



Soybeans

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Researchers recently sat down and calculated what would happen nutritionally if we replaced all meat and dairy in the United States with soybeans. Interestingly there would be significantly increased intake of folate and vitamin K as well as increased calcium and magnesium and iron – all elements essential for good health. Fiber with all of its beneficial effects would be increased. Total protein intake would be down a modest 9% - which considering that American's today are suffering from many diseases due to protein excess would also be a beneficial effect. And of course, all of the diseases and cancers related to various animal born viruses, bacteria, worms and parasites would be eliminated.

Soy is an excellent source of protein easily supplying all of our protein needs with a perfect balance of amino acids. And it can do all this at a fraction of the cost of using animal protein in the diet.

And of course, if we eliminated the meat and dairy industries we would eliminate a major source of pollution. The toxic pollution and greenhouse gas produced from these sources far exceeds that produced by all the automobiles and trucks combined. And if all of the land now used to produce animal feed was used to produce human food world hunger would be eliminated overnight.

Beneficial properties

The recent interest in soy protein has led to the discovery of a number of unique peptides (very short protein chains) found in soy. Defensins, glycinins, conglycinins and lunasin are among these special soy peptides and they provide us with some significant health benefits in terms of improved blood pressure regulation, better control of blood sugar levels, and improved immune function.

A review of over 43 studies by researchers at the College of Medicine at the University of Kentucky concluded that daily soy consumption of 30g produced a definite reduction in coronary heart disease as well as a reduction in LDL cholesterol.

Soy is a good source of omega-3 fatty acids – with even higher levels found in the green soybeans we often call edamame.

Soy has some significant antioxidant properties as well. An isoflavone named genistein has been extensively studied for its cancer protective properties. We now know that genistein increases the activity of a number of powerful antioxidant enzymes in the body including superoxide dismutase, glutathione peroxidase, catalase, and glutathione reductase.

God obviously knew what he was doing when he created soybeans and engineered all of the complex nutrients he placed there. And we are just beginning to understand some of these phytonutrients. Recently we have learned about caffeic, coumaric, ferulic, and sinapic acids all beneficial phenolic acids found in soy with powerful antioxidant properties.

Genetic engineering

Today man is not content to enjoy the benefits as God has given them to us. We now through genetic engineering are recreating the soybean into what we believe will be a better life form. In the United States, over 90% of the soy grown is GMO (genetically modified organism). One genetic “improvement” they have made is herbicide resistance to glyphosate. Now they can spray lots of this toxic substance on the soybeans and kill all the weeds around it without killing the soybeans – so we end up with high levels of glyphosate in our food and lots of health problems related to that – so many in fact that around the world many countries including most of Europe have banned these GMO foods. But here in the US today most soy is GMO. I would highly recommend using only non-GMO soybeans – that is soybeans with the genetic code that God designed still being used.

Soy protein isolate

After God created soybeans, he looked at them and saw that they were very good. But today man looks at them and says no - I can make them better. And so we take them to a factory first we separate out the oil – now in its free liquid form without antioxidant protection it is exposed to oxygen and becomes damaged with oxidative free radicles. If we heat it in a frying pan, we can increase this oxidative damage over a million times. This damaged oil is now added into our diet in large amounts and it is very damaging to the structure of cell walls and other organelles inside a cell – resulting in cancer and many other disease processes.

In an effort to protect us from this damage, the body’s immune system creates a powerful inflammatory response trying to eliminate these oxidative free radicles. This inflammation is the root cause of many diseases and much pain and suffering. Atherosclerosis resulting in heart attacks and strokes is the number one cause of death in the US today. Arthritis and

degenerative osteoarthritis of the spine are major causes of pain and disability. These are inflammatory responses to oxidized free radicals.

But after we take the oil out of the soybeans what do we do with what is left over? We take it through a multi-step process in a factory to separate out the protein – to create soy protein isolate. Isolate means the protein is isolated from all of the other substances found naturally in a soybean. During this process, different machines and chemicals are used to get rid of all of those other substances that God engineered into the soybeans for our benefit and leave us with what we think we need – pure protein. (Actually Americans are getting way too much protein – but that is another story for another day.)

In the process of doing all this not only are all of the antioxidants removed but also the protein is exposed to oxygen and just like the oil we discussed above becomes a highly oxidized substance full of free radicle damage. And so all soy protein isolate is highly oxidized and very harmful to the body and contributes to the inflammatory diseases, cancer, and coronary heart disease just like the oxidized oils.

Huge amounts of this soy protein isolate are used in processed foods of all kinds today because it is so cheap to produce. If the label says: soy protein, soy protein isolate, TSF (textured soy flour), TSP (textured soy protein), TVP (textured plant protein), etc. you can be sure that it is contributing to atherosclerosis in your arteries and arthritis in your joints.

They now include this as a major ingredient in so many of the “health foods” such as various meat analogs that we sell in our Adventist Book Centers. While you will not get mad cow disease or trichinosis from a soy burger, you will be contributing to heart attacks, cancer, strokes and arthritis. I would highly recommend that we move away from these processed ingredients to foods prepared from whole plant ingredients.

Hexane

But it gets even worse. This process of making soy into soy protein isolate uses in one of its first steps a chemical solvent called hexane. Hexane is a petrochemical, a hazardous substance according to the EPA and listed as a neurotoxin by the CDC. However the FDA does not test for it and food companies are not required to monitor for it. They are not required to list it as an ingredient because it is considered part of the processing of the product. Independent testing has shown variable amounts of this to be present in soy protein isolate sometimes in significantly high amounts. My thinking is that even trace amounts of a known neurotoxin would not be a wise choice to include in our diet.

Almost all soy protein in the US today is hexane extracted. It is possible to isolate protein by other means and with more attention being directed to it, it is possible to get hexane free soy protein. Hexane is not permitted in certified organic products. But labeling can be deceptive. One popular protein bar says “made from organic soybeans” but if you read the ingredient list you will see that “organic soybeans” are a minor ingredient while the first ingredient in the list is “soy protein isolate” so this bar is probably laced with hexane. If it says: “100% USDA Organic” it should be hexane free. But of course, if it contains soy protein it will still be highly oxidized and will contribute to the destruction of your body.

Whole plant foods eaten whole

The best way to enjoy the benefits that God placed in soybeans to eat them as a “whole food”. Green soybeans known as edamame can be steamed or boiled briefly and are a delicious meal in themselves, or can be added to a meal in many ways. Tofu can be made from whole soybeans and is an excellent food that can be prepared in many ways. But read the label, some brands add soy protein to their tofu – I would avoid these. Soymilk can be made from whole

soybeans as well – but read the label. Dried soybeans can be cooked and used in many recipes. And remember, no single food should be used in excess in the diet. Many suffer from allergies to soy created by its excess in all of our processed foods and will find relief by eliminating soy entirely from their diets. The best way to get your protein is always to get it from a wide variety of foods, many different legumes as well as many other seeds should all be used rather than relying excessively on a single food like soy.

The more we learn the more we see the wisdom in the Creator's plans. The food as He made it is always the best choice for our health and happiness. Every processed and refined product we create seems to be loaded with the seeds of death and destruction. As we move into the last days of this earth's history, disease in the human race is at the highest levels. Now as never before we need to come back to the simplicity and wholesomeness of God's original diet. We need to lay aside all of these processed refined products and let our diet be simply fruits, vegetables, whole grains, legumes, nuts and seeds. These are the foods that God has given to us and that we will subsist on throughout eternity.

But not only are we getting our tastes ready for heaven, the urgency and importance of the final message we are to proclaim demand the very best possible of our physical powers. This will be impossible if we are living on the diet of the world around us. God is calling us to a higher standard not just so that we will be peculiar but because it is the way He has marked out to give us physical strength, clean arteries, good blood, pain free flexible joints and a clear discerning mind with balanced emotions so that we may be a temple that he can pour out His Holy Spirit upon. Then, filled with His Spirit we may stand in unity with Him and be victorious in the final battle of this earth's history.

May God give us the wisdom and the victory as we submit fully to every ray of light he gives us.