IMPORTANT REASONS TO USE THIS PRODUCT
Ultra Omega-Linic contains the following preformed fatty acids:
- high EPA to increase function
- high SDA to further increase levels of EPA
- high GLA to produce anti inflammatory prostaglandins
- high DHA to support neurological structure

WHAT IS Ultra Omega-Linic?:
Ultra Omega-Linic is a blend of essential Long Chain Poly-Unsaturated Fatty Acids (LC-PUFA). They are essential because they cannot be made by the human body. It is extremely important that they be consumed because of their vital role in the production of neural tissue in the form of phospholipids and their role in nerve conduction in the form of free fatty acids. The LC-PUFA are the main components of inflammation and its regulation. Both omega 6 and omega 3 series must be in the body in adequate amounts in order to modulate the inflammatory process.

I have used a mixture of the omega 3 and omega 6 series LC-PUFA since 1984 and it has helped many health problems. I have formulated Ultra Omega-Linic because recent data indicate that a higher concentration of Eicosapentaenoic acid (EPA) produces even better clinical results. EPA is the PUFA that deals primarily with function. Docosahexaenoic Acid (DHA) deals with structure. EPA cannot efficiently be elongated to DHA, but DHA can be efficiently converted to EPA. There are high levels of both EPA and DHA in Ultra Omega-Linic. In addition it contains high levels of Stearidonic acid (SDA), which also converts quickly and efficiently to EPA in the body. Flax Seed Oil, which contains the parent ALA, but no PUFA, has been used for the source of the essential omega 3. However, ALA is poorly converted to PUFA, and when supplemented, even in large amounts will not raise the level of EPA in Red Blood Cells. The only way to increase DHA in red blood cells is to supplement with preformed DHA. Vegetarians miss out on the many benefits of EPA and DHA when they omit these essential fatty acids.

DESCRIPTION:
Ultra Omega-Linic contains a blend of 550 mg Black Currant Seed Oil, 350 mg Salmon Oil, 100 mg Fish Oil Concentrate and 10 IU Vitamin E as mixed tocopherols in softgels. Each capsule supplies 114 mg Eicosapentaenoic Acid (EPA), 65 mg Docosahexaenoic Acid (DHA), 84 mg of Gamma Linolenic Acid (GLA), 15 mg Stearidonic Acid (SDA) and 10 IU Vitamin E.

WHY DO YOU NEED Ultra Omega-Linic?:
In the typical Western diet, these essential fatty acids are missing, inadequately supplied, or are in a form unusable to the body; unusable because they are in the trans form, or are ingested as the parent essential oils which are very poorly converted to PUFA. (EPA, DHA, SDA or GLA).

WHAT DOES IT DO?:
Fish oil, which is rich in preformed EPA and DHA, combined with Black Currant seed oil rich in preformed GLA, has been found to be very useful in reducing inflammation. This makes a great deal of sense, since EPA, DHA and GLA are precursors of the prostaglandins, and very effectively modify the cyclooxygenase, lipoxygenase and epoxygenase pathways. GLA produces PG1 series prostaglandins that are anti inflammatory; EPA and DHA are precursors of the PG3 series. Arachidonic Acid, which is overabundant in our Western diet, is the precursor of the PG2 prostaglandins, which are highly inflammatory. All three of these pathways (PG 1, 2 and 3) use the same enzymes, but the PG3 series uses them preferentially. This further reduces the production of PG2 series. The epoxygenase pathway, which is controlled by the p450 enzymes, is also modified by the substitution of EPA, DHA and GLA for Arachidonic Acid.
Supplementation of both fish oil and black currant seed oil simultaneously (as they occur in Ultra Omega-Linic) has been found to be more effective than the use of either one by itself. This combination favorably impacts any kind of inflammatory process. Other benefits include HDL is increased, thereby improving the LDL/HDL ratio; Platelet aggregation is decreased; Plasma triglycerides are reduced by an average of 30 percent or more.

The essential fatty acids in Ultra Omega-Linic have been useful in arthritis of any kind, tendinitis, bursitis, PMS, menstrual cramps, chronic fatigue syndrome, fibromyalgia, bowel inflammatory diseases, and both general and cardiac atherosclerosis. It is extremely useful in preventing the complications of diabetes; vascular, ophthalmic and neurological. It has been linked to reductions in cancer. It should be used during pregnancy and lactation to assure an adequate supply of EFAs, especially DHA, for brain and retinal development of the infant and to prevent or minimize post partum depression caused by structural brain loss in the mother.

IMPORTANT NOTES:
Very high EPA supplementation, along with the supplementation of the phospholipid antioxidants Vitamins E and C, alpha lipoic acid and Coenzyme Q 10, has been used successfully to help manage schizophrenia, bipolar and severe depression. Early studies suggest help with senile dementia.

I should point out that to ensure maximum benefit from EFA supplementation, make sure that all of the many nutrients that are required for proper metabolism of the EFAs are present. Use a multi like Ultra Preventive Capsules or Ultra-Vites that meets or exceeds the RDIs.

John W. Jones, MD, MPH

SUGGESTED USE:
As a dietary supplement, one to six softgels daily. For inflammatory conditions use eight to twelve softgels daily; increase or decrease quantity as indicated by symptoms. For Neurological symptoms start with eight to twelve daily. If you take 4 or more softgels daily, also supplement a Vitamin E softgel and Vitamin C capsule daily.

HOW IT IS SUPPLIED:
1 VMUOL bottles of 240 softgels

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.
UNDERSTANDING ESSENTIAL FATTY ACIDS
("Essential" means your body can't make it. "PG" means Prostaglandin)

PG1
- Linoleic Acid (LA) c18:2w6
- Parent Oil: corn, soy, sunflower
- GLA
- Gamma Linolenic Acid (GLA) c18:3w6
  - Source: seed oil of Black Currant
  - Weak (LCPUFA) 5 desaturase (15% in humans)

DGLA
- Dihomo Gamma Linolenic Acid (DGLA) c20:3w6
  - Source: Human breast milk

PG2
- Arachidonic Acid (AA) c20:4w6
  - Sources: Meat, milk, egg, Shrimp, seaweed

DELTA 6 Enzyme Blocked by:
- Alcohol
- Saturated fats
- "Trans" or hydrogenated fats
- Deficiencies of B3, B6 and Zinc
- Some Chemicals, Some Viruses
- Enzymes not as effective:
  - The very young (perinatal)
  - Allergic families
  - Diabetics
  - Advancing age (>40)

PG 3 PATHWAY
- Alpha Linolenic Acid (ALA) C18:3w3
  - Parent Oil: Flax seed (linseed), walnut, chestnut, soy

SDA
- Stearidonic Acid (SDA) C20:5w3
  - Sources: oils of cod liver, salmon, mackerel, tuna, herring, sardine

PG 3
- Eicosapentaenoic Acid (EPA) c20:5w3
  - Δ4 desaturase (slow)
- Docosahexaenoic Acid (DHA) c22:6w3
  - Sources: oils of cod liver, salmon, mackerel, tuna, herring, sardine

Anti inflammatory
- Deficient PG 1 in:
  - Asthma
  - elevated cholesterol
  - eczema
  - hyperactivity
  - hypertension
  - pre-menstrual syndrome
  - thrombosis
  - vascular spasm

Less Inflammatory than PG2
- Deficient PG 3 in:
  - acne
  - dandruff
  - elevated triglycerides
  - learning impairment
  - auto-immune disease
  - thrombosis
  - Inflammatory Bowel Disease
  - Bipolar depression (*EPA)
  - depression (*EPA)
  - Schizophrenia (*EPA)
  - ADHD (*DHA)
  - Schizophrenia
  - Cystic Fibrosis (*DHA)

Highly Inflammatory
- Excess PG 2 in:
  - angina
  - Arthritis
  - Asthma
  - Inflammatory Bowel disease
  - diabetes
  - depression
  - cancer
  - food allergy
  - menstrual cramps
  - Multiple Sclerosis
  - thrombosis

Note: A=Steroids block here, B=NSAIDS block here, Modulation is better than blocking.

Modified from Leo Galland