Sans Soy!

By Paul Chek

Surely you know someone that seems to work so hard at being healthy—eating all the *right stuff,* yet their quest into the world of *health and performance* foods has delivered only fatigue, weight gain, a round middle and a growing lust for sweets—*maybe that someone is you!*

A common scenario among health-seekers today includes faith in and consumption of soy products. Many are avoiding milk because they've heard how brutal the dairy industry is to cows, or very possibly, they have milk allergies or milk intolerance and soy milk is a logical substitute. Many don't want to eat factory farmed animals, so one of the many highly touted soy protein powders or whey protein powders bolstered with soy isolates is *just what the doctor ordered*.

What the soy peddlers forgot to tell you is that *milk only comes from breasts, soy protein usually does more harm than good to everyone but the salesman,* and if you want to be healthy and vital, *it's time to pull your head out of your tofu and review the evidence before you experience side effects that are both problematic and avoidable!*

The mass of empirical evidence and scientific data against soy is enough to fill several books; yet, the soy industry uses its marketing might to swing the pendulum the other way, just like the sugar industry has been doing for over 100 years now. To get you up to speed on soy as quick as possible, I will briefly visit common soy myths and truths. The interested reader should explore the resource trail in this article.

Myth: Soy is a food for human beings.
Fact: Soy doesn't want to be eaten!

If we look at soy from a perspective of biological history, all plants want to live, just like you, so to protect themselves, they produce various chemical agents and mechanisms. For example, caffeine is produced by some plants, such as that found in coffee beans because caffeine disrupts short-term memory, therefore, reducing the likelihood that any animal eating the caffeine producing plant will remember how to find it again! While there are a myriad of such *defensive* chemicals produced by plants, over long periods of time, animals and humans learn to effectively neutralize and/or metabolize the plant chemicals in foods suitable to it; *environmental exposure dictates which plants and chemicals we learn to process for our own survival.*

The human genome adapts to new proteins, chemicals or toxins slowly which is demonstrated in research on celiac disease; a chronic nutritional disturbance caused by the inability to metabolize gluten, a component found in grains. In

Professor Loren Cordain's comprehensive paper titled *Cereal Grains: Humanity's Double-Edged Sword* (1), Dr. Cordain clearly demonstrates that Near East countries were the first to farm cereal grains approximately 10,000 years ago, where the people show the lowest incidence of celiac disease. Moving North West where the agricultural revolution only took hold about 3000 BC, the incidence of celiac disease and autoimmune diseases related to cereal grain exposure is the highest, suggesting the progressive process of biological adaption taking place among grain consumers is more evolved in Near Easterners than North Westerners. Keeping this biological progression in mind, we must realize that our bodies do not automatically adapt to new and foreign nutrients easily.

In most native societies of the world (with few exceptions such as the Massai tribe of Africa), milk was not consumed after leaving the mother's breast. But interestingly enough, two common reasons people consume soy milk are due to their beliefs that calcium containing milk products are vital for optimal growth and that they have an allergy or intolerance to lactose found in milk. As our life systems are going through a process of learning to digest and metabolize cereal grain proteins, we must realize that those same processes are still trying to adapt to our increased consumption of cow's milk and metabolize the proteins and sugars therein. So as we are learning that gluten from flour can cause disease, it is also being shown that soy products have similar effects on our physiology because our bodies aren't biological capable of processing this legume and its constituents.

Myth: The use of soy dates back many thousands of years.
Fact: Soy foods were first consumed no earlier than 1134 BC, just over 3,000 years ago, and all historical references site that the said soy products made for consumption were thoroughly fermented in order to remove all harmful constituents that may have caused harmful side effects (2).

While there are many that would have you believe that the Japanese and Chinese have been consuming soy as a dietary staple for long periods of time, this is, in fact, *incorrect.* Soy was first used as a food during the late Chou Dynasty between 1134-246 BC, only after the Chinese learned to ferment soybeans to make foods like tempeh, natto and tamari (2). This time frame makes soy consumption as human food considerably more recent than cereal grains in the North West, which is a significant factor in light of A) how long the body takes to adapt to any new foodstuff where genetic history is unremarkable, and B) the fact that soy contains gluten. Interestingly, soy eaten as tofu contains enough gluten protein fraction to stimulate an immune response parallel to that of celiac disease among patients with grain sensitivity according to Dr. Bill Timmins, founder of Bio Health Diagnostics medical laboratory (3), the practitioners and physicians working with the C.H.E.K Institute, and others in clinical practice using laboratory testing methods.

Whenever someone presents a food allergy or intolerance to a foodstuff such as the gluten in grains, soy, or the lactose in milk, there is an immune mediated inflammatory response that damages the hair-like projections called microvilli in the small intestine. These projections contain the enzymes that digest, let's take milk for example, and once stripped of these enzymes, undigested milk proteins make it into the liver and eventually into the body's general circulation, producing immune sensitization. It is important to realize that switching to soy milk, *which also contains foreign, immune stimulating proteins,* only serves to make the overall problem worse. As the immune system is progressively taxed, fatigue is commonly experienced. Clinically, I have found that reduced fatigue is one of the first benefits my patients experience after discontinuing soy foods of any type.

Myth: Modern soy foods protect against cancer.
Fact: There is little to no reliable evidence to support such claims made by the soy industry.

A British government report concluded that there is little evidence that soy foods protect against breast cancer or any other form of cancer. It is shown, however, that the modern unfermented soy products on the market today may, actually increase the risk of cancer (2). In fact, the soy industry's inability to remove troublesome protein fractions from soy products without irreparably damaging the remainder of the soy protein led the soy industry to promote these damaging 'anti-nutrients' or plant compounds which decrease the nutritional value of a plant food, usually by making an essential nutrient unavailable or indigestible (4), as 'cancer preventers'. To date, their proof remains slim, although cancer statistics might improve if enough people die from anaphylactic shock first (5).

Myth: Soy foods are nutritious.
Fact: Soy foods have the highest levels of enzyme blocking, mineral binding phytates of any legume and very commonly cause digestive troubles.

Phytates (also known as phytic acid or inositol hexaphosphate (IP6)) are natural compounds found in beans, grains and other seeds that serve two primary functions: they prevent premature germination and they store the phosphorous that a plant needs to grow when the seed begins to sprout.

Phytates support nature by not allowing a seed, nut or grain to germinate until the environment has just the right amount of water and warmth to support life. The phytates do this by blocking enzyme (life) activity. Once the environment reaches the conditions for optimal survival, the phytates actively break down and the enzymatic processes trigger life to begin. Phytates are also mineral blockers and have been found to block absorption of zinc, calcium, selenium, iron and other minerals when consumed by humans. Even minor iron deficiencies can lead to fatigue, lethargy, poor athletic performance, a weakened immune system and learning disabilities. Alarmingly, physicians are prescribing Ritalin and other

drugs for attention deficit disorder at record rates, yet many people, including parents of children, with such learning disabilities think soy products are a *healthy choice!*

Phytates are incredibly hard to neutralize to a point that they don't disrupt your own digestive enzymes, particularly in soybeans, which contain three times the level of phytates as mung beans and four times that of chickpeas. Phytates can also withstand heat, harsh field conditions, transportation and storage environments. They can be rendered harmless *only* by old-fashioned soaking and fermenting processes that enlist the enzyme phytase, which replicates the process of seeds planted in warm, moist soil. Although the soy industry *does* have the technology to remove phytates, they consistently choose the cheap alternative, leaving the phytates in the soy foods and simply adding cheap forms of zinc, iron and calcium to supplement its anti-nutritive value, which only results in malabsorption of the added nutrients! (5). In fact, some manufacturers will *spin* the truth and lead the consumer to think they are getting more for their money because of the *added nutrition...*

Myth: Soy foods are useful for losing weight.
Fact: Soy foods contain goitrogens that block the synthesis of thyroid hormones (5).

Clinically, we have seen a trend among chronic soy consumers seeking to regain their health holistically at the C.H.E.K institute. Common symptoms include those recognized as *hypo*-thyroid symptomology, meaning underproduction of the weight metabolism regulating thyroidal hormones. With regular use of soy milk, protein powders (food bars and shakes) and processed foods high in soy, such as the meat substitutes commonly consumed by vegans and vegetarians, comes the progressive onset of anxiety, restlessness, irritability, panic attacks, attention deficit, significant energy fluctuations, heart palpitations, tremors, sweating, low body temperature, lowered sex drive, bumps on the backs of the arms and, last but not least, fat accumulation around the middle and triceps region. While many of these symptoms are classic hypo-thyroid symptoms, we also see high soy consumption linked to blood sugar handling problems because of the fact that many soy products are high glycemic products. While soy does provide a protein source, few realize that just because there is protein listed on the food label, *it does not mean that the said protein is bio-available, that it will be recognized as a food by gut receptors and the immune system, nor that it can be effectively converted into human tissue.* For example, many vegetarians try to increase protein consumption through soy products and while they *are* eating enough protein on paper, to the trained practitioner, they clearly are *not* getting enough protein to produce new cells and hormones.

Myth: Soy protein supplements will help build lean muscle to burn more fat.

Fact: Soybeans contain high levels of phytoestrogens which act as female hormone mimickers in the body and antagonize the effects of testosterone, growth hormone and typically make an exerciser less anabolic in general.

Phytoestrogens are plant hormones with estrogenic effects on the human body, male and female alike. This has been borne out in both research on animals, birds (6) and clinical observations among clinicians treating chronic soy consumers. In fact, the estrogenic effects of soy foods have recently come to light due to the premature maturation and early onset of menstruation among girls that were fed soy infant formulas. Parents who feed their infants soy formula are unwittingly giving them a hormonal equivalent of three to five birth control pills per day (4. Pg. 331)! Such exposure to estrogenic compounds not only results in accelerated development in young females and retardation of sexual development in young males, but also leads to disease and hormonal disorders. Phytoestrogens and xenoestrogens from environmental sources such as plastics don't have the same effect on the cell that human estrogen molecules do, so when foreign estrogenic compounds attach to estrogen receptor sites on human cells, they trigger some estrogenic effects, but not others. This causes havoc with the body because all hormones are interlocked with one another in a web-like relationship. When we disturb the balance of one hormone, it has a ripple effect throughout the whole hormonal system, and the body. Today, there is a sea of information regarding the link between highly estrogenic compounds in foods, on foods, in water and their link to cancer, so why would you want to eat soy when it has been shown to be both estrogenic and problematic (see resources below).

As you can imagine, I've studied volumes of information on the subject of food, eating, gut health and related topics. Unlike most healthcare providers, I do not accept insurance while my services are very expensive. Therefore my business practice does not lend itself to poor results and my clients all come wanting *and expecting* long-term results. I cannot afford to utilize products that do more harm than good, and *soy clearly falls into this classification.* The only exception to my *"sans soy"* policy is the occasional use of fermented organic soy products as condiments such as soy sauce with sushi.

Suggested Resources and more reliable information on soy:
www.mercola.com
www.westonaprice.org
www.price-pottenger.org
www.soyonlineservice.co.nz
www.soy-allergens.de
www.mothering.com
www.creativehealth.netfirms.com/index.htm#top

References:

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State University. Fort Collins, CO, USA.
Ref. 2 Fallon, Sally. *Update 2003: Soy Alert.* Weston A. Price Foundation, www.westonaprice.org. Spring 2003.
Ref. 3 Timmons MD, Bill. Biohealth Diagnostics. San Diego, CA, USA. www.biodia.com.
Ref. 4 *Plant Toxins and Anti-nutrients.* GEO-PIE Project, Cornell Cooperative Extension, www.geo-pie.cornell.edu/issues/toxins.html#toxins. August, 2004.
Ref. 5 Daniel PhD, Kaayla T. *The Whole Soy Story*. New Trends Publishing, Inc. Washington DC, 2005.
Ref. 6 *Spreading The Truth About Soy* www.soyonlineservice.co.nz/Intro.htm