

What is Flaxseed and how can it benefit me? I was faced with this question when I started hearing about Flaxseed not long ago. It became a 'buzz word' in society and seems to be making great role in increased health for many. I wanted to join that wagon of wellness and so I researched until I felt satisfied that it could help me, too.

Botanical name of flaxseeds is Linum usitatissimum, the flax plant, which has been widely used for thousands of years as a source of food, clothing and decorating houses (paints, linoleum flooring etc.). Usitatissimum means useful seeds. The crushed seed makes a very useful poultice in the treatment of ulceration, abscesses, deep-seated inflammations and even skin cancers. Flaxseeds have become very popular recently, because they are a richest

source of the Omega 3 essential fatty acid; known as Alpha Linolenic Acid (ALA), lignans and fiber. People in the new millennium may see flaxseed as an important newfood super star.

Flaxseed increase oxygen consumption at the cellular level resulting in increased energy and stamina, and feeling of wellbeing. Even Gandhi wrote in his book: "Wherever flaxseed becomes a regular food item among the people, there will be better health." In the 8th century, French king Charle magne even passed a law requiring his people to use flax seed so that they would be healthier.

Omega-3 Fatty Acid - Anti-entropy Factor

Flaxseed has essential Omega-3 fatty acid

called alpha-linolenic acid (18:3 n-3). Omega-3 is also converted into another class of chemical called prostaglandins, (a specific chemical/ hormone group which are essential to regular functioning of healthy cell). They are important for the regulation of inflammation, pain, swelling, blood pressure, heart function, gastrointestinal function and secretion, kidney function and fluid balance, blood clotting and platelet aggregation, allergic response, nerve transmission, steroid production and hormone synthesis. If the omega-3 prostaglandins produced are either lacking or unbalanced, leading to dysfunction of these vital bodily activities.

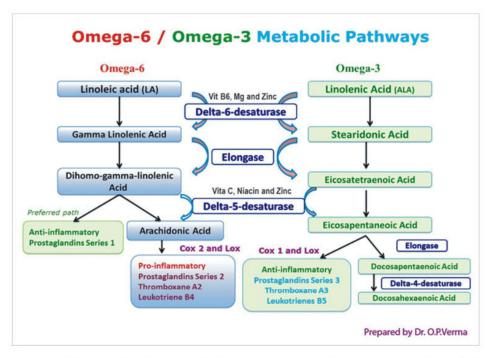
It turns out that both the omega-3 and omega-6 pathway utilize the same enzymes, so both have to compete for these enzymes. Both groups of prostaglandins perform vitally important functions and supplement each other through complex and multi-faceted interactions. For centuries ratio of Omega-6 and Omega-3 was perfect e.g. 2:1 or even 4:1 (very ideal ratio). But after the global switch to industrial agriculture and processed foods it is 20:1, 40:1 or more (!!!). This throws the body into the state of chronic inflammation, giving rise to inflammation-related chronic diseases, including thrombosis, arthritis, diabetes, atherosclerosis and coronary heart disease, cancer and asthma.

Lignan is a Superman

Lignans are unique fiber-related polyphenols that provide us with antioxidant benefits, fiber-like benefits, and also act as phytestrogens. Flaxseeds is the #1 source of lignans on earth. They contain about 338 times as many lignans as sunflower seeds, 475 times as many as cashew nuts, and 3,200 times as many lignans as peanuts.

When flaxseeds are compared with other commonly eaten foods in terms of their Antioxidant value flaxseeds rank 9th among 100 commonly eaten foods, much higher than blueberries or olives. Lignan has immunostimulatory, anti-bacterial, antifungal, anti-lupus and anti-viral effects.

The most important lignan in flaxseed is secoisolariciresinol diglycoside or simply SDG. When eaten SDG in flaxseed is



converted by bacteria in the colon to the mammalian lignans-Enterolactone and Enterodiol.

Lignans have week estrogen-like action and act as hormone balancers. In conditions which are linked with excess estrogen (such as PMS and breast cancer) lignans compete with woman's own estrogen, having an estrogen lowering effect.

In conditions associated with declining estrogen levels such as menopause, lignans have the opposite effect, increasing levels of estrogen. This balancing action is due to their ability to competitively lock onto our body's estrogen receptor sites. Consequently, lignans are used to reduce

symptoms of menopause, such as hot flushes, mood swings and breast tenderness. It is also beneficial in habitual abortion and sterility. Other condition where lignans may be helpful due to their estrogenic effect includes bone health, prostate conditions, hair loss and acne.

Dr. Danial Daves, Director of A.R.A.I proposes that flax lignans for the treatment of AIDS. His research shows 97% success rate for AIDS sufferers who consume flax lignans. The Flax Lignans supercharge the depleted immune system and gives an AIDS sufferer a new life, new hope and a future.

Heart Healer

Flaxseed inhibits the production of proinflammatory cytokines, eicosanoids and cytokines; thus reduces inflammatory responses. One way that Flaxseed helps the heart is by decreasing the ability of platelets to clump together, thus it acts as natural aspirin.

Flax seed helps to lower high blood pressure, clears clogged coronaries like a sweeper, lowers high blood cholesterol, bad LDL cholesterol and triglyceride levels and raises good HDL cholesterol. Intake of flaxseeds has also been shown to decrease the ratio of LDL to HDL cholesterol.

Flaxseeds prevent clot formation in arteries, which may result in strokes, heart attacks and thrombosis. Omega-3 Fatty acids



present in Flaxseed appear to enhance the mechanical performance and electrical stability of the heart and to protect against fatal arrhythmias.

Flaxseed - Diabetes Terminator

Flaxseed is a zero carb whole grain food and helps stabilize blood sugar levels for longer. Let me explain you the sweet maths. 14 Gm of Flax contains 2.56 gm, protein 5.9 gm fat, 0.97 gm Moisture and 0.53 gm ash Total is 0.97+2.56+5.90+0.53=9.86 gm. The Remaining amount 14 - 9.86 = 4.04 is Carb, and by subtracting fiber (3.8 gm) we get actual sugar value 4.04-3.8=0.24. 0.24, which is comparatively negligible amount so practically Flax is called a ZERO carb food.

Omega 3 makes your brain feel satiated and helps stop food cravings! Flax is an excellent source of fiber - helping you feel fuller for longer. Flax lignans help heal the body lessening or preventing complications from diabetes. In a University of Toronto study, flaxseed bread was shown to lower blood sugar by 28% within an hour vs. those who ate otherwise similar bread with no flax content.

Digestive System - Funda of Fiber

Flaxseed is rich in both soluble, insoluble fiber and mucilage. Flax fiber is an excellent food for friendly bacteria in the intestine which keeps disease-causing organisms in check. Consumed with plenty of pure water, flax seed softens the stool and makes bowel elimination easier, a blessing to those with any level of constipation. The researcher concluded that flaxseed relieved constipation more effectively than psyllium husk. Taken for inflammatory bowel diseases like Irretable bowel syndrome, diverticulitis or ulcerative colitis. Finally, flaxseed has been shown to reduce risk of colon cancer.

Rejuvenates Skin, hair and nail

The essential fats in flaxseed are responsible for its skin-healing powers. Dry skin, acne, rosacea, eczema, dandruff and psoriasis often respond to its anti-inflammatory actions and skin-soothing properties. It is a fountain of youth. The omega-3 fatty acids in flaxseed have been shown to contribute to strengthen and

Relative Antioxidant Activity	
Vitamin E	1
SDG (Flax Lignan)	1.27
SECO (Aglycone)	4.86
Enterodiol (Mammalian Lignan)	5.02
Enterolactone (Mammalian lignan)	4.35





fortify hair. It prevents and sometimes reverses premature graying of hair. Similarly, the Flaxseeds work to nourish dry or brittle nails. Flaxseed oil makes skin very soft, fair, moist and attractive. Flaxseed has anti-wrinkle effect. Flaxseed is internal cosmetic. It is natural manicure and pedicure.

CNS-Flax is Sim Card of Mind

Think of your brain like the engine in your car. It needs oil just like your car does. Omega 3 is that oil. In the development of our brain, Omega 3 is vital for memory and performance, and it is needed for the transmission and reception of brain signals.

The Flaxseed is a feel good food and keeps your mind cool and cheerful. You don't become angry. Your mood is always elated and positive. This is super anti depressant. Flaxseeds are essential for the function and structure of the brain and improve cognition, memory learning skill and concentration. Flaxseed is SIM CARD of mind's circuit. Here SIM means Serene, Imagination & Memory and CARD denotes Creativity & Concentration, Alertness, Reading writing & thinking ability and divine. Flax has been scientifically proven to treat depression, diabetic neuropathy, Alzheimer's disease, Parkinson's disease and multiple sclerosis. Flaxseed can improve eyesight and perception of colors. Colors look bolder and vivid.

Arthritis

The two most common forms of arthritis are osteoarthritis and rheumatoid arthritis. Flaxseeds slowly heal these inflammatory joint diseases.

Dr. Budwig Cancer Protocol

Discussion about Flaxseed is never complete without highlighting achievements of Dr. Johanna Budwig, top European cancer research scientist. She proposed Flaxseed oil and cottage cheese diet for treatment of cancer, arteriosclerosis, stroke, cardiac infarction, arthritis and even immune deficiencies. Thousands of cancer patients have been helped by her protocol with 90% documented success rate. Testimonials can be found for almost every type of cancers, even late stage. Dr. Budwig has treated many seriously ill individuals, even those given up by medical practitioners, to regain their health through a simple regimen of nutrition. Dr. Budwig has been nominated for a Nobel Prize 7 times, but was not given because of her refusal to use radiation or chemotherapy.

Best of the Best for Body Building

Flaxseed has received an overwhelming response from the athletic and bodybuilding community. An article entitled "Best of the Best", published in the

bodybuilding and health enthusiast magazine Muscle Media 2000, claims flaxseed as "the hottest idea in bodybuilding" and "a surprising new category of bodybuilding supplement." Mr. Dan Duchene in his column "Ask the Guru", also writing for Muscle Media 2000, and ranked flaxseed as the number one bodybuilding supplement. Beyond providing essential nutrients flaxseed provides valuable fuel required by today's high intensity athlete. Flaxseed increases energy, vitality, stamina and shortens recovery time for fatigued muscles after exertion.

The benefits of flaxseed for athletic performance been demonstrated in preparing Hilary Swank as a boxer in Clint Eastwood's film, Million Dollar Baby. Grant Roberts (her Fitness Trainer) had the task of adding at least 10 pounds of lean muscle in just nine 9 weeks. In addition to an intense training, he gave her 8 or 9 tablespoons flaxseed oil daily. Surprisingly, Swank's hard work added more than 20 pounds of muscle in that time. According to Roberts, nutrition represents 60% to 70% of the effective input to building lean body mass. The remaining 30% to 40% of positive results arise from exercise program.

Ways to include flax seed and flax oil in home cooking

- Sprinkle ground flaxseeds onto your hot or cold cereal.
- Add flaxseeds to your homemade chapatti, cookie or bread recipe.
- To pump up the nutritional volume of your breakfast shake or smoothies add ground flaxseeds.
- How much should be taken in a day -The recommended daily dose for most people is approx. 30-50 gm.

