



Good Food is Wise Medicine

Flax seeds may just be one of the world's most important nutritious grains that not only tastes great but also can improve your overall health and vitality. For years I have been recommending flax seeds to all of my patients who are seeking optimal health. Flax seeds are nutritionally high in alpha linoleic acid (ALA), an omega-3 fatty acid that is heart healthy and also a source of anti-inflammatory precursor molecules. They contain soluble and insoluble fiber, which helps to maintain normal cholesterol levels and promotes optimal bowel function. Also they are a rich source of plant lignans and many vitamins and minerals- this tiny seed is a healthy, wonderful nutritional gift.

To learn more about flax seeds read on...

Flax Seeds:

Over the centuries, flax oil has been used to coat farm tools to prevent rusting. Its whole seed has been boiled and used as a poultice for boils and other skin infections. The mucilage obtained from boiling whole flax seed has been used as a hair gel. And through the ages, flax seed has been eaten for its healthful properties. Flax production has soared as the demand has tripled in just the last decade for flax as a nutritional supplement..

Flax is truly an amazing grain which is proving itself over and over again as a nutritional power house and wonder-grain. The scientific community is becoming more and more excited as it continues to learn about the healthful and healing effects of flax. The study of how flax relates to heart disease and cancer is in its infancy but what has been learned to date shows solid evidence of its healthful properties. As the nutritional benefits of flax continue to come to light, its use will only increase.

Almost half the weight of this small, tear-shaped seed contains oil, and to a large extent, it's this rich, wonderful oil that's making the big waves among the nutritional experts and healthcare practitioners of today. Even more exciting is that there are even more benefits to the flax seed, it's not just the oil that's making headlines. Flax seed also contains several other remarkable nutritional elements; fiber, lignans, antioxidants, protein, B vitamins, potassium, other minerals, calcium and more- this tiny seed is one of nature's most powerful nutritional gifts.

Current research tends to support the theory that flax seeds are beneficial for a multitude of ailments. Flax seeds can relieve constipation. They may be helpful in decreasing symptoms of certain patients with inflammatory bowel disease. They can also help in maintaining normal healthy cholesterol levels and thus may contribute to lowering the risk of heart disease. In addition, flax seeds can play a pivotal role in maintaining normal blood glucose levels which can help with diabetes prevention and control. And finally,

many people love flax seeds because they are also helpful in increasing the sense of fullness or satiety, thus a potential effective aid in weight management.

Flax seeds are naturally high in alpha linolenic acid ALA, a type of omega-3 fatty acid. Over half the oil found in flax seeds consists of this beneficial essential fatty acid. Early research is pointing to ALA as a possible effective stroke reducing agent. Research is also learning that ALA appears to protect the heart against arrhythmias, or irregular unstable electrical activity. ALA has also been shown to also inhibit atherosclerosis, a detrimental process that leads to hardening of the arteries secondary to inflammation. We are now learning and beginning to understand how ALA is converted into compounds that can decrease this harmful process of inflammation. It is also thought that ALA works with flax's other nutrients to help bring about this effect in reducing inflammation. Reducing inflammation may be helpful in cancer prevention as well as in decreasing the symptoms of certain auto-immune disorders. More research needs to be done to determine the role of flax seeds and the benefits of essential fatty acids in the development of these and many other chronic diseases.

Greater than fifty percent of flax seed oil is Alpha-linolenic acid. The flax seed is one of the highest food sources of ALA known in the world.

Alpha-linolenic acid or ALA is an '*essential fatty acid*'. It is called essential because our bodies need to get this nutrient by eating foods that are a rich source. Our bodies cannot make this precursor nutrient on it's own, ironic, since our bodies need to have this nutrient for optimal health and vitality.

It's estimated that most of Americans are not getting enough of this vital essential fatty acid to be optimally healthy. Yet this was not always the case, (and hopefully with the awareness of the importance of essential fatty acids growing, this is going to change). Before the Industrial Revolution, when we were hunters and gatherers of our food, there was much more ALA in our diets. In addition, the intake of saturated fatty acids, and trans-fatty acids, which were unknown in those days, has dramatically increased today thanks to modern technology.

This shift in our diets is probably one of the main reasons that we are seeing certain health problems increase in our society today. We are becoming more aware now that perhaps this change in our diet is contributing to increased heart disease, strokes, behavioral changes, abnormal triglycerides, and cholesterol levels in the blood, higher blood pressure, more diabetes, more tissue inflammation, skin disorders, mental deterioration, hypertension, low metabolic rate and perhaps even some kinds of immune dysfunction.

Flax seed's other primary beneficial ingredient is a group of compounds known as lignans. These *lignans* are a type of naturally occurring phytonutrient (phyto=plant nutrient) that can be beneficial for overall health. When we ingest these lignans, they get broken down by intestinal bacteria into enterodiols and enterolactone, two mammalian lignans that are thought to have weak estrogenic properties. Thus we say that the plant lignans found in flax seeds are phytoestrogenic, ie; act like weak estrogen in the body.

So, lignans can behave as phytoestrogens, ie substances found in plants, again (phyto-) that have estrogen-like properties in the human body. The general consensus, and this still needs more research data to claim as true, suggests that phytoestrogens latch onto the receptor sites on cells meant for estrogen. This results in a partial stimulation of those receptors, less intense than if true estrogen had attached, but stronger than if nothing had stimulated those receptors at all. This leads to possibly two result. In women who have considerable estrogen, high consumption of phytoestrogens tends to occupy the receptor sites and keep the bodies' real and more potent estrogen away. The end result is to reduce the overall action of potent estrogen. Since estrogen promotes a number of forms of cancer (such as certain breast cancer), it is thought that this may reduce the risk of certain hormone related cancers. In addition, in women who have little estrogen (after menopause, for example), consumption of large amounts of phytoestrogens is thought to mimic the effect of the missing estrogen, possibly then, reducing symptoms such as hot flashes. Again, more research needs to be done to confirm this data but how promising!

Research is just beginning to unfold on this fascinating subject, in addition to uncovering other areas of plant lignan health benefits- (including that which may involve supporting and strengthening the body's immune system).

One important question that seems to always come up in my lectures is the difference between flax oil and flax seeds. I bring this up now because one of the main differences is that flax seed oil contains practically no lignans - you must eat the flax seeds. Flax oil also is missing many other important nutrients, namely fiber which is vital for our health. Bottom line: Both from a health and economic standpoint, I suggest eating the whole flax seed. Flackers are an excellent source of flax seeds and their beneficial nutrients.

Why Our flax seeds are whole and still fabulous for you....

Having said that reminds me of another important feature of flackers worth mentioning. While most flax seeds need to be ground before eating in order to release the omega-3 fatty acids, the flax seeds in Flackers are first soaked, thus considered sprouted, which biologically activates the seeds making them easier to digest and the nutrients more absorbable and the omega -3's more stable. After the seeds are sprouted we dehydrate the flackers to make them crispy and delicious, but more importantly to preserve the nutrients and keep them biologically active until crunch! You take a bite and you chew chew these soft active seeds, which releases all the beneficial nutrients that you need.

So, unless you are allergic to flax seeds, most people will benefit from their health giving properties. If you have not already started, its time that you incorporate flax seeds into your life and diet. You will feel better, look better and be healthier!

Containing no gluten, flax seed should be perfectly safe to eat by those with wheat allergies. If you are in poor health or have any health condition where you are told not to eat seeds, please consult your doctor before starting a diet of flackers or flax seeds.