



FISH OILS AND YOUR HEALTH

The debate over the health benefits of fish oils is over a decade long. Within that time, countless studies have been conducted to determine if the ingestion of fish and fish oil capsules help lower the risk of cardiovascular disease. The existing body of evidence suggests that they do have some beneficial effects. In this issue we attempt to highlight some facts known about fish oils and health.

The flesh and oils of fatty fish contain the omega-3 fatty acids which are essential to human health but cannot be made by the body. Therefore, omega-3 fatty acids must be supplied by the diet. The best sources of **omega-3 fatty acids** are fatty fish that live in deep, cold water such as salmon,

mackerel, sardine, halibut, tuna and herring. Other sources include flaxseed oils and walnut oils.

These food sources provide us with three main types of omega-3 fatty acids: alpha-linolenic acid (ALA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA). In the body, ALA is converted to EPA and DHA, the two types of omega-3 fatty acids which are more readily used by the body. These fatty acids play an important role in brain function as well as normal growth and development.

Benefits of Omega-3 Fatty Acids

Researchers first became interested in omega-3 fatty

acids, when Danish physicians observed that the Inuit people of Greenland had markedly lower incidences of heart disease despite high fat diets, than Danish people on high saturated fat diets. It was soon discovered that the diet of these people were especially rich in EPA and DHA, due to high intakes of fatty fish and whales. Since this was discovered in the 1970s, countless clinical trials have been conducted which indicate that omega-3 fatty acids may have beneficial effects on a number of health conditions. The effects seem to be strongest for heart disease and the risk factors that contribute to this condition.

Research suggests that diets or supplements rich in omega-3 fatty acids may help to promote

cardiovascular health by helping to:

- Lower fat levels in the blood;
- Lower blood pressure;
- Reduce the risk of blood clots;
- Increase high density lipoprotein (HDL or good) cholesterol levels;
- Reduce or prevent the build up of plaque in the arteries (plaque can block the arteries which can lead to heart disease).

Some clinical studies reveal other possible benefits of fish oils or fish oil supplementation. These benefits include:

- Reduction in age-related memory loss and the risk for Alzheimer's disease with high intakes of omega-3 fatty acids.
- Reductions in depression and psychosis, and promising effects on schizophrenia.
- Reductions in the risk for vision and brain disabilities, premature birth and abnormally low birth weight of newborns when there is sufficient (maternal) intakes of omega-3 fatty acids.
- Reduction (4-fold) in the risk for asthma in children who eat fresh, oily fish.
- Alleviation of symptoms of rheumatoid arthritis with fish oil supplementation.
- Reduction in the severity of

ulcerative colitis by 50% with fish oil supplementation (2.7 grams of EPA and 1.8 grams of DHA daily)

- Reduction in the risk of developing breast cancer with a high blood ratio of omega-3 to omega-6 fatty acids.
- The treatment of diabetes-related vascular disease with fish oil supplementation.

How Much Do We Need?

There is no recommended dietary allowance for EPA and DHA. The World Health Organization suggests a daily intake of 0.3-0.5 grams of EPA and DHA and 0.8-1.1 grams of alpha-linolenic acid (from which EPA and DHA can be made in the body). Doses above this rarely have added therapeutic benefits.

Scientists believe that it is important to maintain an appropriate balance of omega-3 and omega-6 fatty acids (another important group of essential fatty acids) in the diet as these are both needed by the body to maintain health. The main sources of omega-6 fatty acids are vegetable oils, nuts and seeds. It has been suggested that a healthy diet should consist of roughly 2-4 times more omega-6 fatty acids than omega-3 fatty acids.

Food sources of omega-3 fatty acids should be taken as part of a healthy low fat diet consisting of a variety of foods from the six Caribbean Food Groups. These recommendations can be met by following the recommended guidelines to consume two to three fish servings per week, with an emphasis on fatty fish such as salmon, herring, sardines and mackerel. Commercially prepared fried fish obtained from restaurants, fast food establishments, and frozen, convenience type fried fish products should be avoided because they are low in omega-3 and may be high in trans-fatty acids. The daily diet may be supplemented with fish oil capsules if eating fish is not possible.

How Safe is Supplementation?

Supplementation with fish oils is regarded as safe but it is always advisable to talk with your doctor or nutritionist or dietitian before taking any supplements. Very large doses of omega-3 may increase the risk for haemorrhagic stroke, due to reduced platelet aggregation and increased breakdown of blood clots.

You may also need advice on the type of fish oil capsules that you need. For example, many persons supplement their diets

with cod liver oil capsules in an attempt to attain the recommended omega-3 fatty acids. However, fish oils and cod liver oils are not the same. Fish oils are extracted from the flesh of fatty fish and are excellent sources of

EPA and DHA and contain very little vitamins A and D. Cod liver oils are extracted from the liver of the cod fish and are a rich source of vitamins A and D but provide less EPA and DHA. In an attempt to obtain the

recommended (therapeutic) amounts of EPA and DHA from cod liver oils, one would most likely exceed the recommended daily amounts of vitamins A and D.

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