

# OMEGA 3 PLUS

## “A GIFT FROM THE SEA”



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### Omega 3 “Importance & Benefits”

Omega-3 fatty acids are considered essential fatty acids: They are necessary for human health but the body can't make them -- you have to get them through food.

Also known as polyunsaturated fatty acids (PUFAs), omega-3 fatty acids play a crucial role in brain function as well as normal growth and development. They have also become popular because they may reduce the risk of heart disease. The American Heart Association recommends eating fish (particularly fatty fish such as mackerel, lake trout, herring, sardines, albacore tuna, and salmon) at least 2 times a week.. The short chain n-3 fatty acids are converted to long chain forms (EPA, DHA) with an efficiency of approximately 5% in men, and at a greater percentage in women.

#### Where we find Omega 3?

Omega-3 fatty acids can be found in fish, such as salmon, tuna, and halibut, other seafood including algae and krill, some plants, and nut oils.

The Mediterranean diet has a healthier balance between omega-3 and omega-6 fatty acids.

Many studies have shown that people who follow this diet are less likely to develop heart disease.



The Mediterranean diet does not include much meat (which is high in omega-6 fatty acids) and emphasizes foods rich in omega-3 fatty acids, including whole grains, fresh fruits and vegetables, fish, olive oil, garlic.

#### The importance of omega-3 for brain:

- ▶ Research has found clinical and laboratory importance of omega-3 fatty acids in protecting brain cells and thus its functioning to the fullest, they are at the core of the walls of these cells and thus providing them the flexibility necessary to receive the signals from other cells and send them unlike saturated fatty acids that make the cell membranes allow the passage of harsh vector and nerve signals through with ease.
- ▶ Omega-3 fats benefit in the prevention of blood clots and raised a lot of strokes, as it affects the coagulation mechanisms (such as aspirin), and even in the event of a stroke, the harm resulting therefore shall be less if the levels of omega-3 fatty acids at high .
- ▶ As Investigations have shown that mental performance in older people be better dealt with approximately 75 grams of fish per day.
- ▶ British researchers found in another study that patients with Baltlosm improved their condition after eating for 480 mg of omega-3 daily for a month.

# "Omega 3 Plus : A Gift From The Sea"

▶ There is also evidence that omega-3 may help to raise the rates of mental activity in adults as measured by the rate of transmission of brain waves known as the P300 and its relationship to learning and memory and cognition.

## **Omega 3 fatty acids and the Heart protection:**

High cholesterol:

People who follow a Mediterranean-style diet tend to have higher HDL or "good" cholesterol levels, which help promote heart health. Inuit Eskimos, who get high amounts of omega-3 fatty acids from eating fatty fish, also tend to have increased HDL cholesterol and decreased triglycerides (fats in the blood). Several studies have shown that fish oil supplements reduce triglyceride levels. Finally, walnuts (which are rich in alpha linolenic acid or LNA, a type of omega-3 fatty acid) have been reported to lower total cholesterol and triglycerides in people with high cholesterol levels.

## **Omega-3 and bowel disease:**

A number of studies have proven that omega-3 may help in reducing the symptoms of different types of ulcers that affect the digestive system, such as duodenal ulcers and Crohn's disease. In a study of 78 patients with Crohn's disease.

The symptoms of the disease were decreased by 33% to 78% after using them for 3 grams of fish oil/day. In a further study on patients with duodenal ulcer, 72% of patients who have used the fish oil had grown rich or totally underestimated dose of drugs used sedatives for the disease.

## **Omega 3 may help reduce the risk of the birth of underweight children:**

Researchers at Bristol University, a recent study concluded that eating fish regularly by pregnant women and mothers in particular in the last three months of pregnancy helps to faster growth of the fetus and thereby reducing the risk of having low birth weight. And researchers believe that the reason for this is the omega-3 fatty acids found in fish.

## **Omega 3 fatty acids may help reduce the pain of morning stiffness of the joints:**

This is found by some studies that the consumption of omega-3 in large doses for several months by people who suffer from rheumatoid arthritis, and

they often suffer from joint stiffness when getting up from sleep accompanied by severe pain, will reduce the suffering of a great extent. Researchers attribute the reason for this is that omega-3 rein in some of the enzymes that cause inflammation.

## **Omega 3 fatty acids may help reduce the risk of Breast Cancer:**

Omega-3 found that it reduces the production of Thromboxane A2, a substance that helps in the process of blood clotting and narrowing of the arteries which would be beneficial in the prevention of the blockage.

## **Omega 3 fatty acids may help in solving the problems of skin disorders:**

In a study conducted in Germany on a sample of 20 patients with skin diseases were given omega-3 improve their symptoms after only one week of treatment.

In one clinical study, 13 people with sun sensitivity known as photo dermatitis showed less sensitivity to UV rays after taking fish oil supplements.

However, topical sunscreens are much better at protecting the skin from damaging effects of the sun than omega-3 fatty acids. In another study of 40 people with psoriasis, those who took EPA with their prescription medications did better than those treated with the medications alone. However, a larger study of people with psoriasis found no benefit from fish oil

## **Omega-3 fatty acids may reduce the likelihood of dementia in old age:**

In a study in the Netherlands on a sample of 51 elderly people found that people who ate fish regularly were less likely to suffer from dementia.

## **Omega 3 fatty acids may help in increasing the absorptive capacities of students:**

According to a study by researchers at the University of Bordeaux, including 1000 children of school children aged between 6 & 12-year-old children who have higher levels of omega-3 had learning difficulties have less.

## **Omega-3 and its usefulness in cases of pregnancy and lactation:**

A recent study concluded that eating omega-3 by pregnant women during pregnancy and after as

well as during the lactation period may be useful for infants of mentally later.

In the study, which included a sample of 590 pregnant women, found that children born to mothers who took supplements containing DHA during pregnancy and breastfeeding have attained higher rates in tests of mental abilities.

## **How to Take It?**

Dosing for fish oil supplements should be based on the amount of EPA and DHA, not on the total amount of fish oil. Supplements vary in the amounts and ratios of EPA and DHA. A common amount of omega-3 fatty acids in fish oil capsules is 0.18 grams (180 mg) of EPA and 0.12 grams (120 mg) of DHA. Five grams of fish oil contains approximately 0.17 - 0.56 grams (170 - 560 mg) of EPA and 0.072 - 0.31 grams (72 - 310 mg) of DHA. Different types of fish contain variable amounts of omega-3 fatty acids, and different types of nuts or oil contain variable amounts of LNA. Fish oils contain approximately 9 calories per gram of oil.

## **Children (18 years and younger)**

There is no established dose for children. Omega-3 fatty acids are used in some infant formulas. Fish oil capsules should not be used in children except under the direction of a health care provider. Children should avoid eating fish that may be high in mercury, such as shark, swordfish, king mackerel, and tilefish.

## **Adults**

Do not take more than 3 grams daily of omega-3 fatty acids from capsules without the supervision of a health care provider, due to an increased risk of bleeding.

### **▶ For healthy adults with no history of heart disease:**

The American Heart Association recommends eating fish at least 2 times per week.

### **▶ For adults with coronary heart disease:**

The American Heart Association recommends an omega-3 fatty acid supplement (as fish oils), 1 gram daily of EPA and DHA. It may take 2 - 3 weeks for benefits of fish oil supplements to be seen.

### **▶ For adults with high cholesterol levels**

The American Heart Association recommends an omega-3 fatty acid supplement (as fish oils), 2 - 4 grams daily of EPA and DHA. It may take 2 - 3

weeks for benefits of fish oil supplements to be seen.

## **Possible Interactions:**

### **Precautions:**

▶ If you are currently being treated with any of the following medications, you should not use omega-3 fatty acid supplements, including eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA), and alpha-linolenic acid (LNA), without first talking to your health care provider.

### **▶ Blood-thinning medications:**

Omega-3 fatty acids may increase the effects of blood thinning medications, including aspirin, warfarin (Coumadin), and clopidogrel (Plavix). Taking aspirin and omega-3 fatty acids may be helpful in some circumstances (such as in heart disease), but they should only be taken together under the supervision of a health care provider.

### **▶ Diabetes medications:**

Taking omega-3 fatty acid supplements may increase fasting blood sugar levels. Use with caution if taking medications to lower blood sugar, such as glipizide (Glucotrol and Glucotrol XL), glyburide (Micronase or Diabeta), glucophage (Metformin), or insulin. Your doctor may need to increase your medication dose. These drugs include: Glipizide - Glyburide - Metformin - Insulin.

## **Benefits**

### **▶ Cyclosporine:**

Cyclosporine is a medication given to people with organ transplants. Taking omega-3 fatty acids during cyclosporine (Sandimmune) therapy may reduce toxic side effects, such as high blood pressure and kidney damage, associated with this medication.

### **▶ Etretinate and topical steroids:**

Adding omega-3 fatty acids (specifically EPA) to the drug therapy etretinate (Tegison) and topical corticosteroids may improve symptoms of psoriasis.

### **▶ Nonsteroidal anti-inflammatory drugs (NSAIDs):**

In an animal study, treatment with omega-3 fatty acids reduced the risk of ulcers from nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs include ibuprofen and naproxen. More research is needed to see whether omega-3 fatty acids would have the same effects in people.

## **Omega 3 Plus Capsules**