

*FLAX, THE GOLD STANDARD OF HEALTH & NUTRITION

By Mike King

If there were only one supplement that I could have, it would be the common flax seed (*Linum usitatissimum*). Flax was one of the first crops to be domesticated by humans over 10,000 years ago and thought to have originated in the Mediterranean region of Europe. Recent archeological discoveries show that Flax was used by Stone Age people in parts of Switzerland, home of the Neolithic Lake Dwellers. Not only did they apparently use the fiber for crude linens and fishnets, but they also used the seed. About 3000 B.C. flax was being cultivated in Babylon. Ancient Egyptians cultivated flax and wrapped their mummies in the flax linen cloth from the plants fibers. About 650 B.C. Hypocrites wrote about using flax for the relief of abdominal pains. In the same era, another Greek healer Theophrastus recommended flax for a cough remedy.

Not surprisingly, the Bible is full of reverences to Flax. One of the more famous stories is in Joshua 2:6 when Rahab hid the Jewish spies on the roof of the inn among the stalks of flax which she was drying after harvest. Flax would have supplied Jesus' swaddling clothes as well as his burial clothes - even the Shroud of Turin is made of Flax linen cloth. About 100 A.D. Tacitus, a famous Roman historian, praised the powers of Flax for healing. Flax also has commercial uses. Linseed oil is a processed form of flax oil and is found in fine oil paints, varnishes, and stains. In 1863 Frederick Watson coined the term Linoelum which he invented using flax oil.

Flax oil has been around for a long time and the ancient Greeks, Romans, and Egyptians used Flax as a staple food source and revered its healing properties. Flax provides valuable essential amino acids, protein, dietary fiber, cancer preventing phytonutrients, and is the leading source of Omega-3's. Unfortunately, within the last 100 years "modern" food processing and other grain preferences have removed many of the vital nutrients, such as Flax, from our food chain. Flax oil contains about 56% of the essential fatty acid alpha-linolenic acid or ALA. The word "essential" implies that the fatty acid must come from an outside source and cannot be manufactured, synthesized or broken down from other fatty acids by our body. Flax is the least expensive and most abundant true vegetarian source of Omega-3's, beating out borage, pomegranate, and black currant oils.

ALA is an omega-3 fatty acid that can be converted into eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Both EPA and DHA are found in fish oil, but Flax oil is considered to be the parent compound because the body converts it in to either EPA or DHA as needed. Flax oil is a true vegetarian source and usually is easily tolerated without allergy or assimilation problems. Only in very rare cases, due to a genetic problem, ALA cannot be converted to EPA and DHA. Both forms (fish & flax) of essential fatty acids are important to human health. One is not superior to the other they are simply different.

Over 50 years ago, in 1952, Dr. Johanna Budwig extolled the benefits of the mighty Flax. Dr. Budwig was one of the first scientists and doctors to pioneer the new health benefits of Flax supplementation in the 20th Century. She explains in her book that all fats consist of Glycerine. Glycerine has three 'arms' with a chain of fatty acids attached to it. For example, in butter the chain of fatty acids has four links to it, and coconut oil 14 links. These naturally occurring saturated fats can only be turned into energy by the body in the presence of essential fatty acids.

Dr. Budwig further explains, "Unsaturated fat is when the fatty acids chains have 18 or more links they become not so firmly attached to each other." In her book Dr. Budwig gives the example of when you would fray the end of a silk thread in one place it could easily absorb water or dye. This is the way the fatty acid chains, with their weak unsaturated connections form protein associations easily. These fatty acids then become water soluble through this association with proteins and very

bioavailable to the body. When two unsaturated double links occur together in a fatty acid chain these absorbing effects are multiplied. Thus, in the highly unsaturated fats, such as the linoleic acids (ALA) there is a wealth of available energy for the body.

Dr. Budwig explained many of the attributes of this energy on an atomic level, since she was a quantum physicist. She discovered that the special proteins in cottage cheese or yogurt greatly enhance the properties of the essential fatty acids like ALA. Sadly, her genius was to her detriment and most of the conventional medical community at the time ignored her discoveries and even ridiculed her. Max Planck, quantum physics founder, said, "When someone thinks he has discovered something new but he cannot as a scientist so express it that everybody understands, then he hasn't discovered anything at all." By the end of the 20th century the healing potential of Flax was sadly overlooked. I can remember in the 70's & 80's when people thought Flax oil was only linseed oil used for paints, oil soaps, linoleum and such! No one would want to put "stuff like that in his or her body."

On into the 21st century Dr. Joiner-Bey came to Dr. Budwig's and Flax's rescue. In his book he claims that flax is therapeutic in over 60 diseases and illnesses. In fact, a recent search by Dr. Joiner-Bey of peer-reviewed medical journals established a relationship between omega-3 deficiencies and more than 40 common diseases (see "The Healing Power of Flax" listing). Dr. Joiner-Bey clearly explains in his book how Flax and Flaxseed oil can prevent and dramatically benefit the following conditions; heart disease, strokes, diabetes, high cholesterol levels, ADHD, high blood pressure, cancer, rheumatoid arthritis depression, MS, allergies, dry skin, psoriasis, and eczema.

Dr. Joiner-Bey validates that Flax oil supplementation is good for your heart and circulation. Flax oil reduces your cholesterol and is important to add as a supplement if you are on cholesterol-lowering drugs. Cholesterol-lowering drugs indiscriminately lower blood lipid levels and virtually starve the brain of the missing fatty acids. Flax works harmoniously with cholesterol-lowering drugs and aids in adding to depleted omega-3 fatty acids. Flax oil also helps to normalize your blood pressure, decrease the harmful LDL cholesterol and triglyceride levels and increase the favorable HDL cholesterol. Even arrhythmias (irregular heart beat) and fatal heart attacks are greatly reduced with adequate omega-3 fatty acid intake. There is new evidence that flaxseed reduces C-reactive protein (CRP), a circulatory inflammations marker protein. In the April 2003 issue of *Atherosclerosis*, ALA supplementation lowered CRP by 38%. Flax oil also decreases platelet aggregation, reduces free radical damage and has been shown not only to prevent the first heart attack or stroke, but even the second. It is never too late to start supplementing with flax.

Flax also contains lignans, which are a nutritional fibrous photochemical. Flax seed contains over 100 to 800 times more plant lignans than other nutritional plant seeds such as wheat, soybeans, and wheat bran. These lignans have been shown to have protective effects against breast cancer, colon cancer, prostate cancer, pancreatic cancer and other malignancies. Lignans have been shown to weaken the toxic effects of excess estrogen – especially those associated with cancerous processes.

Research conducted at the University of Toronto, Canada shows flaxseed and Tamoxifen alone or in combination can beneficially influence the course of breast cancer by interfering with various steps of cancer adhesion, invasion and migration. There is a product called Brevail from Barlean's Organic Oils that contains concentrated lignans (mainly SDG or Secoisolaricresinol Diglycoside) that has the ability to inhibit the enzyme aromatase that converts "maverick" estrogen out of extra male hormones that are available in both men and women. Brevail is also used to aid in reducing menopause symptoms and to normalize moods and PMS.

Flax comes as refined liquid oil or in pill form. There are even several combination formulas of Flax oil products specifically designed for a man's or a woman's individual needs. Flax can be given to children and even pets. Many pet owners notice an improved coat and help with arthritic symptoms. It is recommended to supplement daily with one tablespoon for every 100 pounds of body weight while reducing omega-6's (corn, safflower, peanut, sunflower and some soy oils), in your diet.

As you can see there are many benefits to Flax seed oil, Flax seeds, and the fibrous nutritional component Lignan. Remember to always use fresh oil, seeds or quality Flax products. ALA is easily degraded and destroyed. If it's cooked, preserved, canned, or processed it can't have any ALA in it. The leading brand of the highest quality Flax products are made by Barlean's Organic Oils and other less expensive, but still good quality, Flax products come from NOW brand. Yes, if there were only one supplement that I could take, it would be Flax!

**This information is for educational purposes only and is not intended to diagnose, treat, cure, or prevent any disease.*