 2.5 grams of saturated fat ... No artificial color, flavors, or preservatives added

INGREDIENTS: **Cocoa Crisp** (Isolated **Soy Protein**, Tapioca Starch, Cocoa Powder, Calcium Carbonate), **Chocolate Coating** (Sugar, Palm Kernel and Partially Hydrogenated Palm Oils, Cocoa, Nonfat Milk, Sorbitan Monostearate, **Soya Lecithin**, Vanilla), Corn Syrup, Maltitol, Sodium Caseinate, Dried Cranberries (Sugar, Cranberries, Citric Acid, Natural Flavors, Elderberry Juice Concentrate, Sunflower Oil), Arabic Gum, Palm Kernel Oil, Natural Flavors, Glycerine, Dried Cherries (Cherries, Sugar, Sunflower Oil), Inulin, Dried Figs, and 1% or Less of the following: Cocoa Butter, Malic Acid, Carmel Color, **Soy Lecithin**, Sodium Ascorbate, Chromium Yeast, Selenium Yeast, Copper Gluconate, Nicinamide, Molybdenum Yeast, Ferrous Sumarate, Vitamin E Succinate, Zinc Oxide, Vitamin A Palmitate, Manganese Gluconate, Calcium Pantothenate, Vitamin K, Riboflavin, Pyridoxine Hydrochloride, Vitamin D3, Thiamine Mononitrate, Folic Acid, Potassium Iodide, Cynocobalamin, Biotin .
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Just imagine, in order to accomplish "**the suppression of the truth about soy's very serious multiple health hazards,**" — [which, by the way, has also been very efficiently, effectively and profitably inflecting untold, incalculable, "**unimaginable**" and needless pain, suffering, agony and torture onto tens of millions of innocent people around the world every year] — there obviously has to be almost complete and total cooperation by all or almost all of the "**Participants,**" (which includes but is not limited to the soy industry, Monsanto, Dupont, Dow, regular food industry **and** health food industry, Naturopaths, AMA, news media of various forms, chemical-pharmaceutical industry, many academic institutions, most of the popular and famous authors of books on nutrition, the American and Canadian Cancer Societies, the USA's Department of Agriculture, the US FDA, Health Canada, and many other governments and government departments from around the world etc., etc., etc.) — have all played their small part or large part, which ever the case may be, in suppressing this valuable information with their "**Prior Knowledge**" of soy's many serious health hazards for years, by not giving to the public any "**General Health Protection Advisory,**" or "**Public Health Warning**" about all these "**Hidden Dangers**" by those who know, "**The Participants,**" even after the soy industry released it own research in May of **2002** adding further proof to what was already known in the general scientific world, "**... that soy damages the immune system ...**". This suppression of the truth is largely, if not totally, because of the soy industries lobbying practices to governments around the world and to their fellow "**Participants,**" and from various forms of news media intimidation, very much like what has happened in the case of BGH. (See bottom of page 98.) In legal terms, this is a type of world wide cover-up, a "**Conspiracy Of Silence,**" which has also become a very, very extremely financially **\$\$** profitable cover-up, for those involved. The "**Participants**" have to have an extremely scheming, brutal, vicious, cruel and un-loving mind to even think in those terms.

The more that scientists learn about the many serious health hazards of soy through their research, which occurs almost monthly, the more questions are raised, including the all important question ... "**Why aren't we, the public, being told about these KNOWN toxic, poisonous and sometimes deadly cancer causing side-effects of soy so that we can try to protects the ones we love ??**." The soy industries **flawed research** and their **arguments** that allow these serious health hazards to be ignored, through denials, are purposefully and intentionally generated and used "**to cloud the issues and the truth,**" and to "**confuse in order to create doubt, indecision and delay**" through **misinformation**. The FDA is increasingly mired in these **complex** and **arcane scientific arguments** used by the "**Participants**" to support the soy industry's flawed research according to scientists & WHO/Codex Food Safety Standards for Soy Protein Products (page 6) ... **bad science--(Shiv Chopra Health Canada scientists & whistle-blower between 2000-2004)** ... which keeps the general public ignorant of the many dangers soy poses to our health from being in our food supply. These arguments are mostly generated by the "**Participants,**" which serve primarily as "**delaying tactics**" in order to keep soy in the **world's food supply** for as long as possible, in order to **maximize** profits for shareholders and the industry, **which is EXACTLY like what happened and the way it happened for over 20 years with the estrogen problems in Hormone Replacement Therapy, HRT, before the truth halted those trials in June 2002.**

What You Can Do

With no end in sight to this stalemate, the consumer is wise to try to get governments everywhere to ban adding soy ingredients to our food supply, and to get governments to pass enforceable food labeling laws and practices. **But, in the mean time**, the consumer is **also wise** to talk about this topic as much as possible in order to inform people in their own community, to get their local food stores to carry a wide selection of foods without added soy ingredients, in the same way it was done before the year 2000, to minimize exposures to soy and soy ingredients whenever possible by carefully reading all food ingredient labels on all the food they buy, and to also remember that restaurants and hospitals do not list the ingredients in the foods they serve people, even to cancer patients.

So for the soy industry and their **"Participants"** to try and bend the scientific evidence to try to make it fit what the soy industry and the pharmaceutical-chemical companies wants it to look like, that soy supposedly prevents cancer, is doing the very exact same thing the pharmaceutical companies did for over 20 years before June 2002, when the studies on Hormone Replacement Therapy, HRT, were stopped because these studies were proving that HRT was causing the very illness in women, including cancer, that the pharmaceutical companies were claiming and saying that HRT prevented. All this is what we feel can be called **"Crimes Against Humanity and Crimes Against Nature in the extreme."** Soy being used as a weapon of mass destruction, devastation, and unimaginable pain, suffering, heart ache and death !!.

The weed of crime bears bitter fruit. Does the soy industry and all of its supporters really think they'll all get away with it ??. **Do they really think I, we, wouldn't know ??.**

As the Roman Gladiators would say before they died in the great Roman Colosseum, **"... Those who are about to die solute you-(The Soy Industry and all of its supporters, including many & various government departments) !! ..."**, (for your clever, imaginative and ingenious ways you have denied and intentionally hidden the truth about the many serious & sometimes deadly health hazards of eating soy from us, and then deliberately lied and conned us into believing all those lies about the safety of soy...for well over 50 years).

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

The Risks Of Abandoning "The Precautionary Principle"

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

"Soy - Abundance Of Health Hazards" ... <http://www.mayanmajix.com/soy01.html>

Class Action Law Suit Likely

Newest Research On Why You Should Avoid Soy

Cinderella's Dark Side

By Sally Sallon and Mary G. Enig, Ph.D.

http://www.mercola.com/article/soy/avoid_soy.htm

From near the end of this research paper Part 3

From near the end of the Newest Research On Why You Should Avoid Soy ...

Soy - The Next Asbestos ?.

"Against the backdrop of widespread praise...there is growing suspicion that soy - despite its undisputed benefits - may pose some health hazards," writes Marian Burros, a leading food writer for the New York Times. More than any other writer, Ms Burros's endorsement of a low-fat, largely vegetarian diet has herded Americans into supermarket aisles featuring soy foods.

Yet her January 26, 2000 article, "Doubts Cloud Rosy News on Soy", contains the following alarming statement: **"Not one of the 18 scientists interviewed for this column was willing to say that taking isoflavones was risk free"**. Ms Burros did not enumerate the risks, or even mention that the recommended 25 daily grams of soy protein contain enough isoflavones to cause problems in sensitive individuals, but it was evident that the industry had recognized the need to cover itself.

Because the industry is extremely exposed...contingency lawyers will soon discover that the number of "potential plaintiffs" can be counted in the millions and the pockets are very, very deep. Juries will hear something like the

following: "The industry has known for years that soy contains many toxins."

"At first they told the public that 1.) the toxins were removed by processing. When it became apparent that processing could not get rid of them, 2.) they claimed that these substances were beneficial. Your government granted a health claim to a substance that is poisonous, and the industry lied to the public to sell more soy."

The "industry" includes ... merchants ... manufacturers ... scientists ... publicists ... bureaucrats ... former bond financiers ... food writers ... vitamin companies ... and retail stores. Farmers will probably escape because they were duped like the rest of us. But they need to find something else to grow before the Soy bubble bursts and the market collapses: grass-fed livestock ... designer vegetables ... or hemp to make paper for thousands and thousands of legal briefs (that are sure to come and will soon follow) ... (Expect no mercy).

The above is also extracted from Nexus Magazine, Volume 7, Number 3 (April-May 2000)

The US FDA's "Poisonous Plant Database" ... <http://vm.cfsan.fda.gov/~djw/pltx.cgi?QUERY=SOY> ... *lists Soy, and (Flax and Linseed), and (Canola and Rapeseed) as "poisonous plants,"* ... and the FDA recommends that if you are injured by them, to contact the local "Poison Control Center" in your area, (at ... <http://www.aapcc.org/>), or call 911. There are over 685 scientific research abstracts listed, out of over 1,000 known, going way back to **1850**, proving serious harm to human & animal health. (out of about 500 or more abstracts do exist for soy alone since **1907**). The Soy industry, food, health food industries, governments and the "News and Advertising Media" have all been lying to us. See pages 5, 6, 7, 113, 119, 121 ... abstracts on pages 29 – 96.

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .

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Dangers of Dietary Isoflavones
at levels above those found in traditional diets
The Risks Of Abandoning "The Precautionary Principle"
by Soy Online Service ... <http://www.soyonlineservice.co.nz/>
"Soy - Abundance Of Health Hazards" ... <http://www.mayanmajix.com/soy01.html>

----- Original Message -----

From: "SOY ALERT: SOY ONLINE SERVICE AND WESTON A. PRICE FOUNDATION"

[<soy-adult-correspondence_reply@mailhost.groundspring.org>](mailto:soy-adult-correspondence_reply@mailhost.groundspring.org)

To: <healthwise933@shaw.ca>, Vancouver, BC, Canada

Sent: Monday, March 29, 2004 2:09 PM

Subject: SOY ALERT: POSSIBLE LEGAL ACTION ON MEDICAL PROBLEMS CAUSED BY SOY

>

>

> **SOY ALERT**

> **WESTON A. PRICE FOUNDATION**

> **March 29, 2004**

>

> **POSSIBLE LEGAL ACTION ON MEDICAL PROBLEMS CAUSED BY SOY**

>

> This letter is in response to your e-mail to either **Soy Online Service** (www.soyonlineservice.co.nz) or the **Weston A. Price Foundation**

> (www.westonaprice.org) with regards to your belief that you or your child may have suffered serious physical or medical consequences

> as a result of ingesting one or more products containing soy.

>

> **A growing body of credible medical and dietary research suggests that soy products may cause** adverse medical and developmental conditions in susceptible persons, especially children – who in some instances may be affected by soy products consumed either by themselves (for instance, in baby formula) or by their mothers prior to giving birth.

>

> **The Weston A. Price Foundation in cooperation with Soy Online Service is exploring the causal connection between soy and various serious conditions – see attached listing. We have also sought out competent attorneys in the United States and elsewhere,**

> **who may develop medical evidence in a number of these cases to pursue damages or other appropriate remedies against the manufacturers and sellers of soy products.**

>

> **If you would like to participate in these efforts, we urge you to contact the Weston A. Price Foundation at ...**

> westonaprice_soy@verizon.net. Upon receipt of your e-mail, we will forward you, via e-mail with attachments, a questionnaire and release form. We urge you to complete the questionnaire, fully and honestly, to the best of your ability. Also, please sign and return the medical authorization(s) along with the questionnaire, in order that we might gather relevant medical records in those cases which warrant further investigation. Mailing address and fax number will be provided to you with the questionnaire.

> PLEASE BE ADVISED, not all of these potential claims can or will be pursued, even if we conclude that you or your child may have suffered some adverse effects from the consumption of soy products. It may be too late under applicable state laws to pursue some claims; and in other cases, the parties responsible for your condition may not be adequately identified, or the recoverable damages may not warrant pursuit of the responsible parties.

> However, if you would like us to conduct a preliminary investigation of the circumstances of your potential claim, without cost or obligation to you, then promptly complete, sign and return the enclosed documents. We hope to be able to assist you in this matter, if our inquiry develops evidence of corporate responsibility for your medical problems or those of your child.

> Sincerely,

> **Sally A. Fallon, President**
 > **Weston A. Price Foundation**
 > PMB 106-380, 4200 Wisconsin Avenue, NW
 > Washington, DC 20016
 > www.westonaprice.org
 > (202) 333-HEAL
 > westonaprice_soy@verizon.net

> ... Continued ...

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by Soy Online Service ... <http://www.soyonlineservice.co.nz/>
“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

March 29, 2004

SOY ALERT
WESTON A. PRICE FOUNDATION, contact ... westonaprice_soy@verizon.net.

POSSIBLE -“LEGAL ACTION”- ON MEDICAL PROBLEMS CAUSED BY SOY
 continued

See page 18 ... Soy is also called by 8 - “Aliases-(false names)” ... “Vegetable oil -or- Shortening” ... “Textured vegetable protein” “bouillon” ... “MSG” ... “natural flavoring” ... “Hydrolyzed protein -or- vegetable protein.” **Also**, look for “Soy Oil” and “Soy Flour.”

> **PARTIAL LIST OF PRODUCTS CONTAINING SOY** ... (MSG is made from soy, <http://www.truthinlabeling.org/index.html>)
 > **Remember To Read “The Ingredient Labels” On All Of The Foods You Buy !! ... and just change brands if necessary.**

| | | |
|---|---|---|
| > Candy of all types, Junk foods, and soft drinks-(added <u>soy oil</u>) | Canned Tuna, Canned dry Soups | Regular Hamburgers, hot dogs, meat loaf |
| > Dairy Products ... cheese, whip cream, yoghurt, <u>margarine</u> | Pet Foods | French fries cooked in (made with) soy oil |
| > Diet Foods and Low Fat foods ... including cookies, pastry, pies | Prescription and other Medications | Restaurant Foods of all kinds and types |
| > Hospital Foods of all kinds, served to patients and staff | Smoothies and some Fruit Drinks | <u>Regular</u> pre-packaged meats, etc |
| > Meal Replacement Beverages, and Diet beverages | Soy Isoflavone Supplements | Salad Dressings, Mayonnaise (in Soy oil) |
| > Protein Drinks served to cancer patients in Hospitals | Soy Infant Formulas | Soy Milk, and Soy Sausages |
| > Snack-Energy Bars containing soy products-(ingredients) | In women’s Skin Care product | Soy Ice Cream, and regular Ice Cream |
| > Soy-based Bread, pastry, and <u>regulars</u> with various soy ingred.’s | Tofu – Tofu – Tofu | Veggie anything – meat substitutes, salads |
| > Vitamins ... Vitamin E - (put in soy oil) ... various types of Supplements | | |

> **MEDICAL CONDITIONS POSSIBLY ATTRIBUTABLE TO – MAYBE BROUGHT ON BY – SOY CONSUMPTION**

> A growing body of credible Medical **and** Dietary Research suggests that EATING SOY products is also one of the CAUSES of developing these Medical Conditions

> The US FDA’s “Poisonous Plant Database” at ... <http://vm.cfsan.fda.gov/~djw/pltx.cgi?QUERY=SOY> ... *lists Soy as a “poisonous plant.”*

> The genistein in soy is a Topoisomerase II-poison.

> Asthma

> Brain **and** Nervous System damage ...

> Genistein in soy destroys the “myelin sheath” surrounding and protecting the nerves, spinal cord, and brain cell tissue, as in Alzheimer’s - Parkinson’s Disease, M.S., **and** also, learning disabilities as in ADD / ADHD.

- > Chronic Fatigue
- > (**Cancer, Breast, other**) ... added by Gerald Hernesmaa, (who's wife Deanna (Deonaa) died a slow painful death on Dec 15, 2002 of breast, bone and liver cancer while - from - because of eating soy in her food), based on a growing body of scientifically credible medical & dietary research.
- > Depression
- > Diabetes
- > (**DNA and Chromosome Damage, *Immune System Suppression**) ... added by Gerald Hernesmaa ... based on a growing body of scientifically credible medical and dietary research ... see pages 7, ***10 soy weakens immune system**, 13, 17, 34, 40, 52, 53, 55, 58, 61-65, 73, 80, 90.
- > Heart Arrhythmia, (For the above quoted pages on this and these other illness ... refers to this - 144 page - Soy Research Paper.)
- > Heart or Liver Disease
- > (**Hypospadia** ... <http://www.amershamhealth.com/medcyclopaedia/Volume%20IV%202/HYPOSPADIA.asp>) ... added by Gerald
- > Infertility / Reproductive Problems
- > Irritable Bowel Syndrome
- > Osteoporosis ... added by Gerald ... based on a growing body of scientifically credible medical and dietary research
- > **Pancreatic Disorders**
- > Premature or Delayed Puberty , (**Pseudo Puberty** ... <http://www.emedicine.com/ped/topic1881.htm#>)
- > Rheumatoid Arthritis
- > **Thyroid Conditions:**
- > - Auto-Immune Thyroid Disorders (Graves' or Hashimoto's Disease)
- > - Hypo and Hyper thyroidism ... **Thyroid Cancer** ... Goiter ... other thyroid disorders ... Thyroid Nodules
- > **Uterine Cancer**
- > **Weight Gain** - obesity — from thyroid problems ... **Weight Loss** - anorexia — from pancreas problems, soy contains potent enzymes inhibitors that block the action of trypsin and another enzymes need for protein digestion.

> **SYMPTOMS OF POSSIBLE DISORDERS ATTRIBUTED TO SOY**

- | | | | |
|-------------------------------|-----------------------|--------------------------------|--|
| > Always feeling cold or warm | Brittle nails | Hyperactivity | The Reoccurrence of cancer |
| > Anemia | Eczema | Learning deficiencies | Sore bones and joints |
| > Behavioral problems | Hair thinning or loss | Lethargy or low blood pressure | Watery or swelling eyes |

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Dangers of Dietary Isoflavones

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by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

"Soy - Abundance Of Health Hazards" ... <http://www.mayanmajix.com/soy01.html>

((healthwise933@shaw.ca))
Gerald and Deanna - (Deonaa)

Soy Was The Major Contributing Cause In My Wife Deanna-(Deonaa) Death From Cancer

The weed of crime bears bitter fruit. Does the Soy Industry and all of its supporters really think they'll all get away with it ??.

With all the publicly available scientific proof since 1907, do they really think that we wouldn't know ??.

How would you feel if you were forced to feed poison to the one you love as they slowly die

because of it, in your arms ??.

Soy also caused the reoccurrence of Deanna's

cancer 3 times in less than 2 years. [Soy Online Service](#) website

helped to save my wife's life, twice in 1 year. The

* Sir Jason Winters Herbs may have saved

her life ??, if soy had not poisoned

her first. See ***Note** first.

;

***Note** ... Be very, very careful. Soy is in many Sir Jason Winters products. Be sure to check the ingredient labels for each one.

Eating Soy poisoned my wife, Deanna (Deonaa), and also caused her cancer cells to grow, and was the major contributing cause in her death from breast, bone and latter liver cancer on Dec 15, 2002. The soy industry and all of its supporters, (referred to as the "Participants" on page 118), stole from us our happiness and our future together. I can prove it, and I have the tumor marker blood tests, CEA and CA 15.3, to prove it. It was a very slow, painful death that could have been easily avoided, if they, the our Doctor and the dietitian for the patients at UBC Hospital in Vancouver, BC would have listened to me, when Deanna was in the hospital.

We were married for 36 and 1/2 years, and we dated for 4 and 1/2 years in high school before we got married. Deonaa - (Deonaa) discovered a breast lump in the summer of 1996. She was afraid and didn't tell me about it until the end of Jan. 1997. She went to the Medical Doctor for it in Feb. 1997, had mammogram, blood tests, biopsy, and ultrasound for the breast lump. She did not want to have an operation of any type, no chemotherapy or radiation, and no more x-rays. From what she was told, these tests could not tell if her breast lump was cancerous. This is when she insisted that we starting eating soy, soy milk, soy burgers, etc.

She tried to do the holistic approach from what she could find out and read about. Everything she found to read convened her to eat soy, and insisted that I eat soy as well. She read a lot of books on the topic of cancer and breast cancer, and she said that there was a lot of

contradictory information on the topic. She had to sort things out, decide what to do, the best she could. She had no real guidance on the best holistic. She knew that the mainstream medical system had no real answers. Her approach before the operation didn't do any good because she didn't have any good guidance from anyone with holistic experience. Her approach was hit and miss, fly by the seat of your pants, so to speak. It wasn't until a couple of weeks after her back operation, May 1999, that she found real guidance in the holistic approach to cancer from **"The Centre For Integrated Healing" in Vancouver, BC, Canada. Dr. R. Rogers was her Doctor there.** But the Centre also recommended soy for their cancer patients in their **"Healthful Fruits and Vegetables"** list of recommend foods to eat. From the Centre, she used 714x, Hydrazine Sulfate, and eventually Escador. We finally thought she was on the right track. Over the next year, she recovered from the operation about 98%. **She was also taking "Tamoxifen" from the BC Cancer Agency. But** no one, not anyone, had ever told us that the scientific research has proven for 40 years that soy causes cancer and causes existing cancer cells to grow ... or ... that genistein in soy is a Topoisomerase II-poison, (well known since 1989 see pages 32, 34, 40, 42, 44, 70-73, 81) ... or ... soy interferes with, negates or overwhelms the inhibitor effect of tamoxifen on MCF-7 tumor growth !!, see page 47-(2001), page 52-(2002).

We joined Neways in May 2000, & Deanna was taking Neways **"Maximol Solution" with Soy Lecithin in it** from about July-Aug 2000, and stopped May 2001. We never thought to read the label until May 2001, 4 months after we found out about the dangers of soy. But in Dec 2000 - Jan 2001 Deanna had her first reoccurrence of bone cancer. We didn't know why. She had been doing so good for a year and a half. She got discouraged. She had 5 treatments of radiation for her bone cancer, no chemo. Then one week after the radiation treatments, in mid Jan. 2001, she was given a article called ... **"The Newest Research On Why You Should Avoid Soy,"** an article on Dr. Mercola's website at ...http://www.mercola.com/article/soy/avoid_soy.htm . A light went on after reading this, and she knew why he had her reoccurrence of cancer, and why her breast lump had turned cancerous. But she still didn't know that Maximol Solutions had soy in it. The article points out that soy causes cancer, causes existing cancer cells to grow and can turn non-cancerous tumors cancerous. The same day she read the article, we threw out all food with soy listed on the ingredient labels, except Maximol Solutions. **Her tumor marker blood test, CEA and CA 15.5, that measure cancer activity in the body**, started going down after May 2001. By Sept. 2001, her blood test were about 50% of what they were 4 months after she stopped eating soy and soy products. All this time, Since the summer of 2000, we trusted Neways. We told our sponsors about the problems with soy in Jan 2001. They didn't tell us that their product had soy in it. We also didn't think to read the label of the Maximol Solutions until May 2001. Then, right away we contacted Neways, we returned the product and they gave us a refund. **Other than that, at home we did a very good job of avoiding soy in our food by reading all the food ingredient labels of the foods we bought, restaurant foods were a no-no as they do not list the ingredients of their foods.** ... / 123

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at levels above those found in traditional diets
The Risks Of Abandoning "The Precautionary Principle"
by Soy Online Service ... <http://www.soyonlineservice.co.nz/>
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Soy Was The Major Contributing Cause In My Wife, Deanna-(Deonaa), Death From Cancer

The weed of crime bears bitter fruit. Does the Soy industry
and their supporters really think they'll all get
away with it ?? Do they really think
we wouldn't know ??

;

Then, on Tuesday evening Oct. 23, 2001, we went to the Planetarium in Vancouver, BC, to hear a lecture by **Udo Erasmus, PhD.** about his book called **"Fats that Heal and Fats that Kill."** During the question period after the lecture, we found out that Udo's-Ultimate Oil Blend product has soy lecithin in it. We were able to ask Udo if his soy lecithin was safe, safe for cancer patients. He said it was. So, Deanna was persuaded to try **"Udo Ultimate Oil Blend," with soy lecithin in it.** About a week or tow latter, in Oct. 2001, she started saying that her hip was hurting her. By the beginning of Dec. 2001 she was in a lot of pain, the side effect of eating this soy lecithin in Udo Ultimate Oil Blend caused both tumor marker blood tests to quickly go back up again to where they were in the early spring. The tumor marker blood test went up in less than 2 months where it had taken 6 months for the blood tests to go down . Deanna had her 2nd. reoccurrence of bone cancer, caused by soy lecithin, Nov. - Dec. 2001.

This time she got real discouraged. She didn't want to take anything. Then she found out about **Bio-cell Therapy** at Ubiquity Wellness Centre, Vancouver. BC. She took that and was feeling and getting better until she mistakenly followed the **Lemon Cleans Master Cleans Lemon Diet.** That gave her severe dehydration and put her in the hospital in Aug. 2002. We found out about **Sir Jason Winters Herbs** about the same time and she took them right away and over 3 week period and started feeling better, and continued taking them. She came home mid Sept. 2002 feeling and getting better. Then the home care nurse made a mistake on the medications and Deanna ended up in the hospital again, mid Oct 13, 2002. There she started to recover again while still taking the Jason Winters herbs. But after a month into the 2 months she was in the hospital we found out that 90 % of the hospital food has soy in it from the dietitians computer data base print out.

When she went into the hospital last fall, Oct 13 - Dec 15, 2002, she was there for over 2 months before she died. At the beginning of the last month in hospital, I, we found out that, according to the hospitals dietitians computer data base, & that print out, 90% of hospital food has soy added to it from the wholesalers, the bulk manufactures. I told the doctor and the dietitian about the dangers of soy and gave them information on it, even photocopy of research abstract proving it, & asked them if the hospital would bring in food that did not have soy in it for Deanna. But all they said was that soy was controversial & wouldn't believe me or take me seriously. They **would not** bring in extra

food for her without soy in it, even after I gave the dietitian and our Doctor a photo-copy of this abstract from PubMed. See pages 47, 52.

1 1 1, 1 1 1, 1 1 1, 1 1 1 - Soy **Stimulates** breast cancer growth. **Yes !!**.

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11573864&dopt=Abstract .

2001 “Effects of soy phytoestrogens genistein and daidzein on breast cancer growth,” – *de Lemos M.L., Ann Pharmacother 2001 Sep;35(9):1118-21., B. C. Cancer Agency, Vancouver, BC, Canada, mdelemos@bccancer.bc.ca*

— **Objective:** to determine whether **genistein** and **daidzein**, the major phytoestrogens in soy, **can stimulate breast cancer growth ??**.

; 1 ; — **Women with current or past breast cancer should be aware of the risks of potential tumor growth when taking soy products.**”

— **Conclusions:** Genistein & daidzein may **stimulate existing breast tumor growth** and antagonize effects of tamoxifen

Eating poison interferes with everything. A week before Deanna died, she said to me that she did not want to die, by that time, her throat had gotten smaller. She couldn't take the Jason Winters Herbs unless they were broken up into small pieces, and by then she was getting discouraged and didn't want to take them as often as she needed to. On Sunday afternoon, Dec 15, 2002, after taking morphine for 2 days she died in a coma. During the last 2 days, from hand signals, squeezing, Deanna could tell me that she was in a lot of pain, and if she wanted more morphine. The nurses wouldn't believe me, and I had a difficult time getting the nurses to give my wife enough morphine to stop the pain. On Sunday morning, I told our Doctor what I was experiencing and our Doctor said that what I was experiencing was not unusual, it happens. The Doctor instructed the nurses to give Deanna more morphine, and few hours before Deanna died, and they did.

Eating Soy was the major contributing cause in my wife's death from Cancer. I can prove it, and I also have the tumor marker blood tests, **CEA** and **CA 15.3** to prove it. It was a very slow, painful death that could have been easily avoided, if they would have listened to me, when she was in the hospital. We feel that Soy was also the single greatest cause of her getting cancer & also the single greatest cause of the 1st, 2nd and 3rd reoccurrence of bone cancer, and her eventual liver cancer shortly before she died. **The weed of crime bears bitter fruit.** Does the soy industry really think they will get away with it ??; do they really think that we wouldn't know ??.

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .

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Patient Food Items

U.B.C. Hospital, Van., BC

Oct. 13, 2002 — Dec. 15, 2002

Foods That **Do** Contain Soy Ingredients

Meats and Alternatives

Breaded Perch-(soybean oil, soy flower) Breaded Fish-(soy oil)
Breaded - Pork Cutlet Salisbury steak-(textured soy protein)
Ground Beef-(soy flower, as in meat loaf, meat balls, hamburgers)
Veggie Burgers * Chicken Fried / baked-(in what oil, soy ??, yes)

Starches

Whole Wheat Bread-(may contain soy) Turkey stuffing/dressing
60% Whole Wheat Bread -(may contain)
Pancake Mix * Mashed Potatoes-(from a flake/ mix)
French Fries-(and / or soy bean oil.) Stoned Wheat Thins
Social Tea Cookies Digestive Cookies

Foods That **Do Not** Contain Soy Ingredient (as far as she, the dietitian, nutritionist can tell.)

Meats and Alternatives

Poached Eggs Canned Salmon Cod sliced Turkey
Canned Tuna-(mixed with other ingredients in sandwiches ??.)
Chicken Fried / baked-(cooked in what oil ??, Soy ??.)
Ham for sandwiches Pork Sausage Ham Roast
Red Kidney Beans Garbanzo Beans Bacon

Starches

White Rolls Whole Wheat Rolls ? * Bake potatoes
All cereals on the menu - (hot and cold)
All Pasta - (Plain)Bread sticks Melba Toast
Premium Plus Saltines - (Christie)
Arrowroot Cookies Graham Wafers Pie Shells
Cereals, all bran, bran flakes, special k, Cream of wheat, Oatmeal
Puffed rice, rice krispies, raw bran

Soups

Campbell's - Tomato - (no soy listed), listed in store bought
- Cream of Celery - (soy protein isolate)
- Cream of Chicken and Cream of Mushroom
Hospital made soups ?? Beef Broth Chicken Broth

Dressings

French 1000 Island Golden Italian
Soy Sauce BBQ Sauce-(HVP) Worcestershire Sauce
Hollandaise Sauce

Desserts

Jell-O Pudding Cups * Pre-made puddings ??
Whipped Topping Muffins ?? Peanut Butter
Cakes - (margarine or shortening is used)

.....
* * *

Soups

Low sodium Beef Broth Low sodium Chicken Broth
Hospital made soups ??.

Dressings / Condiments

Italian Dressing-(calorie reduced) Miracle Whip
Gravy Butter Bicel Margarine
Ketchup Mustard Cranberry Sauce
Strawberry and Raspberry Jams Fruit Spread
Kraft Light style orange spread and grape spread
Apple / Grape Jelly Orange Marmalade Salt / pepper

Desserts / Fruit

All fresh & canned fruits All Juice Jell-O
sherbert and Ice Cream-(modified milk ingredients)
* Pudding-(made in our kitchen) Lemon and Tapioca pudding
Sweet Tart shells Yogurt plain and fruit-(mod. milk ingred.)

No Soy Ingredients

... Continued ...

Dairy

Process Cheese Slices Cottage Cheese Cheddar Cheese
Brick Cheese Cream Cheese Parmesan Cheese
Grated Cheese - (used to top casseroles, has modified milk ingredients)

Vegetables

All vegetables Cream Style Corn Tossed Salad mix

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

The Risks Of Abandoning "The Precautionary Principle"

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

"Soy - Abundance Of Health Hazards" ... <http://www.mayanmajix.com/soy01.html>

----- Original Message -----

From: [Valerie & Richard James](#) , Soy Online Service

To: [ERIC JOHNSEN](#)

Cc: [Mike Fitzpatrick](#) , [Gerald Hernesmaa](#)

Sent: Tuesday, June 29, 2004 6:46 PM

Subject: Re: Soy question from USA.

Hello Eric .

We help the webmaster at www.soyonlineservice.co.nz with his mail. You should ask that question of the National Cancer Institute, and ask them where they get their funds.

If you go to www.soyonlineservice.co.nz "**Phytoestrogens - Cancer,**" you will see the webmaster's comments...and his opinion about the lowest form of life.

In fact, scientists at the FDA have written for years that soy isoflavones are carcinogens.(see next email). It was even so stated in "Chemical Carcinogens", the text book of the American Chemical Society, in 1976.

The trouble is that the bigwigs in control at the FDA are directed by politicians who are in the pockets of the soy companies. With that much money they can buy anything and everybody and spread as much confusion as they wish.

Good Luck, Valerie.

.....
----- Original Message -----

From: [ERIC JOHNSEN](#)
To: divulge@xtra.co.nz
Sent: Wednesday, June 30, 2004 7:32 AM
Subject: Soy question from USA.

June 29, 2004

I would like to know **why the National Cancer Institute** has posted information saying that isoflavones from soy will prevent cancer cells from growing ??

Why does all of this seem confusing? Please comment.

Thank You
Eric

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Dangers of Dietary Isoflavones
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The Risks Of Abandoning "The Precautionary Principle"
by Soy Online Service ... <http://www.soyonlineservice.co.nz/>
"Soy - Abundance Of Health Hazards" ... <http://www.mayanmajix.com/soy01.html>

----- Original Message -----

From: "**Valerie & Richard James**" divulge@xtra.co.nz
To: talkingpoint@bbc.co.uk
Sent: Sunday, July 04, 2004 8:00 PM
Subject: "IS THE AMERICAN EMPIRE GREEDY". ABSTRACT OF RESEARCH BY US FDA SCIENTISTS

Also see ... #184, 1916, [FDA](#) file #: F06318, (page 83 here)
1907

Hello "Talking Point".

Please consider the work of US FDA scientists in the attachment. Also look at the FDA data base of "Poisonous Plants" here. - <http://vm.cfsan.fda.gov/~djw/pltx.cgi?QUERY=SOY>, of which Kuan's work is **# 96 on the list**. (See abstract below)

We help the scientists at www.soyonlineservice.co.nz and it is quite evident from the existing published research they present that **soy has been known to cause ... thyroid harm for 70 years ... to be estrogenic and to cause infertility for 50 years ... to be Carcinogenic and Cytotoxic for at least 40 years.** (**Cytotoxic** ... toxic to cells, Any agent or process that **kills cells**, as Chemotherapy, radiation, "Webster's New World Medical Dictionary," click on ... <http://www.medterms.com/script/main/art.asp?articlekey=19883>).

Yet there is a huge subsidised international push by the US Dept of Agriculture, USDA, to promote the export to the world of soy meal and protein based on a huge political promotion of it as "healthy".

The US FDA Center for Food Safety and Applied Nutrition in Washington assists enthusiastically by urging the consumption of 25 gr a day of soy protein to lower cholesterol. This despite the protests of their own National Center for Toxicological Research, who had proved that such consumption would cause harm to consumers thyroid glands.. Here is the protest letter of those scientists..(Dr Sheehan being the Director of Genetic and Reproductive Research), http://www.mercola.com/2001/jun/30/soy_fda.htm.

So we at www.soyonlineservice.co.nz think the US empire is both greedy and immoral. Food that it knows is "estrogenic" "carcinogenic" and "cytotoxic" is flooding the food chain, with government support, for the benefit of a few very wealthy corporations....DuPont, Monsanto, Central Soya, and ADM are a few examples.

As one very knowledgeable environmentalist said years ago to us..."if this were widely known it could alter the whole basis of the

European C.A.P., because if soy protein were safely processed it could not be the cheap protein that undercuts all others".
Sincerely, Valerie for www.soyonlineservice.co.nz

* * *

- <http://vm.cfsan.fda.gov/~djw/pltx.cgi?QUERY=SOY> ... US FDA "Poisonous Plants Database" ... Item # 96, File #: F17495.

1991 "Determination of phyoestrogens in soy-based infant formula," — S.S. Kuan, O..J. Francis, A. S. Carman, P.P. Umrigar and G.M. Ware, *Toxicol*, 30, 5-6, 527 , 1991, (U.S. FDA, Department of Health and Human Services, Research Center, USA), and 10 th World Congress Report.

— Infant formula containing soy protein have been available commercially for more than 50 years. Such formulas are designed and manufactured for infants who are allergic to cow milk. Soybeans are known to contain estrogenically active compounds, phytoestrogens. An earlier publication from th is laboratory showed that there was a significant carry-over of soy phyoestrogens into its processed products.

— Soy-based infant formulas contain 2 – 2.5 % soy protein isolates. For some infants the formula is the sole source of nutrition for growth.

— **The carcinogenicity ... cytotoxicity ... estrogenicity ... of phytoestrogens have been reported in a previous publication and elsewhere. Consequently, it is imperative that the formula be free of toxicant or that it be physiologically safe for infant consumption.**

— To determine whether phytoestrogens are a potential hazard to the infant, a rapid simple, reliable and inexpensive method for the determination of phytoestrogens in infant formulas is needed. Many analytical methods have been developed for the determination of phytoestrogens in soybean and its processed products, but none of these methods are suitable for use in assaying the phytoestrogens in soy-based infant formulas.

— A high performance liquid chromatography (HPLC) method developed in this laboratory for the determination of phytoestrogens in soy-based infant formulas is described. The method involves the extraction of phytoestrogens from the infant formula with acetonitrile / methanol / acid / water and the separation of the separation of analytes of interest in the crude extract by HPLC with u.v. detection.

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Dangers of Dietary Isoflavones
at levels above those found in traditional diets
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Ms Shellee Anderson;
Team Leader; Nutrition Policy,
Division of Dockets Management,
Food and Drug Administration,
5630 Fishers Lane, Room 1061 (HFA-305)
Rockville, MD 20852,
USA, fdadockets@oc.fda.gov , Phone (301) 827 – 6860 .

April 27, 2004

By E-MAIL and By AIR-MAIL

The Food and Drug Administration (FDA) confirmed April 15, 2004 that it is in the process of reviewing a **petition submitted**, (Feb 11, 2004), by **The Solae Corporation in order to seek approval for a health claim for Soy** that suggests the consumption of soy protein-based foods may reduce the risk of certain types of cancers including **breast, prostate and colon cancer**.

(FDA Docket # 2004Q-0151) - Solae Corporation Requests Health Claim, re: Qualified Health Claim: Soy Protein and Cancer
. <http://www.fda.gov/ohrms/dockets/dockets/04q0151/04q0151.htm> .

Dear Ms Anderson,

In preparing this petition for filing we would like your staff to consider the following information. These are all abstract references to research published in the **NIH Medline database**, and the full research is available via these abstracts. You can see that these are from some very reputable research institutions, and some like the Dept of Energy and NCTR are Federally operated and funded. Soy

Information Service is shocked that a publicly held corporation would seek health **benefit** claims- labeling, without revealing very well-documented **risks** of cancer causation and acceleration by the same product.

These are risks to consumers of cancers from the Solae (and other) soy products, and do not include the other well-known risks to other organs and bodily functions posed by soy consumption.

For instance, FDA scientists Dr D M Sheehan and Dr D Doerge have raised some of them in their letter to the FDA, here at ... http://abcnews.go.com/onair/2020/2020_000609_soyfdaletter_feature.html , and here at ... http://www.mercola.com/2001/jun/30/soy_fda.htm .

Concerns about the potential carcinogenesis of modern soy is not new. For example, ... (1.) **the Committee for Food Safety was worried about it in 1966**, ... (2.) **the definitive textbook “Chemical Carcinogens” published by the American Chemical Society in 1976 had a chapter titled “Plant Carcinogens” that identified soy isoflavones as known carcinogens**, ... (3.) **the Life Sciences Committee of FASEB in its 1978 “Evaluation of Soy Products for Human Consumption” for the Food and Drug Administration (SCOGS-101 under contract to the FDA # 223-75-2004) declined GRAS determination because of the risks of carcinogenic nitrosamines, lysinoalanines, and nitrite occurring during the modern processing.** (Not to mention the other scientifically documented natural occurring carcinogenic chemicals in soy called genistein and daidzein).

(4.) Moreover in **1999**, an application by Archer Daniels Midland Corp for GRAS determination of GRAS (GRN 00001) for isoflavones was declined due to the failure of the applicant to reveal health risks.

This is exactly the present situation, and Soy Information Service urges you to follow the same course now and to decline to file this present application.

Yours Sincerely,
Soy Information Service,
pp Richard F James, Director, MBA LLB

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Coke to Launch Cholesterol-Reducing Orange Juice

http://story.news.yahoo.com/news?tmpl=story&u=nm/20031024/hl_nm/food_coke_oj_dc_1

Fri. Oct 24, 1:29 PM ET ... By Paul Simao

Yahoo! News, Sun. Oct. 26, 2003, Health - Reuters

ATLANTA (Reuters) - Soft drink maker **Coca-Cola Co.**, which is battling rival PepsiCo Inc. for control the of growing health drinks market, said on Friday it was preparing to launch a cholesterol-reducing orange juice.

The world's largest soft drink maker will begin rolling out **Minute Maid Premium “Heart Wise”** on Monday in the USA. It expects the drink to be widely available throughout the nation by Thanksgiving holiday in Nov.

The product will contain “Plant sterols”, an additive that has been used in cholesterol-fighting margarine and other food products. “Plant sterols” have been shown to cut bad cholesterol levels by about 10 percent when used consistently.

More than 41 million Americans have high cholesterol, a key risk factor for heart disease, according to the **American Heart Association** at ... <http://www.ama-assn.org/> , and (news - web sites) , See news at ... <http://search.news.yahoo.com/search/news/?p=%22American%20Heart%0AAssociation%22&c=&n=20&yn=c&c=news&cs=nw> , and web sites at ... <http://search.yahoo.com/search?p=%22American+Heart+Association%22> . Another 60 million or so have moderately elevated levels of the fatty substance.

"That is a pretty good customer base," Coca-Cola spokesman Ray Crockett said. "People with moderately high cholesterol will find this

product will help them reduce their cholesterol significantly."

Crockett said the company had conducted "[a clinical trial](#)" to back up the drink's health claims and had obtained approval from the **Food and Drug Administration, FDA**, http://www.coreynahman.com/FDA_Page.html See ... ([news - web sites](#)) , See news at ... <http://search.news.yahoo.com/search/news?p=%22Food%20and%20Drug%20Administration%22&c=&n=20&yn=c&c=news&cs=nw> , **and** the web sites at ... <http://search.yahoo.com/search/dir?p=%22Food+and+Drug+Administration%22&h=c> , to market the drink. **Results of the clinical test will be available "next" month ??**.

Atlanta-based Coca-Cola first revealed its plans to launch **Heart Wise** in an interview with Beverage Digest. John Sicher, the trade publication's editor, said the drink was on the cutting edge of a new wave of innovative beverages.

"This is real innovation in that it provides a true functional benefit," Sicher said. "It uses a beverage as a delivery system for an ingredient that will really help people."

Consumers would have to drink two 8-ounce servings of Heart Wise per day to get the suggested daily amount of 2 grams of sterols needed to lower cholesterol, according to Coca-Cola. Each serving contains about 110 calories. The product will have to be kept refrigerated.

BUT ... Are They Harmful ... ?? ... Do They Pose Any Health Risks ??

"Sterol estrogens" were found to be of the highest order of estrogenic activity, even more than Soy.

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .
Pet Food, farm animal foods

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

The Risks Of Abandoning "The Precautionary Principle"

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

"Soy - Abundance Of Health Hazards" ... <http://www.mayanmajix.com/soy01.html>

"Phytosterols"

<http://www.soyonlineservice.co.nz/02phytosterols.htm> .

The new breed of wonder-chemicals ?.

and very, very toxic too !!.

;**l**;

Phytosterols are natural plant estrogens. Because of their reputations in folk lore as abortifacients, menstrual cycle disruptors and ecbolic (hastening labour or miscarriage) agents and are known to stimulate uterine tissue and have hormonal influences on the reproductive tract, the World Health Organization sponsored a huge study to investigate "**Natures Contraceptives**". This can be accessed through the April and May 1975 issues of the Journal of Pharmaceutical Sciences including

l l l, l l l, l l l, l l l

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=167146&dopt=Abstract .

- <http://www.soyonlineservice.co.nz/07abstract.htm> .

1975 **“Potential value of plants as sources of new antifertility agents I,”** – [N. R. Farnsworth, A. S. Bingell, G. A. Cordell, and others., J Pharm Sci. 1975 Apr; 64 \(4\) 535-598, 1975.](#)

— PIP: A comprehensive review of plants that possess contraceptive or interceptive, abortifacient, ecboic, oxytocic, or emmenagogue properties is presented. **The plants reviewed are those which have a folkloric reputation of contraceptive effects and those which have been tested on laboratory animals for their antifertility effect.** The preovulatory, preimplantation, and postimplantation antifertility mechanisms of plant substances affecting the hypothalamus-pituitary, ovary, oviduct, uterus, or vagina are discussed in terms of reproductive differences among laboratory animal species. Lithospermic acid, m-Xylohydroquinone, coronaridine, rutin, and rottlerin are among the few active antifertility principles to be identified in higher plants. Volatile oils, quinine and castor oil, and sparteine have been used as abortifacient agents, but not with consistent success, **and often with toxic, if not fetal, side effects.**

Publication Types:

Review

PMID: 167146 [PubMed - indexed for MEDLINE]

Quotes

The world population explosion has pointed out the need for new and effective contraceptive agents... ...it can be seen that 565 species of plants are known to have a folkloric reputation for use as abortifacients, ecboics, or emmenagogues. Of this 565 species, 225 have been shown to elicit a stimulant response when tested against uterine muscle either in vitro or in vivo.

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .
Pet Food, farm animal foods

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Phytosterols

. <http://www.soyonlineservice.co.nz/02phytosterols.htm> .

The new breed of wonder-chemicals ?.

Continued

1 1 1, 1 1 1, 1 1 1, 1 1 1

- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=1151641&dopt=Abstract .

- <http://www.soyonlineservice.co.nz/07abstract.htm> . Scientific Abstracts

1975 **“Potential value of plants as sources of new antifertility agents II,”** – [N. R. Farnsworth, A. S. Bingell, G. A. Cordell, and others., J of Pharm Sci. 1975 May, 64 \(5\) 717-754.](#)

— PIP: Literature on the phytochemical study of plant estrogens is reviewed. **The coumestans reportedly have a greater degree of estrogenic activity than the isoflavones.** Diethylstilbestrol is the prototype of the synthetic stilbene derivatives. Of the natural stilbenes, only rhaponticin possesses estrogenic activity, though this is not firmly established. 6, 4'-dihydroxyflavone has also been reported to have estrogenic activity.

— Coumestrol and genistein have been shown to compete with 17beta-estradiol for binding sites in the uterus of young rabbits. Vinblastine, demecolene, and podophyllotoxin possess known cytotoxic, antifertility properties. Naturally occurring steroid estrogens, estrogenic isoflavins, coumestans, plants with reported estrogenic activity, and cytotoxic agents with antifertility properties are listed along with their plant sources.

PMID: 1151641 [PubMed - indexed for MEDLINE]

Quotes

— A number of estrogenic sterols have been reported as being derived from higher plants.

— If one inspects the structures of the **estrogenic sterols, isoflavones, and coumestans**, one can see a striking similarity of the skeletal structures of these compounds with the structure of the synthetic estrogen diethylstilbestrol.

— The order or degree of the biological activity of each of the three main groups of natural estrogens has been investigated.

— The sterol estrogens were found to be of the highest order of activity followed by the coumestrols and then the isoflavones.

*** *** *** *** ***

; 1; The study concluded that ... “*If one inspects the structures of the estrogenic sterols, one can see a striking similarity of the skeletal structures of these compounds with the structure of the synthetic estrogen, diethylstilbestrol*”.

at ... <http://www.soyonlineservice.co.nz/04soy&DES.htm> ,

; 1; “... (Diethylstilbestrol is a synthetic estrogen that caused “cancerous” birth defects in the daughters of women who took it while pregnant. The defects did not become apparent until those young women reached maturity. Subsequent events showed that male reproductive function was also impaired.

--- “... DES is so potent and harmful that it is banned as a residue of growth promoters in beef liver at one part - in - two billion ...”

The sterol estrogens were found to be of the highest order of estrogenic activity, followed by the coumestrols and then the isoflavones.

See graph illustration on SOS website page. ; 1 ;

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Phytosterols

The new breed of wonder-chemicals ?.

. <http://www.soyonlineservice.co.nz/02phytosterols.htm> .

Continued

See graph illustration on Soy Online Service website page. For instance, researchers at Duke University Division of Reproductive Endocrinology and Infertility found “Beta-sitosterol may compete with cholesterol and interfere with the synthesis of gonadal steroid hormones...and may create a neonatal environment with low endogenous levels of estrogens....The hormonal environment during the critical period exerts permanent organisational effects that may affect the behaviour in adult animals.

1995 “The effect of neonatal exposure to diethylstilbestrol, coumestrol and B-sitosterol on pituitary responsiveness and sexually dimorphic nucleus volume in the castrated adult rat,” – B. Register, M. A. Bethel, N. Thompson, and others., Jr. Proc Soc Exp Biol Med 1995 Jan;208(1):72-7

— These data show that exposure to environmental estrogens early in development alters both postpubertal pituitary responses to GnRH and basal LH secretion in females...

— Full Abstract And Quotes Here

— The above rodent study has been confirmed by Canadian researchers.

1995 “The phytoestrogen B-sitosterol alters the reproductive endocrine status of goldfish,” – D. L.

MacLatchy, D. J. Van Der Kraak, *Toxicology and Applied Pharmacology* 1995;134, 305-312.

— These results suggest that beta-sitosterol reduces the gonadal steroid biosynthetic capacity through effects on cholesterol availability or the activity of the side chain cleavage enzyme P450SCC.

Full Abstract Here

The European Commission has reported that an application by Archer Daniels Midland Corp to add phytosterols to such consumables as low fat milk, yoghurt, and health food bars could easily cause consumers to be exposed to levels more than twice the safe doses.

The report is here >>> >>... http://europa.eu.int/comm/food/fs/sc/scf/out192_en.pdf and the findings are at page 5. A new article from "Wise Traditions" the magazine of Weston A Price Foundation.

[.http://216.239.39.104/search?q=cache:ZsXU6SIVqaYJ:www.thincs.org/links.htm+wise+traditions+magazine+of+Weston+A+price+foundation+plant+sterols&hl=en&ie=UTF-8](http://216.239.39.104/search?q=cache:ZsXU6SIVqaYJ:www.thincs.org/links.htm+wise+traditions+magazine+of+Weston+A+price+foundation+plant+sterols&hl=en&ie=UTF-8) .

A new article from " <http://bmj.bmjournals.com/cgi/eletters/320/7238/861>

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Phytosterols

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[. http://www.soyonlineservice.co.nz/02phytosterols.htm](http://www.soyonlineservice.co.nz/02phytosterols.htm) .

Continued

TOXINS ON YOUR TOAST

By Valerie James

; 1 ;

The latest buzzword in the food industry is "nutraceuticals," plant-derived substances added to foods to make them "healthier." This is the food industry's solution to the problem of sluggish growth and declining profit margins on processed foods. There's more money in pills containing "phytonutrients" like indoles or isothiocyanates derived from broccoli, than in broccoli itself; and more profit from "functional foods" like "energy bars" with added soy isoflavones touted as a panacea for everything from menopausal symptoms to osteoporosis, than from old-fashioned candy bars.

Recently the FDA allowed the industry the right to add plant-derived sterols to such pedestrian products as vegetable oil spreads, salad dressings, health drinks, health bars and yoghurt-type products. These phyto-sterols include beta-sitosterol, campesterol and stigmasterol, all estrogen-like compounds derived mostly from wood-pulp effluent. The products will carry a health label claiming cholesterol-lowering properties, thanks to FDA largesse, and consumers will pay highly inflated prices for

the privilege of spreading these known toxins on their morning toast.

"We really don't know how phyto-estrogens act in the human body".

Dr Saffron Whitehead of St Georges Hospital Medical School, London

; 1 ;

ADVERTISING BLITZ

"My father died young," says an earnest-looking man on a television commercial. "When I found out I had a cholesterol problem, I just thought, 'Well, I'm not waiting around for it to happen to me.' So I started using Flora ProActiv margarine which actually reduced my cholesterol absorption. With Flora ProActiv, I'm down from 6.5 to 4.5 in just three weeks. Now I can do anything I've been wanting to do for years."

Not all consumers watch television. In fact, those consumers most concerned about their health don't watch much television at all. They are likely to get their nutrition information from newspapers and magazines. Nutrition writers have been quick to comply with their advertisers' wishes with articles on the virtues of functional foods. And the National Heart, Lung and Blood Institute's "New Guidelines" for preventing heart disease recommend the consumption of cholesterol-lowering margarines and spreads providing 2 grams of sterols or stanols per day.

The cash registers are ringing up the dollars; cholesterol-lowering phytosterols are already big business. Recently, the pharmaceutical giant Novartis sold the licence for its phytosterol product, Reducol, to Forbes Meditech, Inc. of Canada for US \$4 million despite the fact that these sterols are not even legal additives in Canada. Predictably, Forbes Meditech is now lobbying the Canadian government for permission to sell to Canadians, and on their website they say they are confident that they can soon build significant sales and can establish a wide and extensive customer base for these products.

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Phytosterols

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. <http://www.soyonlineservice.co.nz/02phytosterols.htm> .

Continued

TOXINS ON YOUR TOAST

By Valerie James

Continued

CONSUMER BEWARE

Just what are phytosterols ??. They are hormone-like compounds from plants, and they are present in large numbers in the effluent from the wood pulp business. Canadian, UK and Scandinavian scientists have shown that water contaminated with phytosterols causes endocrine damage to fish downstream from wood-pulp plants. The fish become "sex-inverted" and hermaphroditic; fertility is also reduced.(1,2,3,4.)

Phytosterols are a problem for wood pulp processors because they are difficult to remove. For a time, in the 1960s, they were able to cash in on them, as they were used as a basis for commercial human sex hormones.(5). That use became obsolete as even cheaper sources of waste products, derived from lanolin in sheep's wool became available! Phytosterols also have the classic estrogenic effect of stimulating the growth of uterine tissues, which may explain their folk-loric use as abortifacients.(6).

There is a remarkable similarity between the chemical structure of plant sterols and Diethylstilbestrol, the synthetic hormone associated with reproductive cancers in women.(7). This is one reason scientists seriously considered them as natural anti-fertility agents in place of the modern synthetic contraceptive pill. This potential usage was abandoned when phytosterols were found to have similarly harmful side-effects.

The National Research Council of the US Academy of Sciences has warned about the potential of hormone exposure to humans from water downstream from paper-mill effluent outflows (8), noting that these compounds can induce feminization in male fish and cause the proliferation of breast cancer cells.(9). Human studies have shown that phytosterols are also osteolytic (10,11,12,13), meaning that they cause a breakdown of the organic bone matrix, and the subsequent leaching of the inorganic bone fraction (14). This can lead to a life-threatening condition called hypercalcemia, where the plasma level of calcium soars, an emergency situation that occurs in about 40 percent of cancer patients.(11,15).

Hypercalcemia manifests initially as anorexia, nausea, vomiting and abdominal pain. It is therefore no coincidence that Cytellin, a now-obsolete phytosterol-based cholesterol-lowering drug, caused similar adverse effects, listed in pharmaceutical texts as "anorexia, abdominal cramps, and diarrhea".(16). In its more severe manifestation, hypercalcemia results in emotional instability, confusion, delirium, psychosis, stupor and coma, muscle weakness, cardiac arrhythmias and acute renal failure.

All authorities, including the FDA, should publicly and conspicuously warn consumers that phytosterol-containing products are unsuitable for pregnant or breastfeeding women, and for infants and children. This is because they accumulate in the fetus by transplacental transfer.(17,18). As they are fat-soluble, they can be found in breastmilk. Studies have shown that phyto-sterols have adverse effects in ovarian structures, and also alter follicular development(19); they work synergistically with the natural hormone estradiol to promote anabolic effects(20), and to alter the sexual balance of the neonate's brain. It is an accepted axiom that "the hormonal environment during the critical period exerts permanent organizational effects that may affect the behavior in adult animals"(21).

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Phytosterols

The new breed of wonder-chemicals ?.

. <http://www.soyonlineservice.co.nz/02phytosterols.htm> .

Continued

TOXINS ON YOUR TOAST

By Valerie James

Continued

A recent Editorial in the British Medical Journal has re-examined the issue of "living in a sea of estrogens," and suggests "that the apparent increases in the incidence of certain reproductive conditions may be due to exposure to chemicals in the environment"(22). There is agreement that the incidence of testicular and prostate cancer is increasing, and that semen quality is probably worsening in some regions of the world. **The increasing incidence of cryptorchidism & hypospadias in men and endometriosis and polycystic ovaries in women is further evidence of the damaging effects of environmental estrogens. Plant sterols added to margarines will add to this load.**

The effect of phytosterols on infants will be accentuated because they accumulate in blood and tissues at a rate three- to fivefold above that observed in adults(18). Once absorbed, they can affect not only the hormonal environment, but can also be deposited in aortic tissues of both infants and adults, resulting in atherosclerotic lesions(17).

Of course, industry interests would rather we do not know about all this. Stan Correy of the Australian Broadcasting Company (ABC) comments, "the days of an apple-a-day to keep the doctor away are over, because the food companies have to move on from apples to make new profits. To give credibility to these new products, they use scientists, doctors and people from the legal professions to speak for them."

NEW ZEALAND FIGHTS BACK

Not all government officials have bowed to the interests of the food conglomerates. Dr Mark Lawrence of Australia's Deakin University, formerly head of the Australian Food Standards Committee, resigned from his post last September largely because of his concerns about the aggressive targeting of public officials and consumers by functional food promotions. "The Food Standards Committee is not able to be vigilant enough because it is dominated by food industry representatives," he said. "I found the situation untenable. I and the other public health nutritionists could not feel confident that public health was going to take precedence over other dimensions." Later, on Radio New Zealand, he explained that the Food Standards Committee was basically dominated by food industry interests, and that they were relaxing any kind of control over functional foods.

Last September, ABC devoted a full program to "The Twilight Zone: Medicalizing the Food Supply," a program about the marketing of functional foods. Interviewer Stan Correy reported that the traditional food industry has "hit the proverbial brick wall. It simply cannot make extra profits by just selling plain grains, veggies and fruit; it has to find new ways to tempt consumers to their products. It is no longer credible for the food to be just delicious, especially if it is full of fat and bad things. There is nowhere to go but to make it full of supposedly good things. Think about it: fish oil in ice cream: it increases your memory; Brocco-bites, that's broccoli in a pill; wood chips or cholesterol-lowering plant phytosterols in margarine; all part of the wonderful 'healthy' world of functional food and nutraceuticals." And of corporate profit motivation.

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"Soy - Abundance Of Health Hazards" ... <http://www.mayanmajix.com/soy01.html>

Phytosterols
The new breed of wonder-chemicals ?.
<http://www.soyonlineservice.co.nz/02phytosterols.htm> .

Continued

TOXINS ON YOUR TOAST **By Valerie James**

Continued

Negative media coverage of functional foods spurred us to fight the introduction of sterol-added foods in New Zealand. We mounted an intense campaign of letter-writing and calls to the Australia/New Zealand Food Authority (ANZFA). As a result, **ANZFA refused to allow a number of sterol-added foods to stay on the market, and permitted the continued sale of sterol-added margarines only on the condition that they carry mandatory warning statements ... at ...**

... <http://www.soyonlineservice.co.nz/02phytosterols.htm> . Their lengthy directive was condensed into a strong press release reported in **Australian and New Zealand media** at ...

... <http://www.soyonlineservice.co.nz/BigBull/Big%20Ugly%20Bull.htm> .

; 1 ; ... In issuing the warning, Ian Lindermayer, ANZFA director, stated, "... we are certainly under those commercial pressures, that is true, but we have a statutory duty that we take very seriously, to put the protection of public health and safety at the very top of our priorities."

The ANZFA action sent shock-waves not only through the Australasian food industries, but around the world, because food companies hype a positive decision in one country to other national food safety organizations. The industry initiated an extensive media campaign, lobbied government officials, and even made a formal complaint about ANZFA to the Australian Federal Senate. Despite industry efforts, ANZFA's directive has become law in Australia and New Zealand, but because of the industry pressure the directive is only being partially enforced. The forbidden foods have gone from the market, but the industry has not conformed to the warning labels and is lobbying for the requirement to be waived.

Amazingly, the industry has touted the ANZFA directive around the world as a "success." Unilever launched an advertising blitz in the UK about the "big news" of the approval to sell its ProActiv product. However, this then got Unilever into trouble at the UK's Advertising Standards Authority. In a bitter dispute about which margarine lowers the most cholesterol, Unilever and Johnson & Johnson, another multi-national, complained about each other's advertising. The UK Advertising Standards authority ruled against them both, stating that both corporations had exaggerated how much their margarines could lower cholesterol

In contrast with this international activity, the US FDA, a law unto itself, has not limited the sale and promotion of these "tumor sterols." The FDA has a unique procedure. It was designed by industry, which lobbied for its substitution in place of normal GRAS requirements. It is called "self-determination," meaning that a manufacturer provides its own evaluation of the "safety" of its product. The FDA then advertises in the Federal Register, which is not really a widely read document. If no citizen objects, the FDA rubber stamps its approval and a multi-million-dollar win is showered on the applicant. This then becomes the benchmark for every other promotion of similar products. The US Center for Food Safety and Applied Nutrition (CF-SAN) does not investigate for itself, and there rarely is an objection because the ultimate consumer does not have a clue about the procedure. The Weston A. Price Foundation joined us in writing to the FDA to protest the inclusion of plant-sterol toxins in the food supply, but the approval was granted anyway. The file reference for the phytosterol approval is GRN 000061.

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Continued

TOXINS ON YOUR TOAST

By Valerie James

Continued

DANGEROUS AND ALSO USELESS

In 1990, Dr Petr Skrabanek of Dublin University commented in the prestigious medical journal The Lancet on the dogma that cholesterol reduction could extend life(23). **He wrote: "There is not a scrap of evidence that it is capable of changing the risk of dying from coronary heart disease, but there is reasonable evidence that it does not. The oldest consensus among the vendors of health, and other traders along the valley of the shadow of death, is that people want to be deceived and should be pleased accordingly.** In the past, mountebanks-(fake, fraud, quacks), were distinguishable from their more respectable colleagues at least in appearance and manners, if not by the effectiveness of their cures. Nowadays, the convergence of medicine and its 'alternatives' is an ominous foretaste." Dr Skrabanek recommends that "people should temper their faith in experts-particularly when they see them coming in droves-with their own informed scepticism."

The food industry believes it has found the Midas touch of turning dross into gold, but for the trusting consumer sterol-added

products are nothing but fools' gold.

*** As of May 1 2002, neither Unilever nor Goodman Fielder, the companies selling these products in New Zealand and Australia, has complied with this health directive, and no warning labels are visible on LOGICOL or FLORA PROACTIV. "Your health or their wealth."**

More information on our

Big Ugly Bull page at ... <http://www.soyonlineservice.co.nz/08biguglybull.htm> .

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .
Pet Food, farm animal foods

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The new breed of wonder-chemicals ?.

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Continued

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Soy Online Service is **appalled and horrified** that Coca Cola would target children with such compounds for profit. We are even more **appalled** that this is occurring in the same year that the **“European Commission”** experts calculated that daily exposures could be way beyond twice a safe amount ... Scientific Committee on Food, Apr. 7, 2003 ... http://europa.eu.int/comm/food/fs/sc/scf/out192_en.pdf

But, we all know that the earth and money is the center of the universe, and that the sun along with the soy industry and all of its supporters revolves around the earth ?? . Astronomer, **Galileo 1564 – 1642**.

"... Money, not truth, drives science – even at the expense of the health and lives of the nation's citizens ...", by Dr. Phyllis Mullenix, Ph.D., formerly of Harvard University, Dept. of Neuropathology and Psychiatry, See ... <http://www.whale.to/b/fl2.html> , and http://www.lef.org/fda-museum/8_water/intarticles/fluoride-01-98.html ... **Did Government Approve Citizens as Toxic Waste Sites ??, Are We Being Poisoned ?? ... and it is no mistake !!.**

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .
Pet Food, farm animal foods

Also see pages 98 and 100 - 115 and 142 - 144.

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Continued

REFERENCES: continued ...

... FURTHER READING ...

Plant Sterols in Food

http://europa.eu.int/comm/food/fs/sc/scf/out192_en.pdf

The European Commission has reported that an application by Archer Daniels Midland Corp to add phytosterols to such consumables as low fat milk, yoghurt, and health food bars could easily cause consumers to be exposed to levels more than twice the safe doses.

The report is here http://europa.eu.int/comm/food/fs/sc/scf/out192_en.pdf ... the findings are at page 5

Sections

3.4 Nutritional and toxicological information

The applicant refers to the scientific literature and previous evaluations of phytosterols. **New nutritional and toxicological information has not been provided.**

4. Comment

The vegetable oil-derived phytosterol mixtures which are the subject of the present application **do not comply fully** with the phytosterol/phytostanol profile of up to ... 80 % B-sitosterol ... 15 % B-sitostanol ... 40 % campesterol ... 5 % campestanol ... 30 % stigmasterol ... 3 % brassicasterol ... and 3% other phytosterols ... considered acceptable in general by the Committee (SCF, 2003). The amounts of the major sterols B-sitosterol, campesterol, and stigmasterol as well as of B-sitostanol and campestanol are in accordance with the accepted profile. The phytosterol mixtures can contain, however, up to 6 % brassicasterol, 4 % delta 5-avenasterol and 5 % other sterols, resulting in a content higher than 3 % for brassicasterol and 3 % for total other phytoesters. As brassicasterol and other phyosterol esters of fatty acids were only minor constituents of the phytosterol esters tested in the relevant toxicological studies (SCF, 2003) the amounts must not exceed 3 %.

The applicant has not made recommendations regarding the intake levels of phytoesterol containing foodstuffs but relies on the assumption that normal consumption of the products will provide the amounts necessary for plasma reduction and will not lead to intakes above acceptable levels. **However, the applicant's estimate of the phytosterol intake**, which is based on the production data of the respective foodstuffs in eight Member States (Eurostat data) and on the consumption data from one Member State (Dutch data), **does not reflect the real consumption behaviour of an individual**. For example, in the case of yoghurt type products containing 3.3 sterols, a daily consumption of 30 or 39 g/person has been assumed, providing 1.0 or 1.3 g sterols/day, respectively. As portion sizes for such products are usually 100 or 150 g, much higher sterol intakes of 3.3 or 5.0 g, respectively, can result if only one portion of a yoghurt type product is consumed per day. In the case that more than one product is consumed, the actual sterol intake can even be higher. For example, the sterol intake from 150 g yoghurt and 25 g fat spread would amount to about 7 g/day.

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<http://www.soyonlineservice.co.nz/02phytosterols.htm> .

Continued

REFERENCES: continued ...

... FURTHER READING ...

Plant Sterols in Food

Continued

The European Commission Report

5. Conclusions

The committee has previously determined that the use of "phytosterols" is safe **provided** that the sterol-containing foodstuffs are not consumed in amounts resulting in total phytosterol intakes exceeding 3 g/day (SCF, 2002; SCF, 2003). In principle, this can be applied also to the phytosterol and phytosterol ester mixtures, which are the subject of the present application.

However, the mixtures can only be acceptable if the composition complies with the phytoesterol/phytostanol profile accepted by the Committee (SCF, 2003). Therefore, the mixture must not contain more than 3 % brassicasterol and 3 % total other sterols (in addition to B-sitosterol, campesterol, stigmasterol, B-sitostanol and campestanol).

The Committee reiterates the previous recommendation that "...appropriate risk management measures should be developed to minimize the likelihood of a daily intake exceeding 3 g phytosterols/phytosteranols, in particular from the cumulative intakes of different types of products (SCF, 2002; SCF, 2003)...". The Committee notes that the Commission is working with Member States to develop such risk management measures.

In addition, the Committee wishes to draw the attention to the point that in this application it is intended to add sterols to beverages for the first time. With regard to the sterol intake from such products, it should be noted that portion sizes are difficult to control.

The Committee also reiterates the recommendations:

- A.) that the small number of people with inborn error of phytoesterol metabolism (phytosterolaemia) should be made aware of the presence of higher levels of phytosterols in the product,
- B.) that patients on cholesterol-lowering medication should only consume the products under medical supervision,
- C.) that the potential B-carotene lowering effect should be communicated to the consumer together with appropriate dietary advice regarding the regular consumption of fruits and vegetables.

The Committee notes again, that the consequences of a persistently decreased blood concentration of B-carotene on human health are largely unknown and that situations where Vitamin A requirements are greater than normal as in pregnancy, lactation or infancy may be of concern (SCF, 2002; SCF, 2003).

Soy Online Service Home ... <http://www.soyonlineservice.co.nz/index.htm> .

DNA and Immune System damage ... <http://www.soyonlineservice.co.nz/04immunefunction.htm> .

Hot News ... Just Off The Press ... <http://www.soyonlineservice.co.nz/02hotoffthepress.htm> .

Weston A. Price Foundation ... <http://www.westonaprice.org/> .

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95.x "... Imagine having drugs added to our food which have been scientifically proven, for nearly 25 years, to be carcinogenic and to also cause DNA and chromosome damage in both humans and in animals. Also, imagine these drugs being prescribed and administered through our food supply without the individual's prior knowledge or understanding of these dangers, or prior consent to be exposed to these dangers. Now, imagine the entire population in many countries around the world, including ours, consuming these foods ... with no medical way of tracking dosage, individual reactions, or harmful side-effects, and, without any concern for some people's increased vulnerability from being exposed to these drugs, such as cancer patients. Does all this sound a little crazy ??. Well, I'll tell you, this is exactly what is happening to us when Soy is added to our food supply. Soy contains the "naturally toxic" ingredients genistein and daidzein which have been scientifically documented, proven, to be carcinogenic, cause DNA and chromosome damage, and to cause cancer cells to grow. Soy can also cause non-cancerous tumors to turn cancerous ...". Soy does all this and more, as these are only some of the many health hazards associated with eating soy. **To protect your health and your families health, be sure to read the ingredient labels on all of the foods you buy. Also, be very, very careful about eating in "Restaurants" and in "Hospitals", as they do not list the ingredients in their foods. Vegetable oil is no longer vegetable oil ... it's either "Soy", or "Canola", or both.**

P.S. The above paragraph was adapted and modified from the 1 st paragraph in this weeks, Sept 10, 2003, **Dr. Joseph Mercola's** newsletter article called ... "**What You Never Expected to Hear About Water Fluoridation,**" at ... http://www.mercola.com/2003/sep/10/water_fluoridation.htm,

"... Imagine a drug being prescribed to the entire U.S.A. population with no consent and no way to track dosage or individual reactions, and without concern for some people's increased vulnerability to the drug. It sounds crazy, but that is exactly what is happening in the United States with water fluoridation ...".

The End ??.

There is no END to Truth !!.

“The Truth Marches On” ... Emile Zola, ... and “The Dreyfus Affair” ... in France, 1894 - 1898 ... and author of many good books, at... <http://www.georgetown.edu/faculty/guieuj/libproj.htm> and http://www.dreyfuscase.com/html/dreyfus_affair.html , others

“Ethics” ... n. pl., 1.) The Principles of morality, including both the science of the good and the science of right. (Also see pages 100 - 4)

Can you do the “right thing”, even if it means challenging the authority figures and rules of the day, **and then** do it again, and again and again ?? . Are you strong enough, and do you **have the “Courage”** to follow Socrates example of what ...

Socrates (469-399 BC) said about Courage ... “Examine your thoughts, statements and actions by pursuing their implications, on the assumption that if they are true, they would not lead to false consequences,” **and about ...**

“Humanitarian Action” ... “Choose wisdom so that society is incapable of doing wrong.”

Einstein Said, “... The world is a dangerous place to live in, not because of the people who are evil, but because of the people who don’t do anything about it ...”.

Neapolitan said, “... Morality is on the side of those with the heaviest artillery !! ...”. Well, just look what happened to Neapolitan, to The Roman Empire and even to ancient Egypt. Or is it, “... them that has the most gold makes the rules ?? ...”. **On the other hand**, has it really been all along about finding ways to use “might for right”. What a novel and old-fashioned idea.

Do you have the “Courage” to play your part in putting an end to this type of activity in our society described in the sentence below?? ...

“... Money, not truth, drives science - even at the expense of the health and lives of the nation’s citizens ...”, by Dr. Phyllis Mullenix, Ph.D., formerly of Harvard University, Dept. of Neuropathology and Psychiatry, See ... <http://www.whale.to/b/fl2.html> ... and ... http://www.lef.org/fda-museum/8_water/intarticles/fluoride-01-98.html ... **Did Governments Approve Citizens as Toxic Waste Sites ??, Are We Being Poisoned ?? ... and it is no mistake !!.**

If you do, then you have been able to touch the **! Heart** and **! Love** of **God** with your **! Heart**, with your thoughts, and with what you have said and done with your life on earth ... this time ... and then each time hereafter. ... / 143

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Written In Memory of Princess Diana and Mother Teresa,
Sept. 1997

The ! Heart Has No Reasons, It Knows Without Reasoning.

When all is said and done, when you come to the end of your life, I don't want to know what the world said or what your worldly mind has learned to define as successful, or what rules or customs you were brought up with and felt you had to follow in order to justify what you did or didn't do to others or for others. What I really want to know is, Do you know how to really not know ?? . Can you realize your own ignorance while you profess and assert your worldly knowledge to others ?? . I want to know if you have learned what it means to think with and through your **Heart**, to know the difference between looking with your eyes and seeing with and through your **Heart**, and to not only be able to hear with your ears but to also be able to listen with and through your **Heart**. Have you learned and experienced the difference between feeling with your hands and feeling with and through your **Heart** ?? . Are you able to touch others **Hearts** with your **Heart** ?? .

I don't want to know what facts you have learned throughout your life on earth, but I do want to know if you know what it means by the saying, "The **! Heart** has no reasons, it knows without reasoning". Have you learned how to know with and through your **! Heart** ... **FIRST**, and then act

accordingly ?? . I want to know if you can do the "Right Thing", even if it means challenging the authority figures and rules of the day, and then do it again, and again ?? . What I really want to know is, are you strong enough, and do you have the courage to follow Socrates, (469 - 399 BC), example of "... Examining your thoughts, statements and actions by pursuing their implications, on the assumption that if they are true, they would not lead to false consequences ..." ?? . I want to know that after you have struggled to climb, to ascend, to the top of the mountain, will you willingly and Joyfully and ! Lovingly come back down to be with and to help those who have not climbed the mountain ?? . If you can, then you have been able to touch the ! Heart and ! Love of God with your ! Heart, with your thoughts, and with what you have said and done with your life on earth ... this time ... and then each time hereafter.

Anonymous

P.S. The ! Heart has no reasons, it knows without reasoning, because the ! Heart understands and knows in ways that reason does not understand and can not verify . . . so, the ! Heart has it reasons that reason does not know.

Einstein Said, "... The world is a dangerous place to live in, not because of the people who are evil, but because of the people who don't do anything about it ...".

"Ethics" ... n. pl., 1.) The Principles of morality, including both the science of the good and the science of right.

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The Water Bearer

A water bearer in China had two large pots, each hung on the ends of a pole which he carried across his neck. One of the pots had a crack in it while the other pot was perfect and always delivered a full portion of water. At the end of the long walk from the stream to the house, the cracked pot always arrived only half full.

For a full 2 years this went on daily, with the bearer delivering only one and a half pots of water in his house. Of course, the perfect post was proud of its accomplishments, for which it was made. But the poor cracked pot was ashamed of its own imperfections, and miserable that it was able to accomplish only half of what it had been made to do.

After 2 years of what was perceived to be bitter failure, the cracked pot spoke to the water bearer one day by the stream. "I am ashamed of myself,

because this crack in my side caused water to leak out all the way back to your house.

The bearer said to the pot, “Did you notice that there are flowers on your side of the path, but not on the other pot’s side ???. That’s because I have always known about your flaw, so I planted flower seeds on your side of the path, and every day while we walk back, you water them. For 2 years, I have been able to pick these beautiful flowers to decorate the table. Without you being just the way you are, there would not be these beauty to grace the house.”

Each of us has our own unique flaw. But it’s the cracks and flaws we each have that make our lives together so very interesting and rewarding.

Margins for main Soy Research Paper,
Pages 1 to 144 , and to 168

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| Top ... <u>0.40 inches</u> | Base Font Type ... Times New Roman and Arial |
| Bottom ... <u>0.30 inches</u> | Base Font Size ... (9, 10 , 11, 12, 14, 16, 18, 20, 22,24, 28, 30, 32, 36) |
| Left ... <u>0.50 inches</u> | Justification ... Full |
| Right ... <u>0.25 inches</u> | ... / 145 |

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Dangers of Dietary Isoflavones
at levels above those found in traditional diets
The Risks Of Abandoning “The Precautionary Principle”
by Soy Online Service ... <http://www.soyonlineservice.co.nz/>
“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

Ethics and Soy

Please refer to page 5, 12, 18, 98-105, 109, 113, 114, 119, 143-152
of this Soy Research Paper

Putting soy in our food supply, medications, vitamins and mineral supplements, and in the food of our pets and farm animals is **force feeding** a poisonous ingredient on to the public, and our pets and farm animals without consent.

Very much the same type of reasoning and logic can be use for not putting soy in our food supply as is used in not putting fluoride in our food supply.

In this research paper, it has been established that putting soy and soy ingredients in our food supply is **not legal**.

It has been established that soy estrogens are a drug.

It has been established that soy is proven to be and is classified scientifically as a **Topoisomerase II-poison** .

Medical **ethics** unequivocally demands that the wishes of the individual must take precedence over actions imposed by the state, medical system, or corporation, unless there is a valid and wider public health concern.

Putting soy in our food supply is forcing a person ... without their consent ... to take a medication ... as well as ... forcing a person to take a know and proven poison with very serious and sometimes deadly health hazards ... It is mass poisoning.

Putting soy in our food supply is illegal mass medication without consent. It is an abuse of our human rights and also breaches Human Rights legislation, Putting soy in our food forces the public to consume an unlicensed substance and a substance that has been tested and proven to cause over 24 very, very serious and sometimes deadly adverse health effects including cancer and heart disease and death.

Putting soy in our food supply does not allow a person to avoid it if they have a medical condition that soy will make worse.

Putting soy in our food supply removes people's fundamental Human Right to refuse medication, removes freedom of choice.

The reality is that our food supply is being poisoned with a poisonous soy ingredients that cause over 24 very serious and sometimes deadly health hazards.

It has been proven that there is no real proven benefit to eat soy. There is only one real reason for putting soy and soy ingredients in our food supply and that is ... for the express purpose and the intent to harm others. This is just like the intent to harm when someone puts a razor blade, pin, etc in a apple or candy at Halloween. The intent to harm. With all the alternatives available for the reasons that are given to put soy and soy ingredients in our food supply, one can easily and understand that there is no other reason but to want to harm large and mass amounts of people, by people with bad motives, including putting profits above the health and safety of others.

Soy robs us of our freedom to choose & violates the ... The Code of Medical Ethics -- set out in the Council of Europe's Convention on Human Rights and Biomedicine ... Codex Soy Food Safety Standards ... Precautionary Principle ... FDA GRAS ... "Declaration of Helsinki" ... "Nuremberg Code" ... Hippocratic Oath ... First Do No Harm.

The ethical validity of the policy of putting soy ingredients in our food supply does not stand up to scrutiny relative to the Nuremberg Code and other codes of medical ethics, including the Council of Europe's Biomedical Convention of 1999. The police power of the State has been used in the United States to override health concerns, with the support of the courts, which have given deference to health authorities.

Continued ...

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Ethics and Soy
Please refer to page 5, 98-103, 113, 114, 119
of this Soy Research Paper
Continued

Soy And The Ethics Of Medical Research ... Clearly, the investigation of the effects of soy on large populations must be regarded as medical research, since their full health implications are unclear even as their efficacy in terms of their primary objective is coming under increasing challenge.

Medical Malpractice Intervention Without Consent ... In the case of any state medical intervention, each person exposed is regarded as a patient, and must be accorded his or her full rights as such. Failure to do so constitutes medical malpractice. Yet there has been no example of fluoridation of the public water supply in which every member of the public living in, or visiting, a target area has been informed, directly and individually, by the state or by its medical agents at any level, of the risks they may personally face from any of the known adverse effects of water fluoridation.

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Page 5 of this Soy Research Paper ...

The Soy industry has “applied twice” and was “turned down twice(1979, 1999)” on both of its applications for “GRAS (Generally Recognized As Safe)” status for Soy Protein **BECAUSE of Soy’s carcinogenic properties; also Soy **has not been given** “Pre-market Approval” for its use in our food. It is not even legal to add it to our food. **In addition**, Soy is in breach of, in violation of - “WHO/CODEX - Food Safety Standards.” **P.S. To add insult to injury**, Soy fails the **1958 “Delaney Amendment”** to the USA’s FDA Reg.’s which prohibits the use of any food additive if it is found to cause cancer in any animal species or in man, at any dose level ... <http://www.pcdf.org/meadows/delaney.htm> . **Add these 6 strikes against the Soy industry to the growing list of ignored side-effects on page 1., and you have millions of crime scenes.** In the US FDA’s “Poisonous Plant Database” ... <http://vm.cfsan.fda.gov/~djw/pltx.cgi?QUERY=SOY> ... *Soy, and (Flax and Linseed), and (Canola, and Rapeseed) are all listed as “poisonous plants”*, and the FDA recommends that if you are injured by them, to **contact your local “Poison Control Center”** in your area, (at ... [http://www.aapcc.org/.](http://www.aapcc.org/)), or call 911. Soy acts like a **fertilizer** and fertilizes, feeds, cancer cells to help them grow.**

* * *
* * *

References :

... <http://www.calderdale-online.org/html/community/fluoride.html> ... **Community Action ... Support the campaign to stop your water supply being illegally poisoned with fluoride.**

... <http://www.rvi.net/~fluoride/000038.htm> ... **Fluorides and Fluoridation ... Fluoridation: A Violation of Medical Ethics and Human Rights ...** by Douglas Cross and Robert J. Carton, PhD ... **International Journal of Occupational Health 2003;9:24-29**

... <http://www.soyonlineservice.co.nz/> ... **Soy Online Service**

... http://www.westonaprice.org/splash_2.htm ... **Weston A. Price Foundation**

... <http://www.thewholesoystory.com/index.php> ... **The Whole Soy Story, 2005, by Kaayla T. Daniel, PhD, CCN**

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“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

HOT - HOT ... SUPER RED HOT **An FDA Historical Event**

(3 Parts) - Soy Industry badly burned
when confronted with the ignored and still denied scientific PROOF
The Hidden TRUTH
“Soy Causes Cancer !!,”
and many other very, very serious health problems!!.

On Sept. 30, 2005, the Soy Industry backs down ... withdraws its Feb. 2004 request asking the U.S. FDA to make a **Fraudulent and False Health Claim** that says ... **Soy Prevents Cancer**

Red - Red Hot ... Part 3 of 3.

----- Original Message -----

From: Valerie & Richard James ... **Soy Online Service** ... <http://www.soyonlineservice.co.nz/> .

To: wholenutritionist@earthlink.net ... **The Whole Soy Story** ... <http://www.thewholesoystory.com/index.php> .

Cc: [Mike Fitzpatrick](#) ; [Gerald Hernesmaa](#)

Sent: Tuesday, October 04, 2005 1:01 AM

Subject: Re: For our website "RED HOT": Solae withdraws soy/cancer petition Also link to "Cancer" "Male Health", and "Your Baby"

Hi Kaayla.

Yes, they will be back in a new disguise. Like the time we got ADM outed (or should I say "withdrawn") on the isoflavone GRN 00001 application, Cargill then popped up like a fairground dummy and slipped Novacrap past us all.

Cheers Dick

----- Original Message -----

From: [Kaayla Daniel](#) ... **The Whole Soy Story** ... <http://www.thewholesoystory.com/index.php> .

To: [Valerie & Richard James](#)

Sent: Tuesday, October 04, 2005 5:31 PM

Subject: Re: For our website "RED HOT": Solae withdraws soy/cancer petition Also link to "Cancer" "Male Health", and "Your Baby"

It's a brilliant corporate spin. It's good news for us, of course, that we all had an impact and that we stopped this fraudulent health claim, but Solae's retreat will effectively prevent any media attention.

We, of course, are claiming victory -- I have big New York PR Agency set to run tomorrow with "[Dr. Daniel vs. SoyLiath: Soy Industry Giant Withdraws from FDA Health Claim Battle.](#)" But the bottom line is - that it has far less news value than the FDA turning them down

I won't be on TV, we won't sell any extra books -- and Solae will carry on business as usual.

Kaayla

Part 3 ... continued

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Red - Red Hot ... Part 3 of 3.

... continued

----- Original Message -----

From: [Valerie & Richard James](#) ... **Soy Online Service** ... <http://www.soyonlineservice.co.nz/> .

To: wholenutritionist@earthlink.net ... **The Whole Soy Story** ... <http://www.thewholesoystory.com/index.php> .

Sent: Tuesday, October 04, 2005

The corporate spin is that the FDA changed the rules.

The truth is that the Dupont/Bunge joint venture named Solae filed a fraudulent application with the US FDA for approval of advertising that soy isoflavones can prevent cancer. Soyonlineservice filed an objection based on published science that shows that soy isoflavones can cause cancer. We were joined by hundreds of other objectors Solae have now tossed in the towel and run away.

See our comments on "the lowest form of life" in [Phytoestrogens.Cancer](#).

... <http://www.nutraingredients-usa.com/news/ng.asp?n=62956-solae-soy-cancer-health-claim> .

[Solae withdraws soy/cancer health claim petition](#)

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Red - Red Hot ... Part 2 of 3.

----- Original Message -----

From: [Valerie & Richard James ... Soy Online Service ... http://www.soyonlineservice.co.nz/](#) .

To: keri@soyatech.com

Cc: greg@soyatech.com ; joe@soyatech.com ; customerservice@soyatech.com ; [Gerald Hernesmaa](#)

Sent: Monday, October 03, 2005 8:01 PM

Subject: Solae Temporarily Withdraws FDA Health Claim Petition;

Hello folks.

If you tread the FDA file ... <http://www.fda.gov/ohrms/dockets/dockets/04q0151/04q0151.htm> ... you will find that several hundred objections to **Solae's** claims were filed citing science that shows that isoflavones cause various cancers.

Tell the truth.....that **DuPont** and **Bunge** (major financial investors-players in Solae and also directly connected to the world-wide Soy industry via the pharmaceutical industry) were ALL sent running with their tails down.

Valerie

...

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Red - Red Hot ... Part 1 of 3

----- Original Message -----

From: [Valerie & Richard James ... Soy Online Service ... http://www.soyonlineservice.co.nz/](#) .

To: [Gerald Hernesmaa](#)

Sent: Tuesday, October 04, 2005 12:57 AM

Subject: Re: Re: Re: Solae Press Release

Hi Gerald

AH! You've learnt a lot !! A very likely scenario indeed. Do you still have the link to the Soy Information Service submission on the FDA website?

Cheers, Dick.

.....
.....

----- Original Message -----

From: [Gerald Hernesmaa](#)

To: [Valerie & Richard James ... Soy Online Service ... http://www.soyonlineservice.co.nz/](#) .

Sent: Tuesday, October 04, 2005 4:24 PM

Subject: Re: Re: Solae Press Release

Hi ... Richard and Valerie James

From ... Gerald Hernesmaa
healthwise933@shaw.ca

Thank you for sending me this email.

I think that Solae withdrew its application in order to have behind the scenes help from the FDA in rewording and resubmitting it again, similar to 1999 ??.

Do you think this is probably the case ??.

Gerald

.....

.....

----- Original Message -----

From: [Valerie & Richard James ... Soy Online Service ...](#) <http://www.soyonlineservice.co.nz/> .
To: wholenutritionist@earthlink.net ... **The Whole Soy Story ...** <http://www.thewholesoystory.com/index.php> .
Cc: [Gerald Hernesmaa](#)
Sent: Monday, October 03, 2005 7:45 PM
Subject: Re: Solae Press Release

Hi Kaayla.

Whoopee-dee-doodah!! However, they are still lying bastards, or their confidence is based on sheer idiocy.
Cheers, Dick.

Part 1 ... continued

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"Soy - Abundance Of Health Hazards" ... <http://www.mayanmajix.com/soy01.html>

Red - Red Hot ... Part 1 of 3.

... continued

----- Original Message -----

From: [Kaayla Daniel ... The Whole Soy Story ...](#) <http://www.thewholesoystory.com/index.php> .
To: [Valerie & Richard James](#)
Sent: Tuesday, October 04, 2005 1:41 PM
Subject: Re: Solae Press Release

Media Room - News Release
For more information, please contact:
Geri Berdak, Director of Public Affairs
The Solae Company
314/982-2588
and/or
Chris Short or Whitney Smith
Cushman/Amberg Communications, Inc.
312/263-2500

THE SOLAE COMPANY TEMPORARILY WITHDRAWS FDA HEALTH CLAIM PETITION
Soy Protein Manufacturer Cites Change in Evaluation Process as Catalyst for Decision

St. Louis, MO (September 30, 2005) – The Solae Company today announced it is temporarily withdrawing its request for a qualified health claim related to soy protein consumption and cancer prevention. The Solae Company made its decision after an analysis of recent FDA health claim decisions.

The company believes the relationship between consumption of soy protein and the prevention of cancer is strong but withdrew the claim because it felt the FDA's process is new and its evaluation process is evolving. By making sure the petition meets current criteria required for the restructured evaluation process, The Solae Company will be putting forward the strongest possible case based on the science for the FDA. The company's objective in filing this petition was to enable research-based health information to be made more readily available to consumers.

“Our decision has nothing to do with our confidence in the science,” said Dr. Greg Paul, director of health and nutrition for The Solae Company. “We have an improved understanding of the process and have decided to withdraw the petition and re-structure it so it will be in-line with the FDA's current qualified health claim process.”

Nearly 60 different independent research studies support the relationship between the consumption of soy protein-based foods and reduced risk of developing several types of cancer, and new studies continue to investigate such a link. For example, a study in this week's Journal of the American Medical Association found that higher consumption of some soy products is associated with a reduced risk of lung cancer.

As leaders in the industry, The Solae Company will continue to spearhead research exploring the health benefits of soy protein and will continue to seek ways to communicate those benefits to consumers. The company plans to re-submit the petition to the FDA at a later date but no specific timelines have been set.

Headquartered in St. Louis, Missouri, The Solae Company is a global innovator in technology development and the research and application of soy protein. It serves food and beverage manufacturers, dietary supplement developers, retailers and consumers in 100 countries worldwide including the U.S. and Canada, Europe and the Middle East, Latin America and the Asia/Pacific region. The company was formed through an alliance between Bunge Limited (NYSE: BG) and DuPont (NYSE: DD). For more than 30 years, The Solae Company has invested in fundamental research to understand the health benefits of soy protein in order to provide better ingredients for better living. Researchers at more than 180 leading universities and research institutions have used soy protein products produced by The Solae Company in hundreds of completed and ongoing soy studies. For more about the health benefits of soy protein, including additional research and sources, please visit www.thesolaecompany.com.

The End of Red Hot Parts 1, 2, and 3

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----- Original Message -----

From: [Valerie & Richard James ... Soy Online Service ... <http://www.soyonlineservice.co.nz/>](#) .

To: editorial@alive.com ; [Gerald Hernesmaa](#)

Sent: Thursday, October 06, 2005 4:02 PM

Subject: Fw: SOY BABY FORMULA WARNING IN -- BMJ

SENT TO YOU BY www.soyonlineservice.co.nz. **Please circulate this knowledge**

British Medical Journal, July 30, 2005

Health committee warns of potential dangers of soya

© 2005 BMJ Publishing Group Ltd Volume 331(7511), **30 July 2005**, p 254
. <http://bmj.bmjournals.com/cgi/content/extract/331/7511/254-a> .

[News: News roundup]

Jerusalem, by Judy Siegel-Itzkovich

Israeli manufacturers of soya products were rattled by the recommendation issued by the country's health ministry that **consumption of soya products be limited in young children and avoided, if possible, in infants**. After a year's work, a committee of experts also advised that adults who eat soya products do so in moderation, pending authoritative future studies. Although research showing possible harm; a higher risk of cancer, male infertility, or other problems from soya is based on

animal or retrospective human studies, **the committee of 13 issued recommendations based on the precautionary principle**. Soya contains phytoestrogens that may have some of the effects of the human hormone if consumed in large quantities. Soya consumption is high in Israel, and use of soya based baby formula is among the world's highest per capita. Nevertheless, the ministry decided not to prohibit the sale of soya based formula without a doctor's prescription, which is already required in New Zealand and Australia. Widespread soya use in Israel is due to a number of reasons, most prominently kosher food practices. Jewish law and tradition forbid the mixing of milk and meat products, dishes, and cutlery, and after eating meat individuals must wait some six hours before ingesting dairy foods. Although this interval is not required of babies, many ultraorthodox mothers observe it anyway, **and those who do not breastfeed "prefer" soya based rather than cow's milk formulas so bottles are not on the table during meat meals. The actual need for soya based formula due to allergy to cow's milk based formula is negligible.**

Since soya provides cheaper protein than meat, it is widely served in various forms, especially in day care centres that are spared from using separate dishes and cutlery. Soya burgers made from reconstituted flakes and other forms, many of them developed by Israeli companies, as well as tofu and misu, are popular among health conscious people. "We don't know the long term effects on health of large amounts, so we are urging moderation," said Dorit Nitzan Kaluski, director of the health ministry's food and nutrition service who was a committee member. "We want to be careful. And while it is easy to identify soya products, there is much more soya added to foods such as breads, cakes, cookies, and crackers." Paediatricians will monitor the thyroxine concentrations in infants and toddlers who have **hypothyroidism** who drink soya based formula or soya foods. And **women with breast cancer or a high risk of it** will be advised to consult their doctors about soya in their diets.

Dr Nitzan Kaluski said that to avoid pressure from soya food firms, the committee did not inform them in advance, but within a day of the report's release, she received at least one lawyer's letter and numerous requests for information. She expects lawsuits are on the way.

Accession Number: 00002591-200507300-00022 , Copyright (c) 2000-2005 [Ovid Technologies, Inc.](#) , Version: rel10.0.0, SourceID 1.10844.1.117

Warning - 2 years to late ... You will notice that the article is very cleverly worded in order to **avoid**, in order to **leave out, WHY** the Israeli government committee issued the warning in the first place ... **which is ... 3 Israeli baby died and 17 other Israeli babies got severe permanent brain and nervous system damage from soy infant formula in the summer of 2003.**

HAARETZ.com on Nov. 9, 2003 ... <http://www.haaretzdaily.com/hasen/pages/ShArt.jhtml?itemNo=358387&sw=Soy-based> ...

"Health Minsitry probing possible (Soy) baby-formula deaths"

MSNBC on Nov.10, 2003 ... <http://msnbc.msn.com/id/3404430/> ...

"Infant deaths linked to baby formula - Israel opens investigation into German-made (Soy) product"

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----- Original Message -----

From: [Valerie & Richard James ... Soy Online Service ... http://www.soyonlineservice.co.nz/](#) .

To: editorial@alive.com ; [Gerald Hernesmaa](#)

Sent: Thursday, October 06, 2005 4:02 PM

Subject: Fw: MOTHERING MAGAZINE REPORTS ISRAELI DECISION

AN ARTICLE FROM "[MOTHERING](#)" MAGAZINE , USA. Sent to you by www.soyonlineservice.co.nz .

Please spread the knowledge around

Israeli Health Ministry Issues Soy Warning

. http://www.mothering.com/sections/news_bulletins/august2005.html#soy .

August 2005

Scientists, doctors and nutritionists who have warned that **soy is not a health food and poses special risks to infants and children**– received support recently from the Israeli Health Ministry, which issued a health advisory recommending that soy foods be eaten only in moderation. The Israeli Health Ministry strongly recommended that consumption of soy foods be limited for young children and adults and that **soy formula be avoided altogether by infants,**" said Kaayla T. Daniel, PhD. Dr. Daniel noted that there are hundreds of studies linking soy foods and soy infant formula to digestive problems, thyroid dysfunction, ADD/ADHD, dementia, reproductive disorders and even cancer. The Israeli Ministry took this matter very seriously and based its advice upon the conclusions reached by a 13-member committee of nutritionists, oncologists,

pediatricians and other specialists who spent more than a year examining the evidence. The committee concluded that the estrogen-like **plant hormones in soy can cause adverse effects on the human body, including cancer promotion and reproductive problems**. They strongly urged that consumption of soy foods be minimized until absolute safety has been proven.

According to the Jerusalem Post (July 20), soy is widely used in Israel by people of all ages because it is a cheap substitute for meat and soy infant formula is especially popular among haredi families who choose not to mix milk-based baby formulas with meat meals. The Health Ministry plans to distribute information about the dangers of soy foods and soy infant formula to pediatricians, health care workers and the public. It firmly recommends that babies that cannot be breastfed receive cow's milk formula and be given soy infant formula only as a last resort. The Israeli Health Ministry's recommendations are in accord with those made by the United Kingdom's Chief Medical Officer and the British Dietetic Association, both of which have alerted pediatricians and parents to use soy infant formula only in unusual circumstances," said Dr. Daniel. In New Zealand, the Health Ministry has suggested that doctors carefully monitor the thyroids of infants on soy formula. However, no country has come close to Israel's warning against soy foods for children up to age 18. This sets an important precedent.

Although the Israeli Health Ministry stopped short of making recommendations on soy consumptions for adults, it found that the evidence on soy foods alleviating menopausal symptoms is inconsistent, that soy phytoestrogens can increase breast cancer risk and that they can reduce male fertility. The Ministry determined that soy has been shown to reduce blood cholesterol but stated that there is no clear proof that it reduces the risk of heart disease.

"**The bottom line**," said Dr. Daniel "is that the Israeli Health Ministry looked long and hard at the evidence and reached the appropriate conclusion that we should eat soy only occasionally and in moderation because possible **benefits are far outweighed by proven risks**."

...
Warning was - 2 years to late ... You will notice that the article is very cleverly worded in order to **avoid**, in order to **leave out**, **WHY** the Israeli government committee issued the warning in the first place ... **which is ...** 3 Israeli baby died and 17 other Israeli babies got severe permanent brain and nervous system damage from soy infant formula in the summer of **2003**.
HAARETZ.com on Nov. 9, 2003 ... <http://www.haaretzdaily.com/hasen/pages/ShArt.jhtml?itemNo=358387&sw=Soy-based> ...
"Health Ministry probing possible (Soy) baby-formula deaths"
MSNBC on Nov.10, 2003 ... <http://msnbc.msn.com/id/3404430/> ...
"Infant deaths linked to baby formula - Israel opens investigation into German-made (Soy) product"

*See the 2 - **one page Soy summary pages below ... on pages 153 – 156 .**

Warning - Soy Damages Your Thyroid, Immune System, DNA and Chromosomes

. <http://www.soyonlineservice.co.nz/> .

((

healthwise933@shaw.ca))

Soy has not → does not → can not → Soy will not → prevent cancer

Gerald and Deanna - (

Deonaa)

Soy blocks vitamin, mineral, protein absorption (Osteoporosis) ... pages 84, 96

Soy damages the **Myelin Sheath** around the nerves, spinal cord and brain tissue ... pages 63 - 67

Genistein in soy is proven to be and is classified as a **Topoisomerase II-poison** ... pages 32, 42, 44, 71-2, 81

Soy causes cancer → → **Soy causes** existing cancer cells to grow → → **Soy causes** non-cancerous tumors to turn cancerous

Soy is an Omega-6 oil, fatty acid, and they → "**cause**" cancer cells to grow ... http://www.mercola.com/2002/jun/5/fish_oil.htm,
[British J. Nutr., Apr. 2002](http://www.britishjournalofnutrition.com/vol87-4), vol.87:4, pp. 281 - 289(9) and vol.87:3, pp. 193 - 198(6).

* Read the fine print

Soy was the major contributing cause of my wife Deanna-(Deonaa) death from **Breast** cancer, **Bone** cancer, and **Liver** cancer on Dec. 15, 2002. **Read her story on pages 122–124.** Her death was a slow, very, very painful, and inhumane DEATH **while - from - and because of** eating soy ingredients in her Hospital food over a 2 month period. We did a good job of avoiding soy and soy ingredients in our food when she was home. **BUT**, it was the **soy in the Hospital food**, (which we could not and were not able to avoid) that **quietly and quickly** poisoned her, causing her cancer cells to continue growing. As soy was **poisoning** her, it was also slowly painfully, brutally, cruelly, violently, **inhumanly** killing her. **To protect yourself and the ones you ♥ Love ... read the ingredient labels on all the food you buy, switch brands to avoid it !.**

The US FDA's ... "**Poisonous Plant and Plant Parts Database**," at ... <http://vm.cfsan.fda.gov/~djw/pltx.cgi?QUERY=SOY> , and <http://www.cfsan.fda.gov/~djw/plantox.html> ... *documents --- Soy – Flax-Linseed – Canola-Rapeseed -- as "poisonous plant,"* Soy since **1907** and Flax since 1850. The FDA recommends that if you are **injured** by these plants, to **contact** your local "**Poison Control Center**" at ... <http://www.aapcc.org/> , or call 911. { **Einstein said**, "... the world is a dangerous place to live in, **not** because of the people who are evil, but because of the people who don't do anything about it ... <http://en.thinkexist.com/> }. **No safe cigarettes ... No safe soy ... Unsafe at any speed.** "**The Precautionary Principle**" pages 113 – 114, and ... http://www.biotech-info.net/rachels_586.html ... "**The obligation to prevent harm.**" * **Soy does not pass ... "WHO Food Safety Standards" ... or ... US FDA GRAS, "Generally Recognized As Safe" status ... In fact, it is not even legal to put it in our food**, pages 5-8, *55, 63, 96-106, 109, 113, 119, 143 ... **For Legal action** against the soy industry, manufactures and sellers, see pages 119 - 121.

“Soy – Abundance of Health Hazards”

identifies the link to the over 144 page Soy Research Paper, which can now be found in the Health Section under Articles on the **“Mayan Majix”** website at ... http://www.mayanmajix.com/art_ht.html , and at ... <http://www.mayanmajix.com/soy.html> ... **Dangers of Soy**
- http://www.mayanmajix.com/soy_summary.pdf ... Short one page Summary PDF - <http://www.mayanmajix.com/soy01.html> ... Full 144 page HTML

- http://www.mayanmajix.com/soy_306.pdf ... Abundance Scientific Proof - Summary - <http://www.mayanmajix.com/soy01.pdf> ... Full 144 page PDF

containing a collection of over 205 scientific research abstract summaries on Soy ... pages 29 - 96, from almost 1,800 going way back to **1907**, (also see the 2005 book **“The Whole Soy Story”**) ... that are from well-designed studies, from around the world, conducted in a manner which is consistent with generally recognized scientific procedures and principles which show that - **there does exist** - significant scientific agreement among **research experts** from around the world, { qualified by scientific training, experience and expertise }, **PROVING** a very strong statistically significant association of very serious harm to human and animal health from consumption of soy, SPI-soy protein and soy estrogen ingredients in our food supply & an **INCREASED RISK** of a variety of cancers and other major and life threatening health problems, referred to in this body of evidence as ... **“Hidden Harm”** ... which includes, but is not limited to this list of **known**, **“ignored,” still denied “Side-Effects”** of ... **endocrine disruption ... thyroid suppression ... immune system suppression ... Liver disease ... Heart disease ... leukemia, (IAL) ... subtle changes in sexually dimorphic behaviors ... Arthritis ... infertility / lower sex drive ... growth problems ... learning disabilities // Alzheimer’s – Parkinson’s Disease // M.S. – from Brain & Nervous System damage ... Osteoporosis ... as well as ... chromosome fragmentation & errors in chromosome orientation ... Cancer(s) - breast, bone, uterine, liver, colon, pancreas, thyroid etc ... DNA damage ... “DEATH” ... (+) infinite # of - “broken ♥ Hearts”**. (Many **“Research Experts”** say in the conclusion of their abstracts ... Women with cancer or a history of cancer should be warned ... pgs. 5-10, 17-8, 37, 40, 47, 52, 55, 73, 77, *80, 122, & 60, 72, 77.)

- <http://www.mercola.com/2002/jun/8/soy.htm> ... **“Soy Weakens Your Immune System”** ... Soy Industry own research **2002** ... **“The phytoestrogen genistein induces thymic and immune changes: a human health concern ?,”** (*see page 55)
NCBI ... http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12032332&query_hl=2 .
(Yellayi S., Naaz A., Sato T., Woods J.A., and others --- *Proc Natl Acad Sci USA* 2002 May 28;99(11):7616-21) ... **Dr. Mercola’s Comment** -- **“It is quite amazing that this study was actually published, as the findings were quite negative for Soy, yet it was funded by United Soybean Board and Illinois Council on Food and Agricultural Research .”** { Soy feeds - fertilizes - cancer cells, **“causing”** them to grow ! . }

It is like throwing gasoline on a campfire.

...“Meta-Analysis”...

- http://www.mercola.com/article/soy/avoid_soy.htm ... A **“meta-analysis”** is a review & summary of the results of many clinical studies on the same subject. The use of meta-analyses to draw general conclusions has come under sharp criticism by members of the scientific community. "... Researchers substituting meta-analysis for more rigorous trials risk making **faulty assumptions and indulging in creative accounting** ...", says **Sir John Scott**, President of the Royal Society of New Zealand, "... Like isn't being lumped with like. Little lumps, big lumps of data are being gathered together by various groups ...". 34

There is a added temptation for researchers, particularly researchers funded by companies like Protein Technologies International – soy corporation, to leave out studies that contradict / dilute the conclusions desired ... see W.A.P.F. 2004 submission of objection to the US F.D.A. - 2004Q-0151, page 10, (**being that soy has many very serious health hazards**). **Dr Anderson discarded 8 important studies for various reasons, leaving a remainder of 29.**

-- See June 14, 2004 ... W.A.P.F. petition of objection to US - FDA ... http://www.fda.gov/ohrms/dockets/dockets/04q0151/04Q-0151_emc-000009-01.pdf .

and ... http://www.westonaprice.org/soy/solae_comments.pdf ... and ... **Soy Alert** ... <http://www.westonaprice.org/soy/index.html> .

Another very good example ... It was a 1994 **meta-analysis** by Mark Messina that fueled **False** speculation that soy had anti-carcinogenic properties, published in **Nutrition and Cancer**.43. (and yet, it is this very same paper that proves Soy has been **“known”** in scientific community ... to be carcinogenic for over 40 years ... cause DNA - Chromosome damage for more than 25 years ... cause infertility for 50 years ... thyroid damage for 70 years ... page 126.)

...
..
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* * *

New Margins – for pages 153 and 154

“Warning - Soy Damages Your Thyroid, Immune System, DNA and Chromosomes

By adjusting **only** pages 153 and 154 to these margins below, this one page summary will all fit on one page in MS Word.

Top ... 0.20 inches
Bottom ... 0.20 inches
Left ... 0.26 inches **Right ...** 0.25 inches

Base Font Type ... Times New Roman

Base Font Size ... (8, 9, 10, 11, 12, 14),

(8 pt for spacing between title and first line, and 6pt spacing between other paragraphs)

Justification ... Full

Note: Make sure the label on your vitamins, minerals, and medications says ... contains no Soy ... or ... contains no Soy ingredients .
Pet Food, farm animal foods

...

“Why Just Stop Eating Soy Will Improve Your Health !!.”

"The Evidence Is In -- **Not Eating Soy** Not Only **Lowers** The Risk and **Helps Prevent** Breast **Cancer**, **Leukemia & Other Cancers Including The Reoccurrence** of Cancer, **Soy Also Damages** Your Thyroid, Nervous System, Pancreas, DNA, And Immune System. **Soy Also Causes** Infertility, Cancer, Heart and Liver Disease, Hypospadias And Osteoporosis."

Just **Revealing** A Few Of The Almost 2 Dozen Scientifically Documented and Still

Ignored And Denied Very, Very

Serious Health Hazards

Since 1907

*

The Evidence

Soy Online Service ... <http://www.soyonlineservice.co.nz/> ... Huge, extensive scientific database, **Soy Causes Cancer**, etc.

Weston A Price Foundation ... <http://www.westonaprice.org/soy/index.html> ... **Soy Alert Page**

The Whole Soy Story ... <http://www.thewholesoystory.com/index.php?pageID=> ... **Book, April 2005, by Kaayla Daniel, Ph.D**

with 1,798 endnotes, scientific research references and abstracts, since 1907 into 2005.

Soy - Abundance of Health Hazards ... http://www.mayanmajix.com/art_ht.html ... <http://www.mayanmajix.com/soy.html> ... Over 144 page **Soy Research Paper, (Oct. 2004), with 205 scientific research abstracts, since 1907 into 2004.**

***US National Center For Biotechnology Information, NCBI** ... <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi> ... **PubMed N.C.B.I.** - Established in 1988 as a national resource for molecular biology information, NCBI creates public databases, conducts research in computational biology, develops software tools for analyzing genome data, and disseminates biomedical information - all for the better understanding of molecular processes affecting human health and disease.

PubMed - a service of the National Library of Medicine, includes over 15 million citations for biomedical articles back to the 1950's. These citations are from MEDLINE and additional life science journals. PubMed includes links to many sites providing full text articles and other related resources.

*Soy does not have FDA **GRAS status**, Generally Recognized As Safe or **Pre-market Approval** ... is not legal to put in our food.

*Soy industry applied twice to US FDA for **GRAS** and was turned down twice, 1989 and 1999, because soy is carcinogenic.

*Genistein in soy is proven to be and is scientifically classified as a **Topoisomerase II-poison** ... NCBI – PubMed.

*Soy proven a poisonous plant since **1907** in US FDA **Poisonous Plant database** ... <http://www.cfsan.fda.gov/~djw/planttox.html>.

*Violates "**The Precautionary Principle**" ... http://www.biotech-info.net/rachels_586.html ... "The obligation to prevent harm"

Text books - dangers of soy ... "**Chemical Carcinogens**" 1976, 1984, American Chemical Society ... "**Cancer Rates & Risks**" 4th Ed.1996, National Institutes of Health, National Cancer Institute ... "**Hormonally Active Agents in the Environment**" 1999.

Be careful, be careful !!. "**Vegetable Oil**" has not been real Vegetable Oil since early 1970's. It is either soy, canola, or both.

***Soy Protein – Is In Breach Of – In Violation Of -- WHO/Codex Guidelines.**

WHO/Codex General Standards for Soy Protein Products ... <http://www.soyonlineservice.co.nz/articles/Codex.htm> .

There is Clear **evidence** Soy Protein does not meet WHO/Codex Guidelines. Natural isoflavones in soy protein induce:

- **Sub acute toxicity** ... <http://www.soyonlineservice.co.nz/04thyroid.htm> ... Repeated daily exposure to a poison
- **Chronic toxicity** ... <http://www.soyonlineservice.co.nz/articles/Brain.htm> ... Long term poisonous health effects
- **Reproductive toxicity** ... <http://www.soyonlineservice.co.nz/04infertility.htm> ... Reproductive system damage
- **Teratogenic effects** ... <http://www.soyonlineservice.co.nz/articles/Bdefects.htm> ... Embryo, monster making
- **Mutagenic effects** ... <http://www.soyonlineservice.co.nz/04immunefunction.htm> ... Immune System and DNA Damage
... <http://www.soyonlineservice.co.nz/articles/metzler.htm> .

WHO/Codex Standard 175-1989.

6.3 (c) **When tested by appropriate methods of sampling and examination, the product shall not contain**

other poisonous substances which may represent a hazard to health.

WHO/Codex General Guidelines for the Utilization of Vegetable Protein Products (VPP) in Foods CAC/GL 4-1989.

4.1 **VPP intended for human consumption should not represent a hazard to health.**

1.4 **Toxicological Safety:**

Safety of the VPP should be predicted from info. concerning methods of production, chemical and physical properties...should be supported, where necessary, by safety data using laboratory animals.

2.4.1 **Sub acute Toxicity Studies:**

The purpose of these studies is to delineate the toxic potential of VPP and to elucidate such problems as species sensitivity, the nature of gross and micro-pathological changes and the approximate dose level at which these effects occur. They also provide guidelines for the selection of dosage for chronic toxicity tests and any functional or biochemical studies that may be necessary.

2.4.1.3 **Length of Study:**

Sub acute toxicity feeding trials should be **at least three months** duration.

2.4.2 **Other Studies:**

Following an appraisal of the source and the method of manufacture of the VPP together with the results of nutritional and sub acute toxicity studies, the need for further studies including chronic, reproduction, teratogenic and mutagenic studies will be evaluated.

* * *

New Margins – for pages 155 and 156

"Why Just Stop Eating Soy Will Improve Your Health !!"

By adjusting **only** pages 155 and 156 to these margins below, this one page summary will all fit on one page in MS Word.

Top ... 0.25 inches
Bottom ... 0.25 inches

Left ... 0.30 inches

Right ... 0.25 inches

Base Font Type ... Times New Roman and Arial

Base Font Size ... (8, 9, 10, 11, 14, 16, 20) , (10 pt for spacing between one line title and first line)
(8 pt for blank line spacing above - **Soy Protein – Is In Breach Of – In Violation Of -- WHO/Codex Guidelines**)

Justification ... Left and full

Note: Make sure the label on your vitamins, minerals, medications says ... contains no Soy ... or ... contains no Soy ingredients .
Pet Food, farm animal foods

* * *
* * *
* * *

Margins for main Soy Research Paper Pages 1 to 144 , and (through to 168)

Top ... 0.40 inches
Bottom ... 0.30 inches
Left ... 0.50 inches Right ... 0.25 inches

Base Font Type ... Times New Roman and Arial
Base Font Size ... (9, **10**, 11, 12, 14, 16, 18, 20,
22,24, 28, 30, 32, 36)
Justification ... Full

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Dangers of Dietary Isoflavones
at levels above those found in traditional diets
The Risks Of Abandoning “The Precautionary Principle”
by Soy Online Service ... <http://www.soyonlineservice.co.nz/>
“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>
(**Foods with Vitamin B17 and B12**)

Foods Containing **Vitamin B-17** (Nitrilosides)

. <http://www.keepblairalive.com/b17foods.html> .
. <http://www.vitaminb17.org/foods.htm> .
. <http://www.realityzone.com/litcyancook.html> .

Vitamin B17 appears in abundance in untamed nature. Because B17 is bitter to the taste, in man's attempt to improve tastes and flavors for his own pleasure, he has ... **eliminated bitter substances like B17** ... by selection and cross-breeding. It can be stated as a general rule that many of the foods that have been domesticated still contain the vitamin B17 in that part not eaten by modern man, such as the seeds in apricots. Listed below is an evaluation of some of the more common foods. Keep in mind that these are averages only and that specimens vary widely depending on variety, locale, soil, and climate. de Spain, June - (former) FDA Toxicologist and Pharmacologist. **"The Little Cyanide Cookbook"** ... <http://www.amazon.com/exec/obidos/tg/detail/-/0912986190/103-8015284-4481409?v=glance> ... A professional nutritionist offers over 300 tasty recipes rich in the cyanide containing substance that many scientists believe is nature's control for cancer. Cyanide, in minute quantities and in proper food forms, instead of being poisonous, actually is essential to health. 192-page book ... **(+)plus Examples of dishonesty and corruption in the field of drug research** ... a close look at the first major study which declared Laetrile - (vitamin B 17) - "of no value" ... proof that the study was fraudulent ... the FDA's ruling against the use of Laetrile because it had not been tested ... and the refusal then to allow anyone (except its opponents) to test it. This year over 550,000 Americans will die from cancer. One out of 3 of us will develop cancer in our lifetime. The 88 million people in the USA alone. The purpose of this study is to show that this great human tragedy can be stopped now entirely on the basis of existing scientific knowledge.

| <u>Fruits</u> | <u>Range</u> |
|----------------------------|--------------|
| blackberry, domestic | Low |
| blackberry, wild | High |
| boysenberry | Medium |
| choke cherry | High |
| wild crabapple | High |
| market cranberry | Low |
| Swedish (lignon) cranberry | High |
| Currant | Medium |
| Elderberry | Med. to High |
| Gooseberry & Huckleberry | Med.. |
| Loganberry | Med. |
| Mulberry | Med. |
| Quince | Med. |
| Raspberry and Strawberry | Med |

| <u>Seeds</u> . . . | <u>Range</u> |
|--------------------|--------------|
| Apple seeds | High |
| Apricot seeds | High |
| Buckwheat | Medium |
| Cherry seed | High |
| Flax | Medium |
| Mullet | Medium |
| Nectarine seed | High |
| Peach seed | High |
| Pear seed | High |
| Plum seed | High |
| Prune seed | High |
| Squash | Medium |
| Strawberries | Med. |
| Palmigranits | . ?? |

| <u>Sprouts</u> . . . | <u>Range</u> |
|----------------------|--------------|
| Alfalfa | Medium |
| Bamboo | High |
| Fava | Medium |
| Garbanzo | Medium |
| Mung | Medium |

| <u>Beans</u> | <u>Range</u> |
|------------------------|---------------|
| Black | Low |
| Black-eyed peas | Low to Medium |
| Fava | High |
| Garbanzo | Low to Medium |
| Green Pea | Low |
| Kidney | Low to Medium |

| <u>Beans</u> | <u>Range</u> |
|------------------------|--------------|
| Lentils | Medium |
| Lima, USA | Low |
| Lima, Burma | Medium |
| Mung | Med. to High |
| Shell | Low |

| <u>Leaves</u> . . . | <u>Range</u> |
|---------------------|--------------|
| Alfalfa | High |
| Beet tops | Low |
| Eucalyptus | High |
| Spinach | Low |
| Watercress | Low |

Range
1,000 mg (Milligrams) = 1 gram
High — above 500 mgs. nitriloside per 100 grams food
Medium — above 100 mgs. nitriloside per 100 grams food
Low — below 100 mgs. nitriloside per 100 grams food

| <u>Tubers</u> . . . | <u>Range</u> |
|---------------------|--------------|
| Cassava | High |
| Sweet Potato | Low |
| Yams | Low |

| <u>Nuts</u> | <u>Range</u> |
|-----------------------|--------------|
| Bitter Almond | High |
| Cashew | Low |
| Macadamia | Med to High |

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Dangers of Dietary Isoflavones
at levels above those found in traditional diets
The Risks Of Abandoning “The Precautionary Principle”
by Soy Online Service ... <http://www.soyonlineservice.co.nz/>
“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>
(Foods with Vitamin B17 and B12)

What Is Vitamin B12 ??.

Foods Containing Vitamin B-12, (Cobalamin)

Signs, symptoms, health problems with vitamin B₁₂ deficiency

- xx. <http://ods.od.nih.gov/factsheets/vitaminb12.asp> .
- . <http://ods.od.nih.gov/factsheets/vitaminb12.asp#en5#en5> .
- . <http://lpi.oregonstate.edu/infocenter/vitamins/vitaminB12/> .

Vitamin B₁₂ is naturally found in animal foods including fish, meat, poultry, eggs, milk, and milk products. Fortified breakfast cereals are a particularly valuable source of vitamin B₁₂ for vegetarians [5-7]. Table 1 lists a variety of food sources of vitamin B₁₂.

Dietary Supplement Fact Sheet: Vitamin B12

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[What foods provide vitamin B₁₂?](#)

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[Do pregnant and/or lactating women need extra Vitamin B₁₂?](#)

[Who else may need a vitamin B₁₂ supplement to prevent a deficiency?](#)

[Drug : Nutrient Interactions](#)

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[What is the relationship between vitamin B₁₂ homocysteine, and cardiovascular disease?](#)

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What is vitamin B₁₂?

Vitamin B₁₂ is also called cobalamin because it contains the metal cobalt. This vitamin helps maintain healthy nerve cells and red blood cells [1-4]. It is also needed to help make DNA, the genetic material in all cells [1-4].

Vitamin B₁₂ is bound to the protein in food. Hydrochloric acid in the stomach releases B₁₂ from proteins in foods during digestion. Once released, vitamin B₁₂ combines with a substance called gastric intrinsic factor (IF). This complex can then be absorbed by the intestinal tract.

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Dangers of Dietary Isoflavones

at levels above those found in traditional diets

The Risks Of Abandoning “The Precautionary Principle”

by Soy Online Service ... <http://www.soyonlineservice.co.nz/>

“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

Dietary Supplement Fact Sheet: Vitamin B12

<http://ods.od.nih.gov/factsheets/vitaminb12.asp#en5#en5> .

Continued

What foods provide vitamin B₁₂?

Vitamin B₁₂ is naturally found in animal foods including fish, meat, poultry, eggs, milk, and milk products. Fortified breakfast cereals are a particularly valuable source of vitamin B₁₂ for vegetarians [5-7]. Table 1 lists a variety of food sources of vitamin B₁₂.

Table 1: Selected food sources of vitamin B₁₂ [5]

| Food | Micrograms (µg) per serving | Percent DV* |
|---|--|------------------------|
| Mollusks, clam, mixed species, cooked, 3 ounces | 84.1 | 1400 |
| Liver, beef, braised, 1 slice | 47.9 | 780 |
| Fortified breakfast cereals, (100%) fortified), ¾ cup | 6.0 | 100 |

| | | |
|--|-----|----|
| Trout, rainbow, wild, cooked, 3 ounces | 5.4 | 90 |
| Salmon, sockeye, cooked, 3 ounces | 4.9 | 80 |
| Trout, rainbow, farmed, cooked, 3 ounces | 4.2 | 50 |
| Beef, top sirloin, lean, choice, broiled, 3 ounces | 2.4 | 40 |
| Fast Food, Cheeseburger, regular, double patty & bun, 1 sandwich | 1.9 | 30 |
| Fast Food, Taco, 1 large | 1.6 | 25 |
| Fortified breakfast cereals (25% fortified), ¾ cup | 1.5 | 25 |
| Yogurt, plain, skim, with 13 grams protein per cup, 1 cup | 1.4 | 25 |
| Haddock, cooked, 3 ounces | 1.2 | 20 |
| Clams, breaded & fried, ¾ cup | 1.1 | 20 |
| Tuna, white, canned in water, drained solids, 3 ounces | 1.0 | 15 |
| Milk, 1 cup | 0.9 | 15 |
| Pork, cured, ham, lean only, canned, roasted, 3 ounces | 0.6 | 10 |
| Egg, whole, hard boiled, 1 | 0.6 | 10 |
| American pasteurized cheese food, 1 ounces | 0.3 | 6 |
| Chicken, breast, meat only, roasted, ½ breast | 0.3 | 6 |

***DV = Daily Value.** DVs are reference numbers developed by the Food and Drug Administration (FDA) to help consumers determine if a food contains a lot or a little of a specific nutrient. The DV for vitamin B₁₂ is 6.0 micrograms (µg). Most food labels do not list a food's vitamin B₁₂ content. The percent DV (%DV) listed on the table indicates the percentage of the DV provided in one serving. A food providing 5% of the DV or less is a low source while a food that provides 10-19% of the DV is a good source. A food that provides 20% or more of the DV is high in that nutrient. It is important to remember that foods that provide lower percentages of the DV also contribute to a healthful diet. For foods not listed in this table, please refer to the U.S. Department of Agriculture's Nutrient Database Web site: http://www.nal.usda.gov/fnic/cgi-bin/nut_search.pl.

Continued ...

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Dangers of Dietary Isoflavones
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“Soy - Abundance Of Health Hazards” ... <http://www.mayanmajix.com/soy01.html>

Dietary Supplement Fact Sheet: Vitamin B₁₂

. <http://ods.od.nih.gov/factsheets/vitaminb12.asp#en5#en5> .

Continued

What is the recommended dietary intake for vitamin B₁₂?

Recommendations for vitamin B₁₂ are provided in the Dietary Reference Intakes (DRIs) developed by the Institute of Medicine of the National Academy of Sciences [7]. *Dietary Reference Intakes* is the general term for a set of reference values used for planning and assessing nutrient intake for healthy people. Three important types of reference values included in the DRIs are *Recommended Dietary Allowances* (RDA), *Adequate Intakes* (AI), and *Tolerable Upper Intake Levels* (UL). The RDA recommends the average daily intake that is sufficient to meet the nutrient requirements of nearly all (97-98%) healthy individuals in each age and gender group [7]. An AI is set when there is insufficient scientific data available to establish a RDA. AIs meet or exceed the amount needed to maintain a nutritional state of adequacy in nearly all members of a specific age and gender group [7]. The UL, on the other hand, is the *maximum* daily intake unlikely to result in adverse health effects [7]. Table 2 lists the RDAs

for vitamin B₁₂, in micrograms (µg), for children and adults.

Table 2: Recommended Dietary Allowances (RDA) for vitamin B₁₂ for children and adults [7]

| Age (years) | Males and Females (µg/day) | Pregnancy (µg/day) | Lactation (µg/day) |
|--------------------|-----------------------------------|---------------------------|---------------------------|
| 1-3 | 0.9 | N/A | N/A |
| 4-8 | 1.2 | N/A | N/A |
| 9-13 | 1.8 | N/A | N/A |
| 14-18 | 2.4 | 2.6 | 2.8 |
| 19 and older | 2.4 | 2.6 | 2.8 |

There is insufficient information on vitamin B₁₂ to establish a RDA for infants. Therefore, an Adequate Intake (AI) has been established that is based on the amount of vitamin B₁₂ consumed by healthy infants who are fed breast milk [7]. Table 3 lists the Adequate Intakes for vitamin B₁₂, in micrograms (µg), for infants.

Table 3: Adequate Intake for vitamin B₁₂ for infants [7]

| Age (months) | Males and Females (µg/day) |
|---------------------|-----------------------------------|
| 0-6 months | 0.4 |
| 7-12 months | 0.5 |

Continued ...

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Dangers of Dietary Isoflavones
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Dietary Supplement Fact Sheet: Vitamin B12

. <http://ods.od.nih.gov/factsheets/vitaminb12.asp#en5#en5> .

Continued

When is a deficiency of vitamin B₁₂ likely to occur?

Results of two national surveys, the National Health and Nutrition Examination Survey (NHANES III-1988-94) [8] and the Continuing Survey of Food Intakes by Individuals (CSFII 1994-96) found that most children and adults in the United States (U.S.) consume recommended amounts of vitamin B₁₂ [6-8]. A deficiency may still occur as a result of an inability to absorb B₁₂ from food and in strict vegetarians who do not consume any animal foods [9]. As a general rule, most individuals who develop a vitamin B₁₂ deficiency have an underlying stomach or intestinal disorder that limits the absorption of vitamin B₁₂ [10]. Sometimes the only symptom of these intestinal disorders is subtly reduced cognitive function resulting from early B₁₂ deficiency. Anemia and dementia follow later [1,11].

Signs, symptoms, and health problems associated with vitamin B₁₂ deficiency

- Characteristic *signs, symptoms, and health problems associated with B₁₂ deficiency* include anemia, fatigue, weakness, constipation, loss of appetite, and weight loss [1,3,12].
- Deficiency also can lead to neurological changes such as numbness and tingling in the hands and feet [7,13].
- Additional symptoms of B₁₂ deficiency are difficulty in maintaining balance, depression, confusion, dementia, poor memory, and soreness of the mouth or tongue [14].
- Signs of vitamin B₁₂ deficiency in infancy include failure to thrive, movement disorders, delayed development, and megaloblastic anemia [15].

Many of these symptoms are very general and can result from a variety of medical conditions other than vitamin B₁₂ deficiency. It is important to have a physician evaluate these symptoms so that appropriate medical care can be given.

Do pregnant and/or lactating women need extra Vitamin B₁₂?

During pregnancy, nutrients travel from mother to fetus through the placenta. Vitamin B₁₂, like other nutrients, is transferred across the placenta during pregnancy. Breast-fed infants receive their nutrition, including vitamin B₁₂, through breast milk. Vitamin B₁₂ deficiency in infants is rare but can occur as a result of maternal insufficiency [15]. For example, breast-fed infants of women who follow strict vegetarian diets have very limited reserves of vitamin B₁₂ and can develop a vitamin B₁₂ deficiency within months of birth [7,16]. This is of particular concern because undetected and untreated vitamin B₁₂ deficiency in infants can result in permanent neurologic damage. Consequences of such neurologic damage are severe and can be irreversible. ***Mothers who follow a strict vegetarian diet should consult with a pediatrician regarding appropriate vitamin B₁₂ supplementation for their infants and children*** [7]. They should also discuss their own need for vitamin B₁₂ supplementation with their personal physician.

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Who else may need a Vitamin B12 supplement to prevent a deficiency ??.

- Individuals with pernicious anemia or gastrointestinal disorders may benefit from or require a vitamin B₁₂ .
- Older adults and vegetarians may benefit from a vitamin B₁₂ supplement or an increased intake of foods fortified with vitamin B₁₂.
- Some medications may decrease absorption of vitamin B₁₂. Chronic use of those medications may result in a need for supplemental B₁₂.

Individuals with pernicious anemia

Anemia is a condition that occurs when there is insufficient hemoglobin in red blood cells to carry oxygen to cells

and tissues. Common signs and symptoms of anemia include fatigue and weakness. Anemia can result from a variety of medical problems, including deficiencies of vitamin B₁₂, vitamin B₆, folate and iron. Pernicious anemia is the name given more than a century ago to describe the then-fatal vitamin B₁₂ deficiency anemia that results from severe gastric atrophy, a condition that prevents gastric cells from secreting intrinsic factor. Intrinsic factor is a substance normally present in the stomach. Vitamin B₁₂ must bind with intrinsic factor before it can be absorbed and used by your body [7,17-18]. An absence of intrinsic factor prevents normal absorption of B₁₂ and results in pernicious anemia.

Most individuals with pernicious anemia need parenteral (deep subcutaneous) injections (shots) of vitamin B₁₂ as initial therapy to replenish depleted body B₁₂ stores. Body stores of vitamin B₁₂ can then be managed by a daily oral supplement of B₁₂. A physician will manage the treatment required to maintain the vitamin B₁₂ status of individuals with pernicious anemia.

Individuals with gastrointestinal disorders

Individuals with stomach and small intestinal disorders may be unable to absorb enough vitamin B₁₂ from food to maintain healthy body stores [19]. Intestinal disorders that may result in malabsorption of vitamin B₁₂ include:

- Sprue, often referred to as Celiac Disease (CD), is a genetic disorder. People with CD are intolerant to a protein called gluten. In CD, gluten can trigger damage to the small intestines, where most nutrient absorption occurs. People with CD often experience nutrient malabsorption. They need to follow a gluten free diet to avoid malabsorption and other symptoms of CD.
- Crohn's Disease is an inflammatory bowel disease that affects the small intestines. People with Crohn's disease often experience diarrhea and nutrient malabsorption.
- Surgical procedures in the gastrointestinal tract, such as surgery to remove all or part of the stomach, often result in a loss of cells that secrete stomach acid and intrinsic factor [7,20-21]. Surgical removal of the distal ileum, a section of the intestines, also can result in the inability to absorb vitamin B₁₂. Anyone who has had either of these surgeries usually requires lifelong supplemental B₁₂ to prevent a deficiency. These individuals would be under the routine care of a physician, who would periodically evaluate vitamin B₁₂ status and recommend appropriate treatment.

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Who else may need a Vitamin B12 supplement to prevent a deficiency ??.

Continued ...

Older adults

Gastric acid helps release vitamin B₁₂ from the protein in food. This must occur before B₁₂ binds with intrinsic factor and is absorbed in your intestines. Atrophic gastritis, which is an inflammation of the stomach, decreases gastric secretion. Less gastric acid decreases the amount of B₁₂ separated from proteins in foods and can result in poor absorption of vitamin B₁₂ [10,22-26]. Decreased gastric secretion also results in overgrowth of normal

bacterial flora in the small intestines. The bacteria may take up vitamin B₁₂ for their own use, further contributing to a vitamin B₁₂ deficiency [27].

Up to 30 percent of adults 50 years and older may have atrophic gastritis, an overgrowth of intestinal flora, and be unable to normally absorb vitamin B₁₂ in food. They are, however, able to absorb the synthetic B₁₂ added to fortified foods and dietary supplements. Vitamin supplements and fortified foods may be the best sources of vitamin B₁₂ for adults over the age of 50 [7].

Researchers have long been interested in the potential connection between vitamin B₁₂ deficiency and dementia [28]. A recent review examined correlations between cognitive skills, homocysteine levels, and blood levels of folate, vitamin B₁₂ and vitamin B₆. The authors suggested that vitamin B₁₂ deficiency may decrease levels of substances needed for the metabolism of neurotransmitters [29]. Neurotransmitters are chemicals that transmit nerve signals. Reduced levels of neurotransmitters may result in cognitive impairment. In 142 individuals considered at risk for dementia, researchers found that a daily supplement providing 2 milligrams (mg) folic acid and 1 mg B₁₂, taken for 12 weeks, lowered homocysteine levels by 30%. They also demonstrated that cognitive impairment was significantly associated with elevated plasma total homocysteine. However, the decrease in homocysteine levels seen with vitamin supplementation did not improve cognition [30]. It is too soon to make any recommendations, but is an intriguing area of research.

Vegetarians

The popularity of vegetarian diets has risen along with an interest in avoiding meat and meat products for environmental, philosophical, and health reasons. However, the term vegetarianism is subject to a wide range of interpretations. Some people consider themselves to be vegetarian when they avoid red meat. Others believe that vegetarianism requires avoidance of all animal products, including meat, poultry, fish, eggs, and dairy foods. The most commonly described forms of vegetarianism include:

- "Lacto-ovo vegetarians", who avoid meat, poultry, and fish products but consume eggs and dairy foods
- "Strict vegetarians", who avoid meat, poultry, fish, eggs, and dairy foods
- "Vegans", who avoid meat, poultry, fish, eggs, and dairy foods but also do not use animal products such as honey, leather, fur, silk, and wool

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Continued

Who else may need a Vitamin B12 supplement to prevent a deficiency ??.

Continued ...

Vegetarians

Continued

Strict vegetarians and vegans are at greater risk of developing vitamin B₁₂ deficiency than lacto-ovo vegetarians and non-vegetarians because natural food sources of vitamin B₁₂ are limited to animal foods [7]. Fortified cereals are

one of the few sources of vitamin B₁₂ from plants, and are an important dietary source of B₁₂ for strict vegetarians and vegans. Strict vegetarians and vegans who do not consume plant foods fortified with vitamin B₁₂ need to consider taking a dietary supplement that contains vitamin B₁₂ and should discuss the need for B₁₂ supplementation with their physician.

There is wide belief that vitamin B₁₂ can be consistently obtained from nutritional yeasts. Consumers should be aware that these products may or may not contain added nutrients such as vitamin B₁₂. Dietary supplements are regulated as foods rather than drugs, and companies that sell supplements such as nutritional yeasts fortified with vitamin B₁₂ can legally change their formulation at any time. If you choose to supplement, select reliable sources of vitamin B₁₂ and read product labels carefully.

When adults adopt a strict vegetarian diet, deficiency symptoms can be slow to appear. It may take years to deplete normal body stores of B₁₂. *However, breast-fed infants of women who follow strict vegetarian diets have very limited reserves of vitamin B₁₂ and can develop a vitamin B₁₂ deficiency within months [7]. This is of particular concern because undetected and untreated vitamin B₁₂ deficiency in infants can result in permanent neurologic damage.* Consequences of such neurologic damage are severe and can be irreversible. There are many case reports in the literature of infants and children who suffered consequences of vitamin B₁₂ deficiency. It is very important for mothers who follow a strict vegetarian diet to consult with a pediatrician regarding appropriate vitamin B₁₂ supplementation for their infants and children [7].

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Drug : Nutrient Interactions

Table 4 summarizes several drugs that potentially influence vitamin B₁₂ absorption.

Table 4: Important vitamin B₁₂/drug interactions

| Drug | Potential Interaction |
|------|-----------------------|
|------|-----------------------|

| | |
|--|---|
| <ul style="list-style-type: none"> • Proton Pump Inhibitors (PPIs) are used to treat gastroesophageal reflux disease (GERD) and peptic ulcer disease. Examples of PPIs are Omeprazole (Prilosec©) and Lansoprazole (Prevacid©) | <p>PPI medications can interfere with vitamin B₁₂ absorption from food by slowing the release of gastric acid into the stomach [31-33]. This is a concern because acid is needed to release vitamin B₁₂ from food prior to absorption. So far, however, there is no evidence that these medications promote vitamin B₁₂ deficiency, even after long-term use [34].</p> |
| <ul style="list-style-type: none"> • H2 receptor antagonists are used to treat peptic ulcer disease. Examples are Tagament©, Pepsid©, and Zantac© | <p>H2 receptor antagonists can interfere with vitamin B₁₂ absorption from food by slowing the release of gastric acid into the stomach. This is a concern because acid is needed to release vitamin B₁₂ from food prior to absorption. So far, however, there is no evidence that these medications promote vitamin B₁₂ deficiency, even after long-term use [34].</p> |
| <ul style="list-style-type: none"> • Metformin© is a drug used to treat diabetes. | <p>Metformin© may interfere with calcium metabolism [35]. This may indirectly reduce vitamin B₁₂ absorption because vitamin B₁₂ absorption requires calcium [35]. Surveys suggest that from 10% to 30% of patients taking Metformin© have evidence of reduced vitamin B₁₂ absorption [35].</p> |

In a study involving 21 subjects with type 2 diabetes, researchers found that 17 who were prescribed Metformin© experienced a decrease in vitamin B₁₂ absorption. Researchers also found that supplementation with calcium carbonate (1200 milligrams per day) helped limit the effect of Metformin© on vitamin B₁₂ absorption in these individuals [35].

Although these medications may interact with the absorption of vitamin B₁₂, they are necessary to take for certain conditions. It is important to consult with a physician and registered dietitian to discuss the best way to maintain vitamin B₁₂ status when taking these medications.

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Caution: Folic Acid and vitamin B₁₂ deficiency

Folic acid can correct the anemia that is caused by vitamin B₁₂ deficiency. Unfortunately, folic acid will not correct the nerve damage also caused by B₁₂ deficiency [1,36]. Permanent nerve damage can occur if vitamin B₁₂ deficiency is not treated. Folic acid intake from food and supplements should not exceed 1,000 micrograms (µg) daily in healthy individuals because large amounts of folic acid can trigger the damaging effects of vitamin B₁₂

deficiency [7]. Adults older than 50 years who take a folic acid supplement should ask their physician or qualified health care provider about their need for vitamin B₁₂ supplementation.

What is the relationship between vitamin B₁₂ homocysteine, and cardiovascular disease?

Cardiovascular disease involves any disorder of the heart and blood vessels that make up the cardiovascular system. Coronary heart disease occurs when blood vessels which supply the heart become clogged or blocked, increasing the risk of heart attack. Vascular damage can also occur to blood vessels supplying the brain, can result in a stroke.

Cardiovascular disease is the most common cause of death in industrialized countries such as the U.S., and is on the rise in developing countries. The National Heart, Lung, and Blood Institute of the National Institutes of Health has identified many risk factors for cardiovascular disease, including an elevated LDL-cholesterol level, high blood pressure, a low HDL-cholesterol level, obesity, and diabetes [37]. In recent years, researchers have identified another risk factor for cardiovascular disease, an elevated homocysteine level. Homocysteine is an amino acid normally found in blood, but elevated levels have been linked with coronary heart disease and stroke [38-47]. Elevated homocysteine levels may impair endothelial vasomotor function, which determines how easily blood flows through blood vessels. High levels of homocysteine also may damage coronary arteries and make it easier for blood clotting cells called platelets to clump together and form a clot, which may lead to a heart attack [43].

Vitamin B₁₂, folate, and vitamin B₆ are involved in homocysteine metabolism. In fact, a deficiency of vitamin B₁₂, folate, or vitamin B₆ may increase blood levels of homocysteine. Recent studies found that supplemental vitamin B₁₂ and folic acid decreased homocysteine levels in subjects with vascular disease and in young adult women. The most significant drop in homocysteine level was seen when folic acid was taken alone [48-49]. A significant decrease in homocysteine levels also occurred in older men and women who took a multivitamin/ multimineral supplement for 56 days [50]. The supplement taken provided 100% of Daily Values (DVs) for nutrients in the supplement.

Evidence supports a role for supplemental folic acid and vitamin B₁₂ for lowering homocysteine levels, however this does not mean that these supplements will decrease the risk of cardiovascular disease. Clinical intervention trials are underway to determine whether supplementation with folic acid, vitamin B₁₂, and vitamin B₆ can lower risk of coronary heart disease. It is premature to recommend vitamin B₁₂ supplements for the prevention of heart disease until results of ongoing randomized, controlled clinical trials positively link increased vitamin B₁₂ intake from supplements with decreased homocysteine levels AND decreased risk of cardiovascular disease.

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Do healthy young adults need a vitamin B₁₂ supplement?

It is generally accepted that older adults are at greater risk of developing a vitamin B₁₂ deficiency than younger adults. One study, however, suggests that the prevalence of B₁₂ deficiency in young adults may be greater than previously thought. This study found that the percentage of subjects in three age groups (26 to 49y, 50 to 64y, and

65y and older) with deficient blood levels of vitamin B₁₂ was similar across all age groups but that symptoms of B₁₂ deficiency were not as apparent in younger adults. This study also suggested that those who did not take a supplement containing vitamin B₁₂ were twice as likely to be B₁₂ deficient as supplement users, regardless of age group. However, non-supplement users who consumed fortified cereal more than 4 times per week did appear to be protected from deficient blood levels of B₁₂. Better tools and standards to diagnose B₁₂ deficiencies are needed to make specific recommendations about the appropriateness of vitamin B₁₂ supplements for younger adults [51].

What is the health risk of too much vitamin B₁₂?

The Institute of Medicine of the National Academy of Sciences did not establish a Tolerable Upper Intake Level for this vitamin because Vitamin B₁₂ has a very low potential for toxicity. The Institute of Medicine states that "no adverse effects have been associated with excess vitamin B₁₂ intake from food and supplements in healthy individuals" [7]. In fact, the Institute recommends that adults over 50 years of age get most of their vitamin B₁₂ from vitamin supplements or fortified food because of the high incidence of impaired absorption of B₁₂ from animal foods in this age group [7].

53 - References ... go to the end of this article ... <http://ods.od.nih.gov/factsheets/vitaminb12.asp#en5#en5> .

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Some Common Alkaline Ash Foods

{ Helps To Control Acid In Your Internal Environment }

Eat 80 % alkaline foods, un-cooked.

Almonds
Apricots - (seeds + B-17)
Apples - (seeds + B-17)

Grape fruit
Grapes
Green beans

Papaya - (Papuan enzyme + B-17)
Parsnips
Peaches - (seeds + B-17)

| | | |
|--|--|--|
| Apple cider Vinegar appreciation | Green Peas | Pears |
| Avocados | Herbs - (some of them) | Pineapple, ½ a day, (Bromelain enzyme) |
| Bananas | Herbal teas - (with no caffeine) | Potatoes, sweet - (B-17) |
| Beans, dried - (B-17) | Honey | Potatoes , white *** |
| (Soybeans <u>and</u> Soy are all acid, <u>Avoid</u> Soy) | joy | Quinoa *** |
| (Soy is a proven poison & <u>blocks absorption</u> of B17) | Juice - (fresh, raw) | Radishes |
| Beet greens | Lemons | Raisins |
| Beets | Lettuce | Raspberries - (B-17) |
| Blackberries - (B-17) | Lima beans *** - (dried and green) | Rhubarb ** - (not recommended) |
| Broccoli | Limes | Rutabagas |
| Brussels sprouts | love | Sauerkraut |
| Cabbage | Maple syrup | Spinach, raw |
| Carrots | Milk - goats * - (infants only) | Strawberries - (B-17) |
| Cauliflower | Melons | Tangerines |
| Celery | Millet *** - (B-17) | Tomatoes |
| Chard leaves | Molasses | Vegetables, raw |
| Cherries, sour - (seeds, B-17) | Mushrooms | Watercress |
| Cucumbers | Muskmelons | Watermelon |
| Dates, dried | Nuts - (not soy) | <u>Pesticides</u> turn food from alkaline to acid <u>and</u> |
| Dulse | (Soy is a proven poison & <u>blocks absorption</u> of B17) | make acid food more acid. |
| Figs, dried | Onions | <u>Do not</u> mix citrus or melons with any other food |
| Fresh Fruit - (organic) | Oranges | |
| (no pesticides) | Olive oil - (organic, cold pressed) | |
| Fun | | |



Vitamin B-17 ... found in seeds of all common fruits (except citrus), it is an anti-cancer vitamin.

* Recommended for infants only when mother's milk is not available

** Not recommended, has properties detrimental to the body

*** These foods slow down the cleansing process, reduce amount of plaque removed, therefore should be limited

“Alkalize for Health, (Stop the cancer epidemic)”... <http://www.alkalizeforhealth.net/> ,
<http://www.alkalizeforhealth.net/tableofcontents.htm> ,

“Live Blood Cell Analysis and the SanPharma Remedies”, with a list of some ”Alkaline Foods“ at ...
 - http://www.medical-library.net/specialties/framer.html?specialties/live_blood_cell_analysis.html .