

## Omega 3 (Fish Oil)

While a helpful form of Omega-3 can be found in flaxseed, walnuts and a few other foods, the most beneficial form of Omega-3 - containing two fatty acids, DHA and EPA, that are essential to fighting and preventing both physical and mental disease - can only be found in fish.

### Benefits of the Omega-3 Found in Fish Oil and Cod Liver Oil

Helps fight and prevent heart disease, cancer, depression, Alzheimer's, arthritis, diabetes, ulcers, hyperactivity and many other diseases

Increases your energy level and ability to concentrate

Provides greater resistance to common illnesses such as flu and cold

Helps pregnant women avoid premature births, low birth weight and other complications

Americans consume a dangerously insufficient amount of Omega-3, a fat essential to good health but only found in fish oil and a few other foods. Meanwhile, our intake of Omega-6, another fat found in corn, soy, sunflower and other oils, is far too high. The ideal ratio of Omega-6 to Omega-3 should be 1:1, but the typical American's ratio ranges from 20:1 to 50:1!

I am convinced - and even the medical establishment addicted to band-aid treatments versus prevention is conceding - that this lack of Omega-3 in our diets is a primary reason behind many of the diseases Americans face, and our shorter lifespan in relation to many other "first world" countries such as Japan or Greece.

OMEGA-3 from FISH or FLAX?

Omega-3 fatty acids fall into two major categories: Plant derived (flaxseed, yielding alpha linolenic acid or ALA) or marine derived (fish oil, yielding both EPA and DHA). The human conversion of ALA to EPA and DHA is somewhat slow and can be inhibited by various conditions. Research shows that only about 15% of ALA converts to EPA, and it may not convert to DHA at all.

Lifestyle and health influences that can inhibit the conversion include a diet excessively high in linolenic acid (Omega-6) and saturated trans fatty acids, as well as alcohol intake. A deficiency of any type of the vitamin and mineral cofactors (vitamin Bs, B6, C, zinc and magnesium), required by elongase and delta-6-desaturase, may inhibit conversions of ALA to EPA and DHA, as well as cause certain health conditions such as diabetes and immune dysfunction.

The majority of research conducted with Omega-3 fatty acids has been done on fish oil, and has focused on the benefits of EPA or DHA. On a gram for gram basis, fish oils are the optimal means of enhancing EPA and DHA in the body.

### **EPA (Eicosapentaenoic Acid)**

EPA protects heart and blood vessels

decreases triglycerides, increases "good cholesterol," reduces homocysteine levels

prevents arrhythmia & stabilizes heart rhythm

In a recent study those who had the highest levels of fish oil fats enjoyed a 44% reduction in risk for heart attacks and related problems over those with the lowest levels.

Studies show EPA can lower cancer risk as much as 50%

prolongs survival of cancer patients

helps prevent recurrence of tumors

Harvard Medical School researchers found that Omega-3 EFAs decreased development and recurrence of colon cancer.

EPA has anti-inflammatory effects

weakens pro-inflammatory prostaglandins

relieves allergic symptoms

reduces symptoms of rheumatoid arthritis

reduces menstrual pain

### **DHA (Docosahexaenoic Acid)**

DHA, like EPA, has beneficial cardiovascular effects, but DHA is most noted for its essential role in brain health and nervous system function. Research has found that DHA levels are low in Alzheimer's patients.

DHA promotes good mood

- increases serotonin in the brain and decreases symptoms of depression
- improves memory and cognitive function
- essential for brain and nerve health

Studies of large populations find that people in societies who lack fish in their diets suffer more depression.

DHA for pregnancy and breast feeding

- essential for fetal and infant brain and eye development
- essential for cognitive development in infants
- low in women with postpartum depression