

HEALTH PERSPECTIVES

"Practical Insights Into The World Of Natural Healing."

Fats for Health

Flax and Borage Seed Oil

by Jade Beutler

In this day and age of fat phobia and the resultant barrage of low fat and non-fat food products lining the grocery store aisles, a recommendation to supplement your daily diet with one to two tablespoons of essential fatty acid rich oil would appear to go against the grain. To the contrary, this is exactly what health conscious consumers are doing across the country, not only to attain and maintain optimal health, but in many instances, as a treatment for the over 60 health ailments the essential fatty acids have been scientifically validated to benefit.

While it is true Americans should not consume more than 20-30% of daily calories as fats, a lack of the dietary essential fatty acids has been suggested to facilitate degenerative disease. If surveys are correct that approximately 80% of our population is deficient in the essential fatty acids, this may present a serious health threat. Unfortunately, mass commercial refinement of fats and oils products and foods containing them has effectively eliminated the essential fatty acids from our food chain, contributing to our modern day deficiency. Organic, unrefined flaxseed oil is considered by many to be the answer to this health dilemma. Oil extracted from organic flaxseeds is unique because it contains both essential fatty acids: alpha-linolenic, an Omega-3 fatty acid, and linoleic acid, an Omega-6 fatty acid, in appreciable amounts. Flaxseed oil is the world's richest source of Omega-3 fatty acids at a whopping 57% (over two times the amount of Omega-3 fatty acids as fish oils). Omega-3 fatty acids have been extensively studied for their beneficial effects toward:

- high cholesterol levels
- stroke and heart attack
- angina (heart pain)
- high blood pressure
- arthritis
- multiple sclerosis
- psoriasis and eczema
- cancer

The high content of Omega-3 fatty acids inherent in flaxseed oil is but one of its positive attributes. The essential fatty acids combined here have proven to impart a regulatory function on the body's fatty acid metabolism. Fat metabolism is as important, if not more critical, than our body's metabolism of proteins and carbohydrates as evidenced by the drastic rise in fat related degenerative diseases, such as vascular disease and strokes. Dietary essential fatty acids common to flaxseed oil are ultimately converted to hormone-like substances known as prostaglandins, and are important for the regulation of a host of bodily functions including:

- inflammation, pain, and swelling
- pressure in the eye, joints or blood vessels
- secretions from mucus membranes and their viscosity
- smooth muscle and autonomic reflexes, gastrointestinal, arterial, ear, heart
- water retention
- blood clotting ability
- allergic response and rheumatoid arthritis
- nerve transmission
- steroid production and hormone synthesis

Scientists continue to discover regulating effects of prostaglandins. Without the essential fatty acids—the building blocks of prostaglandins—a malfunction of fat metabolism is certain, as are problems in the regulation of the above listed bodily functions.

For some individuals, flaxseed oil may offer only half of the solution. Those deficient in cofactor nutrients, specifically the vitamins pro-A, A, C, E, B2, B6, pantothenic acid, B12, biotin, and the minerals calcium, magnesium, potassium, sulfur, and zinc, sometimes have difficulty in converting the Omega-6 fatty acid, linoleic acid, found in flax and other seed oils to the healthful prostaglandins.

Still others are thought to lack the necessary enzyme (catalyst) to make this conversion; particularly those afflicted with diabetes, asthma, cystic fibrosis, multiple sclerosis, alcoholism and the aged. For those suffering from co-factor deficiencies, a broad spectrum multi-vitamin and mineral may be recommended with, perhaps, an oil supplement rich in gamma-linolenic acid (GLA). Individuals who may lack the proper

enzyme system would require a GLA supplement in addition to the flaxseed oil to effectively skip over the absent or impaired enzyme and continue on toward normal production of beneficial prostaglandins.

Nature's most potent concentration of GLA comes in the form of borage seed oil (24%). A great deal of scientific research has been conducted with supplements rich in GLA, resulting in significant interest regarding the aforementioned health ailments, as well as those affected by premenstrual syndrome, benign breast disease, eczema, psoriasis, obesity, and vascular disorders.

When considering an essential fatty acid supplement and deciding on either organic flaxseed or borage seed oils the most sensible solution may be a formulation of the two. The combination of organic flax oil and borage seed oil yields a true Omega-Twin by providing nature's best of the Omega-3 fatty acids in flax with the best of Omega-6 fatty acids in GLA rich borage oil. This option has now been made available by a flax/borage oil product that can be found in many health food stores.

Supplementation with organic flax and borage seed oils combined makes good sense for the following reasons.

- Omega-3 fatty acids and GLA together exert favorable effects on the production of beneficial prostaglandins
- A number of health problems have proven to benefit from both Omega-3 fatty acids and GLA supplementation
- Organic flaxseed oil combined with borage oil may exhibit synergistic complementary effects
- Optimal conversion of fatty acids to beneficial prostaglandins is more likely assured
- Flax and borage oils combined in a single formulation is less expensive than purchasing both separately

In conclusion, the answer appears not to be no fat, but the right fat, as common to organic flax oil and borage seed oil, to achieve optimal health.

Summary:

Past and present scientific research supports the use of essential fatty acid nutrients in promoting optimal health. Flaxseed oil is recognized as nature's richest source of essential and Omega-3 fatty acids. Borage seed oil is recognized as nature's richest source of GLA. These natural plant substances used alone have created a great deal of interest in the treatment of numerous health problems. Evidence exists to suggest the

combination of Omega-3 fatty acids with gamma-linolenic acid (GLA) may further complement the therapeutic result of either fatty acid used singularly.

References:

- 1) The Essential Fatty Acids, Sardesai, V.M., (Nutrition in Clinical Practice, August, 1992)
- 2) The Metabolic Role of N-3 Polyunsaturated Fatty Acids: Relationship to Human Disease, Kelly, F.J. (Comparative Physiology, 1991)
- 3) Summary of the NATO Advanced Research Workshop on Dietary Omega-3 and Omega 6 Fatty Acids, Simopoulos, A.P. (Journal of Nutrition, April 1989)
- 4) The Effects of Flaxseed Supplementation on Early Risk Markers for Mammary Carcinogenesis, Serraino, M. (Cancer Letter, November 1991)
- 5) High Alpha-Linolenic Acid Flaxseed, Some Nutritional Properties in Humans, Cunnane, S. C. (British Journal of Nutrition, March 1993)
- 6) Effect of Flaxseed Supplementation on Arachidonic Acid Metabolism. Bowen, P.E. (University of Illinois at Chicago)
- 7) The Effects of Dietary Flaxseed on Estrogen Metabolism in Women, Kurzer, M.S. (Proceedings of the Flax Institute)
- 8) Borage or Primrose Oil Added to Standardized Diets are Equivalent Sources of Gamma-Linolenic Acid in Rats, Raedarstorff, D. (Lipids, December 1992)
- 9) The Effect of Gamma- Linolenic Acid on Human Diabetic Peripheral Neuropathy, Jamal, G. A. (Diabetic Medicine, May, 1990)
- 10) Significance and Motivation of the Chemical Use of Essential Fatty Acid Derivatives, Especially GLA (Clinica Terapeutica. March 1990)

Mr. Jade Beutler is a licensed health care practitioner with over a decade of hospital and clinical experience in adult and neonatal intensive care, pediatric and emergency medicine. He is the author of **Understanding Fats and Oils, Your Guide to Healing with Essential Fatty Acids and Flax For Life.**

Provided Courtesy of Linasana.com

Reprinted with permission from Health Perspectives Publishing.