A few Shaklee friends asked me to clarify the Shaklee difference with their Shaklee Soy Protein. One friend sent me the article at the Mercola's website where this confusion was coming from. I tried to compile a few articles that I had received, in chronological order. It is very interesting and the most updated was by Dr. Dixie Mills who addresses the actual article on the Mercola site. Take care! To your health, *Heidi Carlsetdt*

This is the website of Joseph Mercola that brought this Update was written in response to:
http://articles.mercola.com/sites/articles/archive/2011/04/02/soy-formula-linked-to-fibroid-tumors.aspx Feb 4, 2011

Subject: UPDATE ON SOY CONTROVERSY. By Breast Surgeon April 4, 2011 - Dr***. Dixie Mills, MD***

We've wondered for a long time why there are still people who question the safety of soy foods and supplements. We've used soy at the clinic for 10 years to help relieve menopausal symptoms, and we've reviewed all of the myths about it - that soy causes breast cancer, interferes with tamoxifen or the digestion of protein, causes developmental delays in infants fed soy formula, and many others. In our experience, and in countless studies we've looked at, we've found nothing to support these myths.

Which only makes sense, since soy has been an important part of Asian diets for thousands of years and continues to be a popular food choice? Countless forms of soy foods and supplements available are everywhere - from soy bars, shakes, tofu, and milk sold in the grocery store to more exotic foods like sushi and edamame (young, natural soybeans boiled and served whole) – and there is just no reason to believe that any of these foods are harmful. And yet, I keep hearing from women that they, their friends, or their partners are worried about the safety of soy.

It's absolutely true that soy products are not for everyone - there are some women who are allergic or sensitive to soy. Other women have digestive or thyroid problems that need to be addressed before eating soy is a good idea. But I decided to research why soy has been fingered as a "dangerous" food, and why some of these anti-soy voices are so angry, if not downright frightened, about a little green bean.

Given that soy is eaten by millions of people around the world every day, it's puzzling that some people regard soy so negatively. While I'm not sure that we've found all the answers, we here at Women to Women have looked into whether there is any scientific merit to the claims of those who demonize soy, and what we've found only confirms our understanding that soy is a healthy food with many benefits for women. So let's talk about who is campaigning so aggressively against soy, and take a look at the science behind this issue.

Who is the voice against soy?

There is just a huge amount of information and misinformation floating around on the internet about the supposed dangers of soy. The loudest anti-soy voices are coming mostly from a close-knit group associated with promoting the nutritional agenda of the Weston A. Price Foundation (WAPF). Sally Fallon, Kaayla T. Daniel, Mary Enig, Julia Ross and Joseph Mercola are all members of the board at WAPF, or honorary members.

The WAPF was founded by the early 20th century dentist Dr. Weston Price, who traveled around the world to research the diets of populations who enjoyed the greatest longevity. Today the foundation promotes a nutrition agenda based solely on "nutrient-dense whole foods and the vital fat-soluble activators found exclusively in animal fats."

The WAPF agrees with many of the same ideas we have about the benefits of whole, organic foods produced without harmful chemicals and additives. But their main principles disregard the fact that some of the longest-lived peoples in the world enjoy a diet that is rich in plant proteins - not the least of which includes soy. And it is puzzling that they single out the soybean as harmful when it is a staple in so many healthful foods from around the world and has been shown to have health benefits from many years of ongoing research.

What are their claims about soy?

The internet is a marvelous invention, but just because anyone's voice can be heard nowadays doesn't mean that what's being said is true - or worse, that it hasn't been taken out of context. And some of the claims the shrillest voices are making against soy really are outrageous and frightening. Here are just a few:

* Soy phytoestrogens disrupt endocrine function and have the potential to cause infertility and to promote breast cancer in adult women.
* Megadoses of phytoestrogens in soy formula have been implicated in the current trend toward increasingly premature sexual development in girls and delayed or retarded sexual development in boys.
* Women with the highest levels of estrogen in their blood [have] the lowest levels of cognitive function.

This kind of "medicalese" is a problem because it almost sounds like real science - enough so that others on the internet cite this website as a source for publishing some truly strange and ridiculous headlines of their own: Soy reduces penis size; or Tofu shrinks brains; or Soy is making kids "gay." It gets almost comical as the list goes on.

It's no wonder so many women are uncertain about the safety of soy - but the good news is that there is just no real evidence behind these extreme claims. At Women to Women, we have examined hundreds of studies and reviews on soy from the leading peer-reviewed research journals around the world. Everything we know so far about soy points to the many positive health benefits of soy products, or demonstrates inconclusive results. So I was interested to learn where these detractors were getting their information from, and what I found was quite surprising.

Faulty science and the campaign against soy

One of the most important lessons in science and statistics for us to understand is that just because two factors seem related, does not mean one caused the other. Another is that we have to carefully examine how someone reaches their conclusions, because faulty reasoning leads to incorrect answers. So let's look at the reasoning of the people who consider soy unhealthy and see how it stacks up.

Many of the most strident anti-soy groups list page after page of resources in support of their claims. To the untrained eye, it might appear as though there is scientific substantiation against soy. But more often than not, they are misrepresenting the research findings**. For example, I found that the WAPF listed articles or reports (not necessarily scientific studies) by year, out of context, without listing any other articles that came out that year, making it seem as though that one study was "the truth" for that year.**

Also, many of the studies on soy showing ambiguous results have been conducted on non-human subjects - usually rats or other rodents. In much the same way dogs can't tolerate chocolate, rodents and humans can't always digest the same foods or substances in the same ways. There are enough similarities that we can learn a lot by experiments in rats, but enough differences that it's important to know up front when rats, not humans, are the test subjects. Sometimes studies in animals give us the only information we have, but we need to be cautious about drawing conclusions from studies based on animal models. From there, the next step is to design a study to see whether the findings apply to humans as well. The WAPF doesn't say that the studies were actually done on rats when they discuss the findings - perhaps because doing so might make their claims seem less believable, without the same results being seen in people.

Here's another kind of "sleight of hand" explanation the WAPF gives on their website. A study published in 1997 in the journal Pediatrics suggested that girls in the US are entering puberty at an earlier age than in the past, and here's what the WAPF concluded:
(WAPF) Our Comment: The widespread use of soy-based formula, beginning in the 1970's, is a likely explanation for the increase in early maturation in girls.

The study indeed came from Pediatrics, published in 1997 - but nowhere in the article's content or summary do the researchers ever link their findings to soy products. Here is how the authors themselves worded their conclusion:

Conclusions. These data suggest that girls seen in a sample of pediatric practices from across the United States are

developing pubertal characteristics at younger ages than currently used norms. Practitioners may need to revise their criteria for referral of girls with precocious puberty, with attention to racial differences.

The fact that more African-American girls were maturing earlier than in the past was one of the researchers' points, in the context that precocious puberty creates social and psychological concerns. But because African-Americans in general have been shown to be more lactose-intolerant, the WAPF leapt to the conclusion that soy must be the culprit without looking at the facts. In statistics, this is called a fallacy, and I could not find any literature to date that supports this idea. In fact, nearly all infant formulas, both cow milk and soy-based, contain corn syrup or sucrose, providing calories that might contribute to obesity - which in girls can lead to early puberty. Unfortunately, this kind of "magical" guesswork can be found all over the internet when it comes to soy - and without good science, many are resorting unnecessarily to scare tactics.

The best thing we all can do is adopt a considered approach to the shouting match about soy. For whatever personal, political or economic reasons, there are people out to make misleading, confusing, and downright scary statements about soy - but a wild guess is just not the same thing as a sound conclusion. We can counterbalance the loud, alarmist, but scientifically thin voices against soy with a mass of positive research data that speaks volumes about soy's safety - not to mention the fact that thousands, if not millions, of people consume soy all the time with no ill effects!

So let's take the science at face value. While we know that science doesn't always get it right, there is a wealth of research that shows that when eaten in small amounts every day, soy can be an extremely healthy, low-fat, body-beneficial food that gives you lots of protein without a lot of harmful side effects. In other words, the good far outweighs the remote possibility of bad.

But just so you can enjoy soy without worry, there are things you may want to know about how best to include soy in your diet, considering both health benefits and concerns.

The heart of the soy controversy - soy isoflavones

Soybeans and many other legumes contain compounds called "isoflavones", and it is these compounds that many in the anti-soy camp point to as the main "danger" of soy. They argue that because isoflavones are phytoestrogens - that is, their molecules share similarities with the estradiol molecule, the major estrogen hormone in human beings - consuming soy products could promote the growth of estrogen-sensitive cancers in women.

Faults in the argument against soy:

* BIAS: Using only research that supports one point of view while ignoring studies that contradict it.
* OVERGENERALIZATION: Assuming that the results of a small number of limited studies is directly applicable to all human beings.
* LEAPS OF LOGIC: Drawing conclusions unrelated to the goals or methods of particular research studies.
* FALLACY: Making assumptions about the relationship between two pieces of information without testing that relationship (correlation does not equal causation).

Phytoestrogens do have the ability to interact with estrogen receptors in our bodies, where they can evoke similar types of responses that the hormone causes or alternatively, block those effects. But many people don't realize that the intensity of an estrogen receptor's bond with isoflavones is much, much weaker (a thousand times or so) than estradiol's. The duration of the response may also be different and, unlike synthetic estrogens, phytoestrogens do not accumulate in the body but pass through in a matter of hours. Isoflavones also function as antioxidants, counteracting free radicals in our tissues, which may be why some research shows they can protect against cancer.

We explain this in much more detail in our article on phytotherapy but the bottom line is that soy isoflavones are not the same as our own estrogen, so eating soy does not cause us to have more estrogen in our bodies. Even more good news is that in many of the studies on soy isoflavones that look at soy isoflavone intake and cancers, cardiovascular risks, brain dysfunction, osteoporosis, or menopausal symptoms, researchers found either

favorable, promising, or else inconclusive effects. In other words, at minimum, soy isoflavones show no harmful effect.

And there are many possible explanations for why results can be "inconclusive," including study design and limitations. Every woman's body is unique; therefore, how bioavailable phytoestrogens become in our bodies after we eat them depends on many variables: our individual genetic make-up, our digestion and metabolism, what else we eat - even our native gut flora. All of these influence our ability to reap health benefits from soy isoflavones. Also, it's important to remember that these studies do not take into account what else is going on in a subject's life, and what other lifestyle changes she might be experiencing (or may need to address).

At the clinic, we recommend soy as a natural, therapeutic treatment to help women with many aspects of their health, including hormonal balance, because so many of our patients find it helpful. We've seen years of case studies and research that suggests that adding soy to the diet - or appropriate dosages of isoflavones - can sometimes help menopausal symptoms, although not everyone experiences uniform relief.

While there are no one-size-fits-all treatments for any problem, what I can say about the safety of soy is that scientists from several countries recently examined more than 200 isoflavone studies and concluded that "the current literature supports the safety of isoflavones as typically consumed in diets based on soy or containing soy products." I think the key piece that women can walk away with is the word "typically." Because how much soy isoflavones we eat - and in what form - matters when thinking about how to best include soy into our diets.

Whole bean vs. germ - go for the way it's found in nature

At Women to Women, we encourage our patients to consume soy as close to whole form as possible. This is because the greatest benefits of eating soy come from following an isoflavone ratio close to that found in the whole soybean, which is similar to the ratio found in healthy Asian diets. As long as whatever soy products you eat are made from whole soy, you're getting soy as Nature intended.

But there is a difference between consuming the whole bean and taking supplements made from the germ only. Take a look at our "soybean" to see the difference in isoflavone ratios:

Whole soy foods reflect nature's isoflavones ratios
Source: US Department of Agriculture, Agricultural Research Service. 1999. USDA-Iowa State University database on the isoflavone content of foods. URL: http://www.nal.usda.gov/fnic/foodcomp/Data/isoflav/isfl_tbl.pdf (accessed 04.23.2008).

Of the many isoflavones that occur naturally in plants, genistein, daidzein, and glycitein are the primary ones found in soybeans. As you can see above, soybeans typically include at about 50% genistein, 40% daidzein, and up to 10% glycitein forms. In contrast, soy germ isoflavone products typically contain only 20% genistein, 40% daidzein, and 40% glycitein.

What do all of these numbers mean?
Well, if a product lists 100 milligrams of isoflavones, you don't really know what the ratio of those isoflavones is unless the manufacturer lists the ratios for you. Since genistein has the most noted beneficial effects in humans, and whole soybean is much higher in genistein than the soy germ, eating soy products or supplements that are made from the whole bean gives you more of the therapeutic effects that we see in the clinic.

How much soy is healthy?
We don't really know yet whether any particular soy isolates taken by themselves are as safe as or effective as whole soy foods, but what we do know is that we can get the most benefits when we consume small amounts of isoflavone-rich foods throughout the day, as part of a regular, lifelong eating habit.

Another key to separating the facts from the misleading information is to look at isoflavone dosage. Studies often cited by

soy critics use isolated compounds containing amounts of isoflavones that far exceed what a person would normally eat. Soy experts analyzing populations in major soy-consuming countries report isoflavones intakes varying between approximately 25-80 milligrams of isoflavones per day. Studies also show intake at the upper end of that range to be both safe and highest in therapeutic value. Again, let's not forget that Asian cultures have not only been enjoying soybeans in their diet for thousands of years, but likewise they enjoy longer lifespans, less heart disease, and lower rates of obesity and cancer.

But just as with any other food, it's best to make soy one of a variety of healthy choices rather than making it the major focus of your diet - especially if you're concerned about your breast health or your thyroid.

Addressing your health concerns and soy

* Breast health

As a breast surgeon, I'm frequently asked about soy's estrogenic qualities, and whether phytoestrogens are helpful or detrimental for prevention or treatment of breast cancer. Patients also want to use alternatives to hormone replacement and are curious about soy products, foods, supplements, isolates and phytoestrogens, but are deeply concerned about the safety of soy and breast health.

After years of research, we know that the soy isoflavones genistein and daidzein have a very weak estrogen-like effect, but unlike real estrogens, they do not allow cells to proliferate. As mentioned above, soy isoflavones can weakly bond with estrogen receptors on a cell, making the cell resistant to the more reactive hormonal form of estrogen. For women, this blockade may prevent certain cell processes from turning on, which can stimulate it to grow or possibly mutate. The lower rate of breast cancer in Asian societies that eat a lot of soy is often quoted in support of this concept.

But given so many genetic, lifestyle, and dietary factors (Asian women begin eating a regular soy diet much sooner, with more consistency, and they also include more omega-3's in their diets), there is not enough evidence yet to support eating soy as a cure for breast health in non-Asian women.

* Soy and tamoxifen

Some doctors and healthcare practitioners have long recommended that women with breast cancer and anyone at high risk for it avoid soy, because of genistein's weak estrogenic effects on breast cells. Studies in mice show that genistein may actually help override cancer cells' resistance to tamoxifen, which suggests it might be useful in combination with this drug or other types of chemotherapy to prevent recurrence. But researchers also recognize that the links between genistein and tamoxifen therapy warrant further examination in humans.

Studies in humans have shown that in Asian women, "there was no evidence of soy intake adversely affecting levels of tamoxifen... [Yet] age, menopausal status, BMI, and the use of hypertensive medications significantly influenced circulating levels of tamoxifen." Without definitive science either way, it's impossible to provide a one-size-fits-all answer for women, but recommendations to avoid soy foods are not based on any clinical evidence to support this advice. In fact, several FDA-approved clinical trials are currently going on with breast cancer patients using soy.

* Thyroid concerns

It is true that if someone has a hidden thyroid problem, eating soy regularly can uncover it. That doesn't mean soy caused the problem, only that certain properties of soy made the problem more obvious - and that's a good thing, because it helps you to address the problem!

When soy exposes a thyroid deficiency, one possibility is that you have not been getting enough iodine. For a healthy, iodine-replete individual, soy is very beneficial, but if you do have a thyroid problem and you consume large quantities of soy without first looking into your iodine status, there is a remote risk of developing a goiter. Ensuring that your iodine levels are adequate, and learning how to balance your body's needs adequately, will eliminate this risk.

So what do I tell my patients who are eager to try, or continue eating, soy in the face of breast cancer? My best recommendation is this: if they have been eating soy regularly in their diet, it is safe to continue. However, I advise

moderation. My bottom line is that there are still many things we don't know about how breast cancer behaves in individual women, so women should be able to have frank conversations with their healthcare professionals if they have any concerns about including soy in their diet. And when it comes to your thyroid health, if you have a personal or family history of thyroid disorders, the same holds true: having open discussions with your physician about your concerns, and using soy products in moderation, is always a wise choice.

Enjoying soy the right way

We feel very excited about what we've uncovered. Soy is good for us! This is great news! While soy itself is innocent, however, there's no question that it has become a political issue. Some will probably continue to revile it as "poison," while others will continue to sing its praises as the "miracle food." Neither extreme is the right approach. We really don't need to build a mythology around it: a soybean is just a soybean. There are some people who love the flavor of soymilks or yoghurts over dairy, and there are others who prefer the taste of cow's milk. But if you're still a little uncertain about eating soy, here are a few easy rules-of-thumb to follow:

* Try to include soy regularly in your diet, averaging 25-50 mg soy isoflavones per day will give you the basic benefits.
* If you are using soy for menopausal symptoms, target a higher initial therapeutic dose of 80-100 mg soy isoflavones per day for best results.
* Choose whole food products (like tofu or edamame) or supplements made from whole soybeans.
* Make sure your soybeans are from a reliable, quality source – choose soy products that contain no GMO's (genetically modified organisms) and look for organic foods whenever possible [Shaklee's Soy products]
* If you have thyroid concerns, breast health issues, allergies, or problems with digestibility, speak with your healthcare practitioner before eating large quantities of soy.

At Women to Women, we believe that knowledge is power, and where that knowledge comes from is just as important as the source of the foods we eat. Finding reliable sources that aren't one-sided is the best way to get the big picture, especially when it comes to issues that are so politicized. So after reading the above bullet points, speak with your healthcare practitioner if you're still concerned about including soy in your diet. Otherwise, rest assured that for most women, these wondrous green beans are part of a diet that is healthy, flavorful, and above all - safe.

To Your Good Health

An incredible testimony to Shaklee's Soy Protein was that my mother who had had colon cancer in 1972 was on Shaklee Soy Protein for 34 years. When she passed away (accidently choking to death), she had been tested for cancer the month before and had NO cancer. **IF the Shaklee Soy Protein is suppose to be a carcinogen, then there should have been SOME cancer, somewhere. Shaklee's Soy Protein is balanced and is close to nature as possible. Because it is not tampered with, it is a phytoestrogen – (explained very well above and in the book *Why Do I Feel This Way).*** My 10 year old Catherine, my special needs child, has been on 3-6 TBLS of Shaklee's protein a day since she was 4 years old. Her body is exactly on target for a normal girl and is not accelerated development which should be happening if the soy is an estrogen stimulator. When I wean my children, they are put on Shaklee Soy Protein and have developed normally. It says a lot about the balance of Shaklee Soy Products!
Heidi Carlstedt

"Dr. Stephen Chaney"
April, 2010
Subject: Is Soy OK For Women With Breast Cancer?

Dr. Stephen Chaney is a frequent spokesman for health and nutrition issues. As a professor of biochemistry, biophysics and nutrition at the University of North Carolina, Chapel Hill, he teaches nutrition to medical students and has conducted a cancer research project for nearly 30 years. His name is on over 80 published studies in peer-reviewed journals.

You've probably heard the warnings: "Soy may increase the risk of breast cancer!" "Women with breast cancer shouldn't use soy!".

The first warning was never true. Numerous clinical studies have shown that consumption of soy protein is associated with a lower risk of developing breast cancer.

Furthermore, the science behind the second warning has never been very strong. The concerns that soy might stimulate the growth of breast cancer cells was based primarily on cell culture experiments and one experiment in mice - even though a second experiment in mice came to the exact opposite conclusion.

However, the possibility that soy isoflavones could stimulate the growth of estrogen- responsive breast cancer was biochemically plausible because soy isoflavones bind to the estrogen receptor and have a very weak stimulatory effect (much weaker than estrogen itself).

Even that evidence was not definitive because soy isoflavones also turn on several tumor suppressor pathways in breast cells and help strengthen the immune system - so they could just as easily inhibit the growth of beast cancer cells.

However, because the concerns were plausible and had not been definitively disproved, most experts, including me, have recommended that women with estrogen- responsive breast cancer might want to avoid soy protein.

Well a definitive study has finally been performed and it turns out for women with breast cancer, consumption of soy foods actually decreases their risk of breast cancer recurrence and dying from breast cancer.

The study was reported in the December 2009 issue of the Journal of the American Medical Association by researchers at Vanderbilt University and Shanghai Institute of Preventive Medicine.

It was a large, well designed, study that enrolled 5042 Chinese women aged 20 to 75 years old who had been diagnosed with breast cancer and followed them for an average period of 3.9 years.

The women were divided into four groups based on the soy content of their diet (ranging from 5 grams/day to 15 grams/day).

The results were clear cut. Breast cancer survivors with the highest soy intake had 25% less chance of breast cancer recurrence and 25% less chance of dying from breast cancer than the women with the lowest soy intake.

The effect was equally strong for women with estrogen receptor-positive and estrogen receptor negative cancers, for early stage and late stage breast cancer and for pre- and post-menopausal women.

In short this was a very robust study. The study also showed that soy protein intake did not interfere with tamoxifen. The reduction in the risk of breast cancer recurrence & death was just as great whether the breast cancer survivors were taking tamoxifen or not.

In fact, tamoxifen was protective only for women with low soy intake. It conferred no extra protection for the women at the highest level of soy intake. What does this mean for you if you are a breast cancer survivor? I personally feel that this study is clear cut enough that breast cancer survivors no longer need to fear soy protein as part of a healthy diet.

However. it is important to recognize that this is a single study. It is a very good study, but it is just one study. As a scientist and a cancer researcher I would like to see this study confirmed by other studies before recommending that all women who have had breast cancer should add soy protein to their diets. It may turn out that some women will benefit much more from using soy protein than others.

Similarly, this study suggests that soy protein does not interfere with tamoxifen. But the use of tamoxifen after breast cancer remission is a medical treatment - and all medical treatments should be discussed with your doctor.

Finally, I would like to point out that a number of previous studies have suggested that isolated isoflavones may not have the same benefits as soy protein foods containing the isoflavones - so I don't recommend skipping the soy protein and opting for an isoflavone supplement instead.

To Your Health!
Dr. Stephen G Chaney

"Dr. Stephen Chaney"

July, 2010 Subject: Soy and Girls

Dr. Stephen Chaney is a frequent spokesman for health and nutrition issues. As a professor of biochemistry, biophysics and nutrition at the University of North Carolina, Chapel Hill, he teaches nutrition to medical students and has conducted a cancer research project for nearly 30 years. His name is on over 80 published studies in peer-reviewed journals.

For years we have known that women in the United States have breast cancer rates that are 4 to 7 times higher than women in China or Japan.

We've also known that when Chinese or Japanese migrate to this country their risk of breast cancer is no different from that of any other US citizen by the second or third generation.

So clearly the increased risk of cancer in US women is not a matter of genetics. It is caused by the US lifestyle.

Because soy reduces the sensitivity of breast tissue to carcinogens in animal studies, many experts have suspected that it was the soy content of the Asian diet that was protective - but it has been difficult to prove and it was unclear how early in life soy was important.

Drs. Larrisa Korde and her colleagues at the National Cancer Institute set out to answer both questions.

They studied 1563 women of Chinese, Japanese or Filipino descent aged 20 to 55 years (597 with breast cancer and 966 without) and determined their intake of soy-containing foods during childhood, adolescence and as adults.

They then divided the women into three groups – those with high frequency of soy intake (more than 1.5 times/week), those with medium frequency of soy intake (1 to 1.5 times/week), and those with low frequency of soy intake (0 to 1 times/week - not unlike the average American).

When they compared the high intake group with the low intake group the results were striking.

A high level of soy intake in childhood was associated with a 58% reduction in breast cancer. A high soy intake during adolescence and the adult years was associated with a 20-25% reduction in breast cancer (Cancer Epidemiology Biomarkers and Prevention, 18: 1050-1059, 2009).

When you couple that with the December 2009 report in the Journal of the American Medical Association showing that soy consumption decreases the risk of breast cancer recurrence in those women who do develop breast cancer it sends a powerful message.

Soy is a woman's friend - all the way from childhood on.

To Your Health!

Dr. Stephen G Chaney

Shakleefriends-Study links soy intake to increased breast cancer survival December 2009

Health Sciences Bulletin

Study Links Soy Intake to Increased Breast Cancer Survival

In a new study published online in the Journal of the American Medical Association, http://jama.ama-assn.org/cgi/content/abstract/302/22/2437 (JAMA. 2009;302(22):2437-2443), the authors conclude that "among women with breast cancer, soy food consumption was significantly associated with decreased risk of death and recurrence." This research conclusion is an extremely important message regarding the positive research in support of soy food intake in women with existing breast cancer, and we were compelled to present this recent science related to the potential benefits of soy food intake and breast health.

Soy foods are rich in isoflavones, a major group of phytoestrogens thought to reduce the risk of breast cancer. Many studies have supported this hypothesis, and a study published earlier this year, http://cebp.aacrjournals.org/content/18/4/1050.abstract (Cancer Epidemiol Biomarkers Prev 2009;18(4):1050-9), found that soy intake during childhood, adolescence, and adulthood was associated with decreased breast cancer risk in Asian American women.

However, the estrogen-like effect of isoflavones and the potential interaction with tamoxifen (a drug used for the prevention and treatment of breast cancer) have fueled concerns about soy food consumption among breast cancer survivors. But only limited laboratory and animal research has linked high levels of soy phytoestrogens to potential breast tumor cell growth, so we need to be extremely cautious before generalizing these results to humans.

To assess the effects of soy food intake on breast cancer outcomes, researchers from Vanderbilt University in Nashville, Tenn., and the Shanghai Institute of Preventive Medicine in Shanghai, China, collaborated on this study to evaluate the association of soy food intake after breast cancer diagnosis with total mortality and cancer recurrence.

The current study population of 5,033 participants originated from the Shanghai Breast Cancer Survival Study, a longitudinal, population-based study of 6,299 survivors in China between the ages of 20 and 75. These women were diagnosed as having primary breast cancer between March 2002 and April 2006 and they were recruited into the study about six months after cancer diagnosis.

Information on cancer diagnosis and treatment, lifestyle exposures after cancer diagnosis, and disease progression was collected six months after cancer diagnosis and reassessed at three follow-up interviews conducted at 18, 36, and 60 months following diagnosis. Total mortality and breast cancer recurrence, or breast-cancer-related deaths, were recorded, adjustments were made for influencing lifestyle factors, and soy food intake was treated as a time-dependent variable.

During the four-year follow-up, soy food intake (measured as soy protein or soy isoflavone intake) was inversely associated with death and recurrence. Those with the highest level of soy intake had a 29% reduced risk for death and a 32% reduced risk for recurrence compared with those having the lowest soy intake levels. Adjusted four-year mortality rates were 10.3% for those with the lowest and 7.4% for those with the highest soy intake. Four-year recurrence rates were 11.2% for women with the lowest and 8% for those with the highest levels of soy protein intake. The inverse association was evident among women with either estrogen-receptor positive or negative breast cancer, and was present in both users and nonusers of tamoxifen. As American subjects may respond differently to the effects of soy compared to breast cancer survivors in China, the potential benefit may not be the same.

The authors conclude that among women with breast cancer, soy food consumption was significantly associated with decreased risk of death and recurrence. As mentioned earlier, this is an important study that helps to clarify the safety of soy food intake in breast cancer patients. Scientists are still trying to understand all of soy's hormonal effects. For example, it's possible that soy acts like the breast cancer drug tamoxifen, which blocks the effects of estrogen, but additional research is needed to confirm or dismiss this possibility.

In addition to its potential breast health benefits, soy foods are a source of high quality protein nutrition and an excellent alternative to traditional protein sources that are often laden with excess calories, fat, saturated fat, and cholesterol. In fact, when considering the entire body of scientific research on soy, the majority of scientific data strongly supports the value of soy protein as part of a healthy diet for heart health, breast and prostate health, bone health, and for managing menopausal symptoms. So our position has been and continues to be: When soy foods are consumed as part of an overall healthful diet, they are exceedingly safe, nutritious, and potentially beneficial.

But because safety should be your number one concern and each individual is a special case, all women with a history of breast cancer, or those at high risk, should discuss the use of soy protein as part of a healthful diet with their physician.

[personal, not-from-Shaklee editorial note: assuming your physician knows anything about nutrition, and if she/he doesn't, it might be time to shop for a new physician or a second opinion]

Shaklee Health Sciences

Subject: What can Soy do?/ Shaklee Soy Protein Dr. Nasr July, 2009

Excellent Info On Soy Protein
Shaklee's Soy Protein

Dr. Nasr has a B.S. in Agronomy; M.S. in Biochemistry of anti-oxidants and a PH.D. in Pharmacognosy (science of bio-active products). He received his M.D. from Rush Medical College in Chicago, followed by Internal Medicine and Cardiology fellowships from Chicago Medical School. He is a member of the American College of Nutraceuticals and the American College of Preventive Medicine and is Director of the Medical Care & Diagnostic Center, Lake Villa, Il 847-356-9009.

1. Optiflora and Soy Protein increase the absorption of protein, decrease gas and discomfort and decrease cholesterol by 23%

2. Sixty (60) studies have been conducted showing soy protein increases bone density more than just Calcium Magnesium does.

3. Two studies show that soy and vitamin E, together, decrease LDL (bad cholesterol) by 40% and that is 17% greater decrease than Zocor and Lipitor

4. Four studies show that soy protein inhibits oxidation of LDL (bad cholesterol) by 40%. When cholesterol oxidizes, it becomes "sticky" and builds up on the arterial walls, which leads to clogged arteries.

5. Soy prevents gall stones. It doesn't dissolve them but it prevents them.

6. Soy prevents kidneys from damage. Lots of animal protein may be hard on the kidneys, but soy protein protects the kidneys

7. French fries at major fast food establishments are crispy. That is a value for the store. Some french fries are coated with a protein substance that when combined with the sugar in the potato and then heated, gives them added crispness. Unfortunately that combination of sugar, protein and high heated fat produces a carcinogen. Probably a good idea to avoid all French fries.

8. **Shaklee's protein includes valuable protein and isoflavones that are not present in other soy proteins produced with heat or chemicals. Shaklee's low heat - water wash process keeps the isoflavones in the protein. Isoflavones are natural cancer fighting ingredients that occur naturally in soy.**

9. Soy's protein and Isoflavones inhibit the mutated cell´s ability to make an enzyme that would cause the cell to continue reproducing and form a tumor.

10. Soy inhibits the cancer cell from making blood vessels that invade arteries and zap nutrients (this process is called angiogenesis).

11. Soy increases the killing effect of the white blood cells (phagocytosis).

12. Soy's amino acid Lysine when combined with Vitamin C decreases Colon Cancer by 90%.

13. The flavanoids (like those in Shaklee's Flavomax) when combined with Soy Protein are synergistic (they work even better together) and decrease breast cancer 10 fold.

14. Beta carotene (like those in Shaklee's CarotoMax) when combined with Soy Protein and Calcium with Vitamin D are 10 times as effective at preventing cancer cells from getting an addition blood supply.

15. Women in the Orient get about 80mg of Isoflavones a day¦.women in US and Europe get about 1.0 mg. That is an 80% negative difference for US and Europe.

16. Soy protein helps the differentiated cell (bad cell) convert back to a normal cell.

Dr. Nasr also listed the several forms of protein and the length of their chain of Amino Acids. The shorter the chain, the more quickly the Amino Acids can be absorbed and utilized.

1. Soy has the shortest chain and takes less than an hour.
2. Fish is next.
3. Chicken takes about 4 hours.
4. Beef takes about 5 hours.
5. Pork takes about 6-8 hours to digest.

Contact Dr. Nasr for the actual research studies. He uses Shaklee Soy exclusively because it has the very best and most complete soy protein and isoflavone content. You can feel so very good about Shaklee's soy protein, and how we can help so many people who are looking for ways to improve their health.

Linda & Rick Berkheiser

Shaklee Soy is Safe
Shaklee Field Communications, April 2009

Soy is safe and imparts substantial benefit to human beings. We have seen much misinformation about soy, and the following piece, prepared in conjunction with our Health Sciences staff, should help address most concerns about soy raised in fringe publications and web sites.

There are a number of anti-soy articles being distributed over the Internet and through various publications. They are often found under such headlines as "Soy Alert," "The Dark Side of Soy," "The Dangers of Soy," and so forth. While the themes in these articles are provocative, it is our view that they lack substantiation.

Was soy the notorious poison that it is claimed to be in these articles, it surely would have been banned long ago? We would have observed soy consumers suffering highly disproportionate rates of cancer, dementia, physical deformities, myriad other diseases, and otherwise dropping dead from consuming soy.

Assertion: One anti-soy article tells us about a flock of commercial birds, some of which died as a result of being fed soy, and asks, "If soy does this to birds, what is it doing to us?"

Fact: The connection is erroneous and illogical, and it seems the bird keepers knew less than their flock. Birds do not seek out soy for food, and sound science knows that animal data does not automatically translate to humans. For example, Thalidomide, the drug that caused tragic birth defects in humans, did not cause birth defects in test animals; and as any dog lover knows, humans enjoy chocolate with no ill effects, but it can be lethal to canines.

Assertion: Another article says, "Preliminary studies (these are not referenced or footnoted) indicate that children given soy formula go through puberty much earlier than children who were not fed soy products," and that "the trend toward lower male fertility may be due to environmental estrogens, including soy phytoestrogens (again, no references)."

Fact: The medical literature provides no evidence of endocrine effects in humans from infant consumption of modern soy-based formulas. Growth is normal, and no changes in timing of puberty or in fertility rates have been reported in humans who consumed soy formula as infants.

Assertion: Many anti-soy articles cite a Hawaiian study purportedly showing that soy consumption caused accelerated brain aging and was associated with Alzheimer's disease.

Fact: The study, headed by Dr. Lon White, was an "observational" study. While these articles would have readers believe that soy causes Alzheimer's and brain aging, this type of study merely suggests a link between a behavior (in this case tofu intake) and an outcome like brain aging. It does not prove that one thing caused the other. Dr. White, himself, added, "It is never proper to draw definitive conclusions from a single study. It would be premature to advise anyone that they should change their diets based on a single research study.

In actual fact, there is evidence that consumption of soy foods may have beneficial effects related to improving blood lipid levels, and reducing risks for breast cancer." A recent study of patients with high cholesterol who were given soy protein showed significant reductions in LDL (bad) cholesterol, and that soy protein did not increase the risk of hormone-induced cancers. Soybean compounds appear to also reduce the incidence of colon, prostate, and breast cancer. Of course, if one is being treated for cancer, or has a family history of cancer, one should seek the advice of a physician concerning soy or any food additions or modifications to diet. It just makes sense.

The Internet is a rich source of unreliable data and unsupported opinion. We encourage a skeptical approach to such information, and recommend a look at such reputable sites as The American Council for Science and Health (www.acsh.org), HealthCentral (www.healthcentral.com), or for the more technically adept, The National Library of Medicine (www.nlm.nih.gov/hinfo.html), to name a few.

Citations:

- Nutrition Reviews #56: Pg. 193-204, 1998; Journal of Pediatrics #124: Pg. 612-620, 1994.
- Metabolism #49: Pg. 537-543. 2000.
- Journal Nutrition #125: Pg. 733-743S, 1995.

Saturday, April, 2008
Subject: Soy Reduces Breast Cancer Risk

Soy Reduces Breast Cancer Risk: Japanese Study

Women who eat traditional Japanese soy-based foods on a regular basis face a lower risk of breast cancer, showed a recent Japanese government-sponsored study.

Women who had high levels of genistein, a compound found in soybeans, had less of a chance of developing breast cancer than women with less of it, said the study by the National Cancer Center in Tokyo. Soybeans in Japan are eaten as tofu, miso soup or Japanese fermented beans known as "natto."

The study followed approximately 25,000 women aged between 40-69 throughout Japan for an average of 10.5 years.

The team studied the relationship between genistein concentration and breast cancer risk by comparing blood samples taken from 144 women who had developed breast cancer and 288 who did not. The risk of cancer for those with the highest level of genitive was one-third of that for the group with the lowest concentration, the study said. Women who had the highest concentration of genistein in their blood consumed 100g (3.5-oz.) of tofu or 50g (1.75-oz) of "natto" per day, it said.

"These results were limited to daily consumption of isoflavone at meal times," said Motoki Iwasaki, a team member at the Epidemiology and Prevention Division.

Another recent study showed older women who eat soy-based foods faced lower risks of heart disease.

The study was published in the Journal of Clinical Oncology.

Subject: Dr. Chaney corrects news story misinformation

February, 2006

Dear Friends,
Here is important information from Dr. Steve Chaney of the UNC medical school. Dr. Chaney's informed perspective is always helpful in separating fact from fiction in the news reports about supplements and dietary recommendations which have appeared recently.

Part of the Story

You've been hearing a lot of negative news stories about supplements and standard dietary recommendations lately. They are what I call "part of the story". What I'd like to share is what Paul Harvey calls "the rest of the story". But first a bit of perspective: You may have noticed lately that the news media never let the facts get in the way of a good story. That's because the role of a journalist is to sell newspapers or increase the ratings of their radio or TV station. The journalist craves controversy because that generates interest, which leads to follow-up articles and TV reports. Scientists also crave controversy to a certain extent. There is no fame in being the 10th person to prove a widely accepted belief. The recognition comes from being the first person to disprove a widely held belief and developing an alternative hypothesis. However, scientists know the rules of the game. That is why you always hear scientists saying that "further studies are needed". We're not trying to assure job security. We just know that every study is based on underlying assumptions that may ultimately prove to be false. Therefore, we don't want to make dietary recommendations to the public until those recommendations are based on at least 5 or 10 independent studies that all come to the same conclusion. Unfortunately, journalists don't understand the rules of the game and enjoy creating controversy (see above). With that perspective behind us, I would like to comment on some of the recent news headlines.

Soy doesn't decrease the risk of heart disease: What the study actually showed is that adding soy protein or soy isoflavone pills to the diet did not significantly reduce cholesterol levels if nothing else in the diet changed. That is not news. If you took the time to read down to the end of the article (which, of course, was on the inside page of the paper), you would have read that the experts stated that "using soy protein in place of some of the high fat animal protein in a typical American diet does reduce cholesterol". That is what we have always been saying and, in fact, forms the basis for the American Heart Association and National Institutes of Health recommendations that "soy protein is part of a heart healthy diet". The real take-home message of this article and the message that the scientists were trying to get across (before it was distorted by the journalists) is that you won't lower cholesterol (and thus decrease your risk of heart disease) by simply sprinkling soy protein on your Big Mac or taking a soy isoflavone pill along with your Big Mac. As a side note, Shaklee's groundbreaking study (American Journal of Clinical Nutrition, 73: 728-735, 2001) showed that the isoflavones need to be present in the soy protein for it to effectively lower cholesterol levels. Thus, soy protein without isoflavones is ineffective and isoflavones without soy protein are ineffective. Fortunately, Shaklee's soy protein products contain both.

Some of you have also asked me about a web site run by Dr. Mercola. I don't know what his agenda is, but he has been running an anti-soy site for years. He has made a career of collecting facts that represent "part of the story" on his web site and completely ignoring every study that represents "the rest of the story". There are so many half-truths in that web site that I don't have the time to respond to them one by one. Fortunately, Shaklee has put together a point by point rebuttal, which is available from them.

Calcium supplements don't prevent bone fractures due to osteoporosis: These headlines were particularly curious because when you read the article the experts were quoted as saying that calcium supplementation did actually decrease the incidence of hip fractures, but not some of the other fractures tested. The experts went on to make the point of saying that the calcium supplements were effective at preventing bone fractures in the sub-group of women who were at highest risk and that the inclusion of both high risk and low risk women in the study confounded the results. Loosely translated this means that if you are starting with dense bones entering menopause (usually because of a combination of genetics, good diet and exercise), the addition of calcium supplements may not be necessary, at least in the short run. However, if you are entering menopause with relatively low bone density, calcium supplementation can be very important. Finally, the experts were quoted as saying that the calcium supplements worked much better for those who took them regularly than for those who didn't. That comes under the category of "Duh"! All of the experts concluded by saying that they still recommended that post-menopausal women get at least 1000-1200 mg of calcium per day. Even if you are taking bone-protective medications, the recommendations are still for 1000 mg of calcium per day.

Two points that were not made in any of the news reports are: (1) that the calcium supplements consisted of only calcium and vitamin D. Shaklee's studies show that trace minerals, boron and vitamin K are also necessary for optimal bone formation and all of these nutrients are found in Shaklee's OsteoMatrix; and (2) that weight bearing exercise is needed for optimal utilization of calcium for bone formation. This is something that we have been saying for years. As the new study shows, calcium supplementation alone can be of some benefit for preventing some

fractures in high risk women who take their calcium supplements regularly. However, calcium supplementation and weight bearing exercise will be effective for most women and for every bone that is exercised. Chasing the grand kids doesn't count. We're talking about pumping iron. It's also important to recognize that weight bearing exercise alone isn't effective if you aren't getting enough calcium. You need both!

Saw Palmetto is ineffective at preventing prostate problems: Suffice it to say that the lead author of this study acknowledged that people shouldn't change their use of saw palmetto based on his study alone, because its results were opposite to those reported by dozens of earlier studies. Clearly more studies are needed (that's the scientist in me) because this study may be a fluke.

Low fat diets are ineffective at preventing cancer and heart disease in women. Again, even the headlines were misleading because the study did show that low fat diets slightly decreased the risk of breast cancer. However, the point to be made here is really that the concept of "low fat diet" has always been an oversimplification. When nutrition experts introduced the concept of low fat diets they were visualizing the American population replacing high saturated fat animal foods with more fresh vegetables, fresh fruits, whole grains, seeds and nuts. What many Americans did, however, was replace the fatty foods with wonder bread, pasta and twinkies. The real take home message from this study should be to reduce the fat content of the diet slightly, focusing on healthy fats (olive oil, fish oils and unmodified vegetable oils) and healthy carbohydrates (vegetables, fruits and whole grains with a high glycemic index).

Stephen G. Chaney, PhD

Nutrition Help Guide - your pathway to better health
Semi-Monthly Newsletter / September, 2006 *(from Irene Ralph)*

Is Soy All That Terrible?
By Karen R. Hurd, Nutritionist
A person hears so many things that often it is difficult to sort out truth from supposition or just outright error. Hopefully this article will shed some light on the very controversial subject of soy.

Many years ago it was discovered and well-documented that soy provided protective effects. These effects were noted most especially for the ability of soy to lower cholesterol levels, specifically the LDL (low density lipoprotein) level. Some work was done at that time that also indicated that the isoflavones in soy helped to prevent endometrial and breast cancer.

It was the low incidence of breast and prostate cancer among the Japanese, Chinese, and Indonesian peoples that spurred much of the original research. These populations have a high intake of soy, most especially the Indonesians. However, because of the proliferation of studies and literature that resulted from the apparent Asian resistance to cancer and heart disease, it became difficult to sort out truth from error.

For instance, studies on the sheep that grazed on the pastures in southwest Australia documented the infertility of those animals that fed on a species of clover that was rich in isoflavones. Studies on cows, horses, fowl, dogs, monkeys, and rodents have shown this same effect. Then conversely, studies have been done to show that soy actually provides a protective effect against estrogen-fed cancers.

The number of studies that has been done is quite vast. How is it that some studies clearly show that soy prevents estrogen-fed cancers and then other studies say that soy encourages estrogen-fed cancers?

I believe the disparity lies in the problem of such a large body of data that has been gathered and not appropriately evaluated. Please understand that the parameters of a study need to be closely examined before making a broad statement that either condemns or supports a position. To illustrate this let me use an example.

In 1998, an article published in Cancer Research stated that the genistein found in soy increased mammary (breast) growth and enhanced the growth of cancerous tumors. The study was conducted on mice. Only genistein was fed to the mice, not the entire soy substance.

This would be a very frightening study to read because the conclusion is quite clear and strongly stated. The message is "Soy causes cancer." Unfortunately, the vast majority of people do not realize that genistein is very poorly absorbed in the presence of all the isoflavones. Both genistein and isoflavones occur together in soy. Isolating one component of the soy without considering the other components is not wise. That means that we are studying a isolated reacation in a vacuum, regardless of the myriads of other factors that have a major influence. Genistein in isolation is not consumed by humans. Genistein is always consumed with the entire soy product which contains protective isoflavones. Therefore, the study, although it is interesting academically, really has no bearing on reality.

Then we must take into account the animals that are used in a study. Broad conclusions are made without adequately considering the difference in species. You see, a rat is not a human (most studies have been conducted on rodents).

I find the study that was done on cheetahs very interesting. Soymeal was fed to captive cheetahs in North American zoos. It led to infertility. Yet the cheetah, as well as many feline species lack the catalysts (called UDP-glucuronyltranserases) to appropriately utilize steroid hormones and isoflavones. That fact was disregarded in the study and conclusions were made that are not necessarily true.

We do know a few definite things about soy. It contains phyto-estrogens (phyto means "plant"). Just so you know, plant estrogens are abundant in nature. They are found in many sources besides soy, including flax seed. We know that the soy isoflavones bind to the estrogen receptor sites that are found on reproductive cells. Where the question comes is: is the plant estrogen strong enough to cause growth of that cell (which would increase the possibility of cancer) or is the plant estrogen taking up the receptor site, not allowing a stronger estrogen (that the body makes) to take up the receptor site?

You should know that it is a misnomer to label phyto-estrogens (isoflavones) as estrogens. Isoflavones are non-steroidal in chemical structure. In other words, they are not hormones. But the presence of what are known as phenolic rings allow them to bind to estrogen receptors, as do many substances, including anti-estrogens like tamoxifen. Tamoxifen is a medication that is given to women with breast cancer. Isoflavones bind more effectively to the receptor sites than does the tamoxifen-about six- to eightfold. In fact, isoflavones act as selective estrogen receptor modulators (SERMs). Isoflavones are natural SERMs. They prevent the strong estrogens (such as estradiol) from encouraging tumor growth.

If the phyto-estrogen blocks a stronger estrogen from stimulating cell growth, then it will be protective against cancer. If the phyto-estrogen is potent enough to stimulate the cell to grow, then it will enhance cancer formation. There are some excellent studies, with all parameters taken into account, that support the protective effects of soy.

The work of Kenneth Setchell, Ph.D. at the Children's Hospital Medical Center in Cincinnati, Ohio is an excellent source of information for those who would like to study the effects of soy. A lengthy article was published in the Journal of the American College of Nutrition (Vol. 20, No. 90005, 354S-362S [2001]) that accurately deals with the many questions of soy. Dr. Setchell reviews over 120 studies done on soy. His conclusions are the same as mine: soy is not dangerous. Soy is protective. I have been researching soy and its effects (both positive and the supposed negative) at different times during my clinical practice for almost seventeen years. I have read many studies as they have been published.

I have never come to the conclusion that soy is harmful. Always, I am impressed with the beneficial nature of the isoflavones (phtyo-estrogrens) found in soy. Soy is incredibly protective. It not only lowers cholesterol, but it protects women from estrogen-fed cancers and protects men from prostate cancer.

Soy May Help Prevent Breast Cancer in Older Women / January, 2006

(The New York Times News Service) -- A diet rich in soy, with its natural plant estrogens or isoflavones, may help protect postmenopausal women with relatively high levels of estrogen from getting breast cancer, preliminary research suggests.

Women past menopause who have low estrogen levels probably won't derive the same risk reduction, but they can probably be assured the soy isn't harmful in terms of breast cancer risk, said Charles E. Wood, an instructor of pathology at Wake Forest University.

"If you have high estrogen, the isoflavones could block the adverse effects of your body's own estrogen (on the breast tissue)," said Wood, who based his views on his team's study involving postmenopausal monkeys, published in the Jan. 15 issue of Cancer Research.

Wood's study adds new fuel to the ongoing debate surrounding soy's effect on cancer risk. "There's been a good deal of confusing information, particularly with soy's effect on (breast) cancer risk," said Wood.

"Most population-based studies have found that women who consume lots of soy are less likely to develop breast cancer," he said. "A number of studies have been done, and they generally show a positive effect or no effect."

But in lab studies, Wood said, isoflavones from soy -- which have a structure similar to estrogen -- have been found to stimulate breast cancer cells grown in a petri dish and induced estrogen-like effects.

"Our hypothesis was that the amount of estrogen in the body may help determine whether soy was having good or bad effects," he said. "If you have very low estrogen, high doses of soy could have adverse estrogen-like effects on your reproductive tissue. If you had high estrogen, the isoflavones could block the adverse effects of your body's own estrogen. That was our working hypothesis."

Wood and his team used a postmenopausal monkey model. They first selected out a high-estrogen group of monkeys and a low-estrogen group. Next, they fed each group four different diets for 16 weeks each, along with a high or a low dose of estrogen.

The diets included either no isoflavones; 60 milligrams of isoflavones (similar to the typical Asian diet); 120 milligrams (highest amount that can be obtained via diet alone); or 240 milligrams (levels that must be obtained via supplements).

Next, Wood's team measured how the diets affected so-called "markers" for breast cancer risk, such as breast cell proliferation.

"No effect of the isoflavones was seen in the low-estrogen animals," he said.

In contrast, among the high-estrogen groups the researchers observed more breast cell proliferation when isoflavones were NOT added to the diet, and when they were added in smaller doses. High levels of the isoflavones tended to block the effect of estrogen on breast tissue in the high-estrogen animals. The strongest effects were seen at 240 milligrams daily, Wood said.

"In the postmenopausal period, women with high natural estrogen levels have higher breast cancer risk," he said. So the isoflavones may help reduce risk in those who need it most. These women with high estrogen levels may get the most benefit from isoflavones in soy in terms of cancer risk reduction, Wood said.

"Isoflavones may connect with cell receptors normally reserved for estrogen," he speculated, thus reducing the breast's exposure to estrogen, thereby decreasing cancer risk.

Wood stopped short of giving dietary advice, only noting that the topic warrants further study in humans.

Another expert praised the study and said it gives women reassurance. "This study is basically coming down on the side of, 'Do not worry about the effect of estrogen on the breasts of postmenopausal women,"' said Mindy Kurzer, a professor of nutrition at the University of Minnesota, who has published on the topic of soy intake. "I think it's an excellent study."

The study does have its limitations, she said -- most notably the fact that it was conducted in animals, not humans. However, "the monkey is the absolutely best animal model for this kind of study," Kurzer said, because its physiology is so close to that of humans.

The finding that there was virtually no effect of soy in the low-estrogen group is also good news when it comes to breast cancer risk, she added. "The concern was that the phytoestrogens (isoflavones) might mimic estrogen when estrogen is not around."

Soy is considered good for building bones and good for heart health, Kurzer said, as well as for relieving hot flashes during menopause.

Subject: Breast Cancer and Soy Protein
October, 2004

Lorri Kreusche

Thank you martha willmore for this great article!

If you have Breast Cancer, have you been warned AGAINST using Soy Protein?
If your answer to the above question is YES, then you have been misinformed. Below, is information intended to help clear up the confusion regarding whether soy is a "good" food or a "bad" food for you.

First of all, it is important to know the reason why women have been warned against using soy if they have breast cancer. It is a known fact that many cancers are estrogen fed. If a woman has an estrogen fed cancer, Tamoxifen is usually prescribed. The drug is intended to fit into the cell's receptor sites where estrogen normally fits, to block out the body's estrogen. (Estrogen causes the growth of cancer to accelerate.)

Since soy is a "phytoestrogen" food, it contains components that will also fit into the receptor sites on cells where estrogen would normally fit. Phytoestrogen foods are not estrogens, but rather contain molecules that the body uses to manufacture estrogens. Now here is where the confusion comes in. Since soy is a "phytoestrogen" food many health care professionals have warned women not to eat it for fear that it will also cause an acceleration in the growth of breast cancer. However, the "missing link" of information is this ..... phytoestrogens are 1/1000th as strong as the body's own estrogen. Because phytoestrogens are so weak, but they fit into the same receptor sites as estrogen, they block out estrogen hormones which are 1000x stronger .... therefore, having a protective affect, similar to Tamoxifen, but without all the undesirable affects of Tamoxifen. Those undesirable side affects include ...
Increased risk of stroke
Increased risk of cataracts & blindness
Increased risk of liver dysfunction
Causes white blood cell depletion & anermia
Causes phlebitis (inflammation of the blood vessels)
Causes depression, nausea, hot flashes, vaginal dryness
Causes loss of libido
Increases risk of uterine cancer
Note: after five years, breast cancer protection benefits wane

Due to it's protective benefits, soy is one of the BEST foods a woman with breast cancer can consume. One naturopathic doctor described soy's benefits as follows:
Soy Isoflavones Decrease Cancer Stimulation

Fill the bloodstream with phytoestrogens (soy molecules)

They will bind to the cell's receptor spaces where stronger estrogens would normally bind

When phytoestrogens block estrogens from binding to the receptors, they are called ANTAGONISTS, meaning they work against or block out the stronger estrogen hormone.

This prevents the strong stimulation of cancer cells by the estrogen hormones.

With less stimulation from estrogens, cancer cells grow much slower and are more susceptible to control by the immune system.

Also, research reports that isoflavones from soybeans (in particular "genisteins") actually suppress tumor growth even in tumors that are not influenced by hormonal activity.

Research is discovering that phytoestrogens are inhibitors of breast, uterine, bowel and prostate cancer.

ESSENTIAL INFORMATION: When an informed woman with cancer wisely chooses to consume soy, she must know several things about how to choose her soy ... choose raw soy powder, (not pasteurized soy milk or roasted soy beans). The soy powder must be made from organically grown, non-genetically grown soybeans. It must be water washed (not alcohol washed), and must have the anti-thyroid/anti-growth hormone removed. [Shaklee's processing] (see quality control details). Foods with Phytoestrogens (the most powerful ones are highlighted & underlined - soy & flaxseed are the strongest)

Fruits & cherries, broccoli, cauliflower, brussels sprouts,Vegetables cabbage, tomatoes, garlic, onions, peppers, yams

Herbs & aniseed, fennel, licorice, parsley, red raspberry,Seasonings red clover, sage, hops, flaxseed, black cohosh, dong quai

Beans, Grains peas, soy, garbanzo beans, bulgur, wheat germ,& Seeds rye

Decreasing GAS caused by Phytoestrogen Foods (the strongest are highlighted and underlined)

It is not uncommon for people who are consuming more legumes and other vegetables to have increased gas and bloating, due to the gas-producing nature of these foods. For the best remedy for these gastrointestinal problems, look to your spice rack ..... many spices and culinary herbs are carminatives (rich in aromatic oils that help the digestive system work properly). They are soothing, help ease gripping discomfort, and help remove gas from the digestive tract. Anise
Cardamon
Chili & Cayenne Celery Seed
Cinnamon Cloves
Dill Seed Fennel
Ginger Horseradish
Oregano Parsley
Peppermint Rosemary
Sage Spearmint
Thyme Turmeric
Shaklee's "Stomach Soothing Complex" contains Anise, Ginger, Peppermint & Fennel, and provides wonderful relief for many gastrointestinal problems.

More validation of Shaklee Soy Protein, Optiflora , and DTX . 1/2009

Here is a recent research abstract for your review. It presents a double barreled validation of two important products for insuring high wellness.Consider how this research suggests the long term value, and the essentialness of our Soy Protein drinks and Optiflora. The soy protein product provides the isoflavones and the Optiflora provides the necessary microflora in a convenient, safe, guaranteed and efficacious form.

We could apply this research to a third product: our DTX. Looking at this research abstract, we note that the isoflavones undergo "enterohepatic recycling". That refers to processing in the liver. Clearly, a cleansed, nontoxic liver which is functioning well is critical to this process. Our DTX product is primarily designed and aimed at cleansing, detoxifying and enhancing the performance of the liver. The important concept to keep in mind is the all-important condition of "Balance" and the synergistic self enhancing efficacy of nutrients and vitamins working in concert !!!! Once again we are amazed at the prescience of the products and philosophy of Dr. Shaklee. How often have we seen current research "catch up" with his formulations and concepts? No wonder we enjoy our high level of trust and confidence in these products.

Dr. Stu Goldstein drstu@unidial.com

From: Am J Clin Nutr 1998 Dec;68(6 Suppl):1333S-1346S

Phytoestrogens: the biochemistry, physiology, and implications for human health of soy isoflavones.

Setchell KD Clinical Mass Spectrometry Center, Children's Hospital Medical Center, Cincinnati, OH 45229, USA.

The importance of estrogens in homeostatic regulation of many cellular and biochemical events is well illustrated by the pathophysiologic changes that occur with estrogen deficiency. Many of the major diseases of Western populations are hormone dependent and epidemiologic data have shown a strong association between their incidence and diet. In particular, the importance of a plant-based diet is evident from the current dietary recommendations that emphasize an increase in the proportion and amount of fruit and vegetables that should be consumed. Although interpretation of the role of individual components of the diet is difficult from epidemiologic and dietary studies, it is recognized that there are many plant-derived bioactive nonnutrients that can confer significant health benefits. Among these phytochemicals is the broad class of nonsteroidal estrogens called phytoestrogens, and in the past decade there has been considerable interest in the role of isoflavones because of their relatively high concentrations in soy protein. The isoflavones in modest amounts of ingested soy protein are biotransformed by intestinal microflora, are absorbed, undergo enterohepatic recycling, and reach circulating concentrations that exceed by several orders of magnitude the amounts of endogenous estrogens. These phytoestrogens and their metabolites have many potent hormonal and non-hormonal activities that may explain some of the biological effects of diets rich in phytoestrogens.

Key words to file under: isoflavones, phytoestrogens, soy protein, DTX, microflora, Optiflora,

One more abstract attests to the cancer preventive properties of soy:

Does high soy milk intake reduce prostate cancer incidence? The Adventist Health Study. PMID: 10189040, UI: 99202923

Jacobsen BK, Knutsen SF, Fraser GE Institute of Community Medicine, University of Tromso, Norway.

OBJECTIVES: Recent experimental studies have suggested that isoflavones (such as genistein and daidzein) found in some soy products may reduce the mrisk of cancer. The purpose of this study was to evaluate the relationship between soy milk, a beverage containing isoflavones, and prostate cancer incidence. METHODS: A prospective study with 225 incident cases of prostate cancer in 12,395 California Seventh-Day Adventist men who in 1976 stated how often they drank soy milk. RESULTS: Frequent consumption (more than once a day) of soy milk was associated with 70 per cent reduction of the risk of prostate cancer (relative risk = 0.3, 95 percent confidence interval 0.1-1.0, p-value for linear trend = 0.03). The association was upheld when extensive adjustments were performed.

CONCLUSIONS: Our study suggests that men with high consumption of soy milk are at reduced risk of prostate cancer. Possible associations between soy bean products, isoflavones and prostate cancer risk should be further investigated.

Shaklee Protein & Estrogen/Breast Cancer 2000

In the media coverage during National Breast Cancer Awareness month last October, there is good news to talk about for a change. It is being reported that discoveries recently announced that certain new drugs, such as Tamoxafin and Rolaxafine, can work as estrogen blockers and have shown real promise in preventing breast cancer. But perhaps even more exciting will be the reports on the natural estrogen blocking power of soy foods. As reported in Sept. 27, 1998 issue of USA Weekend, research increasingly points to a connection between soy foods and breast cancer prevention. The article, written by Dr. Bob Arnot, Chief Medical correspondent of NBC News and author of the new book called The Breast Cancer Prevention Diet, explains that increased consumption of soy foods can be a natural alternative to estrogen-blocking drugs.

Nancy Brenner, Communications Manager for Shaklee Health Sciences, gives these facts: Breast cancer is the most common form of cancer among women in North America. The American Cancer Society expects that this year, in the US alone, about 179,000 women will be diagnosed with new cases of invasive breast cancer. Breast cancer will claim the lives of about 44,000 women this year. In fact, it is the leading cause of cancer deaths of American women ages 35-55. One good thing is that the breast cancer mortality rate has actually been decreasing in the past few years, probably due to increased screening efforts, and that leads to earlier detection and therefore earlier and more effective treatment. Early detection is absolutely key to increasing chances of survival. Even though we are discussing dietary support and lifestyle factors that may be elements of breast cancer prevention, there is no substitute for regular self exam, professional medical exams, and mammography as recommended by your physician. Part of the problem with breast cancer is that the risk factors appear to be numerous, complex and interconnected in ways we don't fully understand yet. Lung cancer, for example, has some very obvious risk factors you can identify and even do something about. But with breast cancer, we have to be careful about drawing conclusions that are too narrow.

SOME RISK FACTORS TO BREAST CANCER ARE:

Gender is the big one. Women are 100 times more likely to get breast cancer than men are. Among women, other factors are: Aging -- About 77% of women with breast cancer are over the age of 50 at the time of their diagnosis.

Genetics plays a very significant role. Having a close relative with a history of breast cancer doubles your own risk. Having 2 close relatives with breast cancer increases your risk by 5 times.

There are some lifestyle factors that can increase your risk, some of them are quite clear, while other seems to have only a slight effect.

There is a very strong connection between alcohol use and increased risk. Women who average 2-5 drinks daily have a 50% greater risk than women who don't drink at all.

Diets high in saturated fats, in particular polyunsaturated fats from foods such as corn oil and margarine can significantly increase risk. A recent study found polyunsaturated fats increase risk by 69%.

Hormone replacement therapy, while providing many important health benefits for post-menopausal women, can cause problems for some women over the long term. Studies have shown that women taking hormone replacement over a 10 year period increased their risk of breast cancer by about 30%.

Oral Contraceptives - Some of the factors which have what is characterized as a slight effect in increasing risk include the use of oral contraceptives, having no children or having a first child after the age of 30, and obesity. It is true that some women who ended up with breast cancer didn't appear to have any significant risk factors other than gender. That is why it is so important not to skip regular exams. In terms of lowering risks, the wellness basics are regular exercise, and a low-fat, high-fiber diet with lots of fruits, vegetables, whole grains and beans. Now there is a lot of evidence pointing to the protective effects of soy foods.

Eric Zaltas, Shaklee Health Sciences Sr. Project Manager gave these facts: Researchers noticed a glaring difference between the rates of breast cancer for American women and women living in Asian countries. The women in Asia have about 75% fewer cases of breast cancer than do American women. Obviously the first thing that comes to mind is that Asian women must have a different genetic predisposition to breast cancer. But when researchers looked at Asian women living in the US, they found that the incidence of cancer shoots right up to the normal US rate. From there, diet was identified as the key difference between women living in Asia and the US. Researchers looked at the typical Asian and American diets--One of the biggest differences was the consumption of soy foods. Soy foods are the primary component of the daily diet in Asian countries. Many other dietary and lifestyle factors may be involved, but as researchers look more closely, they have consistently found a decreased risk of cancer linked with increased consumption of soy foods. Actually, it is not only breast cancer rates that are different. Women in Asia also have lower rates of uterine cancer, and men in Asia have much lower risk of prostate cancer.

<u>What is it about soy that gives it such a protective effect?</u>

Scientists analyzed the soybean and discovered a whole variety of natural phytochemicals. But what really sets soy apart from other plant foods is a class of compounds called isoflavones. Soy beans are naturally rich in these compounds. One of these isoflavones, called genistein, has been found to have cancer preventive properties at the molecular level. And that is probably because it is a phytoestrogen.
Phytoestrogens are compounds from plants that are very similar to the female hormone, estrogen. Phytoestrogens only have a small fraction of the potency of the powerful estrogens produced by the body. That may be the key to some of the protective effect we have been talking about. What is the connection between estrogen and breast cancer?

Nancy Brenner responds: Estrogens are a group of female hormones whose primary function is to promote the growth of tissues related to reproduction. For example, estrogen is important to normal growth of tissue in the breast. The breast tissue contains receptor sites for estrogen. Unfortunately, estrogen also plays a major part in the development of breast cancer. Sometimes the cells in breast tissue may turn cancerous and lose the ability to regulate their rate of division and growth. Under those circumstances, estrogen can stimulate the growth of those cancer cells and that can lead to the formation of a tumor. Here's where the breast cancer prevention theory comes in. Many scientists now think that when you have a diet rich in soy foods, the phytoestrogens from soy bind with some of the those receptor cells in the breast instead of some of the more powerful estrogens produced by the body. The phyto- estrogen locks onto the receptor cell in the same way that estrogen does, but because it is so much weaker, phytoestrogen doesn't stimulate cell growth in the same way. In other words, the phytoestrogens block the regular estrogens from stimulating cell growth, and that may reduce the risk of cancer developing at that particular site.
Another effect the phytoestrogens have is that they seem to trick the hypothalamus and pituitary glands. Those are the glands that help regulate the production of female hormones in the body. The glands seem to detect the presence of the phytoestrogens and that makes them decide not to produce more estrogen. The net result is the level of estrogen circulating in the body is lowered.

Eric Zaltas on research of phytoestrogens and cancer prevention: There have been several laboratory studies where phytoestrogens were added to cancer cells in test tubes and the result was that the growth of these cells was inhibited. Phytoestrogens have been shown to inhibit the growth of cancerous tumors in animals, as well. Researchers are branching out to studies on human subjects to further investigate the protective effects of phytoestrogens. For example, a study published in Oct. of 97 in Australia, was called a case controlled study. This means researchers took a group of women who had been recently diagnosed with cancer and then matched them in terms of ethnicity and age, with similar women who did not have cancer. When they measured the levels of phytoestrogens in their urine, they found that the women without cancer had much higher levels of phytoestrogens.

Another study evaluated the effects of tofu consumption on breast cancer rates among Asian-American women living in Los Angeles, San Francisco, and Hawaii. Compared to a control group, the women with an increased consumption of tofu had a decreased risk of breast cancer. It can also be that genistein, one of the key isoflavones in soy, has some sort of protective effect aside from being a phytoestrogen. Genistein has been studied extensively. More than 150 studies have shown that genistein will inhibit the growth of cancer cells in a test tube. We are talking about all sorts of different cancer cells, including types that are not estrogen dependent, as breast cancer is. Genistein seems to effect the enzymes that can convert normal cells into cancerous ones. There is no single miracle food that is guaranteed to prevent cancer. You need to be covering all the wellness basics of a good overall diet and regular exercise. But there is a lot of evidence at this point to suggest that adding soy foods to your daily diet is a good idea. How much soy are we talking about? People eating the average Asian diet are getting 25 – 45 mg of soy isoflavones daily.
How much soy food to you need to eat to get that much of the isoflavones?
1/4 cooked soy beans -- 18 mg of isoflavones
1/4 cup textured vegetable protein (a soy product used to make veggie
burgers) -- 18 mg of isoflavones
1/4 cup tofu -- 20 mg of isoflavones
1/4 cup water-washed soy protein drink mix -- 30 mg isoflavones
To get the isoflavones, you've got to be sure you are using the right kind of soy protein drink mix. Some drink mixes are made from soy flakes that are washed in alcohol to remove the carbohydrates, which leaves a concentrated protein powder. **The problem is that the alcohol process pretty much destroys all the**

isoflavones. What you need is a protein drink mix made from soy flakes that are "water-washed." That's because waterwashing keeps the isoflavones in the protein. Shaklee Soy Protein drink mixes are made from water-washed soy flakes.

WHY SOY PROTEIN

Why soy will add 25 years to your life - *Jim Burke, Biochemist*

Shaklee Soy Protein Drink Mixes

High in Protein, Low in Fat, and
Naturally Cholesterol Free

 A complete protein containing all of the 9 essential amino acids is essential for long-term human health (Shaklee's soy contains all 9 essential amino acids). It's not the protein that is important, it's the amino acid content of the protein that is important.

 Animal protein does not contain the essential amino acids in any one serving. The amino acid levels are too low and take too long to digest.

 Enzymes are essential for protein utilization (when protein is heated to 110° the enzymes are destroyed. The enzymes are necessary for protein utilization. That is why Shaklee does not go over 56° of heat when producing the product.

 Phyto-chemicals and Phyto-estrogen, which are essential for maximum human health, are not found in animal protein. Although they are not nutrients like vitamins and minerals, scientists believe these plant chemicals show much promise in the prevention of cancer.

 Producing an alkaline base in the body improves the immune system and reduces the ability of viral and bacterial growth. An acid base which is produced when you eat meat and dairy products reduces the immune system, increases the level of viral and bacterial growth and will lead to many problems. Soy products are alkaline based, which is essential for long-term health.

 Soy must be water washed to maintain the Phyto-chemicals and Phyto-estrogens in the soy. Many companies use alcohol to wash their soy. This is why Shaklee uses only water to wash the soy.

Up to 24 g Protein
25 g Protein
6 g Protein
22 g Protein

Protein									
Total Fat									
Saturated Fat									
Cholesterol (mg)									
14 g									
<1g									
4 mg									
11g									
72mg									
5.5g									
7g									
19g									
71mg									
212mg									
5g									
15g									

 Shaklee soy does not raise the blood sugar level, which becomes very important to start the day so as to increase the blood sugar levels. When we start the day by increasing our blood sugar levels we will experience blood level swings, which will cause us to be tired and irritable all day long.
 Animal protein takes too long to digest and as we get older it becomes difficult to properly digest meat, which leaves too much residual acid in the body. Meat contains too much saturated fat and cholesterol.
 Shaklee soy is very digestible, has only 25 calories per tablespoon, is very low in saturated fat, contains no cholesterol and quickly absorbs into the blood.
 Most proteins take too long to digest to maintain the amino acid and protein level. The body then must attack the muscles. This is why we loose muscle mass during our lifetime. Shaklee soy is readily available to the blood.
 The lower the carbohydrate ratio to protein, the more valuable the protein is to the body.
 The raw material that goes into soy products depends on the soil where it is raised; the conditions used while growing soy make a large difference in its value.
 Bio-available is a term which refers to how protein is absorbed and used by the body. Bioavailable is a standard we use in making our Shaklee soy products. This is why Shaklee soy produces such a high level of amino acids and protein levels in the blood.
 Blood amino acid levels play such a tremendous role in maintaining health in the human body. We tend to eat such large volumes of food because low blood amino acid levels are never satisfied from saturated foods. They are full of calories, fat, and carbohydrates, which will alter the body's performance and never bring the body into balance.
 The storage cells in the body either store fat or protein. Using Shaklee protein daily can help maintain the problems in the storage cells so the body will always have a supply of amino acids stored, reduces muscle loss, and reduces fat storage.
 Protein can't be utilized in our metabolism with out adequate B_3, B_6, potassium, phosphates, and carbohydrates. Most meals do not contain adequate amounts of the right levels of B and potassium, phosphates, or carbohydrates to properly utilize the protein we are eating. Our Shaklee soy has been completely metabolized for full utilization.

1. Rebuilds the immune system
2. Rebuilds the connective tissue
3. Rebuilds the muscle tissue
4. Rebuilds bone tissue
5. Rebuilds nerve fiber
6. Rebuilds collagen & connective tissue
7. Grade one energy source
8. Special antibody production
9. Muscle nerve fiber combination

THE FUNCTIONS OF AMINO ACIDS

 Soybeans contain a full spectrum of natural phytochemical compounds that may have health benefits; compounds like phytates, phytosterols, saponins, phenolic acids and protease inhibitors. What really sets soy apart from other plant foods is a class of compounds called isoflavones.
 Soy is the highest quality protein available from nature. We are what we eat. Our health is going to be affected by the quality of protein we consume. Shaklee soy is the very best money can buy. Stress is the greatest factor in protein utilization in the body. Under stress the body's demand for amino acids increases six times. Soy is so readily available to the body; it can help counter these changes. Other proteins just take too long to digest and do not supply an adequate amount of amino acids. So in most cases the body must attack the muscles to try and get the amino acids that are needed.