

COD LIVER OIL & OMEGA-3 FACTSHEET

About the Foundation

The International Cod Liver Omega-3 Foundation has been set up supported by an educational grant from Seven Seas Cod Liver Oil, Haliborange and Pulse Fish Oils to provide the latest information on Omega-3 Fish Oil and help provide answers to some of the common questions concerning Omega-3 Fish Oils.

We are constantly bombarded with new information on Omega-3, but research reveals that there is some confusion around what Omega-3 actually is, how much we should take and what the best sources are and what areas of health it supports?

The Foundation is supported by a back-bone of independent international experts who the Foundation uses to comment on Omega-3 topics, latest research, or answer questions from you.

The panel members come from a broad range of backgrounds from general nutrition to children's brain health and Fish Oil experts to food safety.



What are Omega-3s?

There are two types of Omega-3 long and short chained polyunsaturated fatty acids (PUFAs). These fatty acids are described as essential because they cannot be made by the body and must be obtained from the diet.

Long chained Omega-3 from fish or fish oil supplements, such as Cod Liver Oil, are thought to be the most effective form of Omega-3 as the body can utilise them immediately. Omega-3 found in fish oils provide a source of Docosahexaenoic Acid (DHA) and Eicosaopentaenoic Acid (EPA). Omega-3 found in plant or vegetable sources (short chain Alpha-Linolenic Acid ALA) are not readily available to the body and are converted inefficiently by the body to the effective long chain.

Why are Cod Liver Omega-3's important?

Cod Liver Omega-3 fatty acids play an important role as structural membrane lipids, particularly in nerve tissue and the retina, and along with other substances are

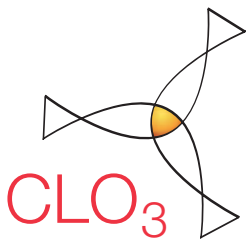


precursors to eicosanoids. These are highly reactive substances such as prostaglandins and leukotrienes that act to influence a wide range of functions in cells and tissues. A more straight forward analogy is that Cod Liver Omega-3 fatty acids may help to reduce blood viscosity.

The modern UK diet is thought to contain too little Cod Liver Omega-3 fatty acids relative to another class of polyunsaturated fatty acids, called Omega-6s.

The ratio of Cod Liver Omega-3 fatty acids to Omega-6 fatty acids has fallen radically in the diets of most people in industrialised countries such as Britain since 1900. These fatty acids compete with each other in reaction with enzymes and it is important that we get the right balance from our diet. Imbalances in favour of Omega-6 appear to be contributory factors in a range of dietary related illnesses, and also behavioural disorders.





International
Cod Liver Omega₃
Foundation

How is Cod Liver Omega-3 Good For Your Health?

Taking adequate levels of Cod Liver Omega-3 fatty acids may be beneficial in a wide range of contexts.



Heart Health

There is a raft of international evidence dating back over 30 years that demonstrates the value of marine-sourced Cod Liver Omega-3 for heart health protection¹.

Joint Health

People have taken Cod Liver Oil for years for all round good health and to 'oil' their joints. Omega-3s, found naturally in Cod Liver Oil, help reduce inflammation which is why it helps relieve joint pains and stiffness.

Brain Development

Regular Omega-3 supplementation has been shown to have a positive effect on the behaviour, concentration and learning ability of children.

The UK Government recommends a regular intake of oily fish, amongst the general population. However, as a nation we generally don't eat enough oily fish, which is why some people turn to fish oil supplements to ensure their daily intake.



Additional Benefits

However, there are numerous other clinical studies that show a range of additional positive uses including joint health Joint Health, stroke, Rheumatoid Arthritis.

Where are Cod Liver Omega-3s found?

- The most effective form of Omega-3 is naturally found in fish, and especially in oil rich fish such as herring, mackerel, sardines and fish oil supplements
- Some manufacturers are fortifying foods such as milk and bread with Omega-3 fatty acids, although the levels are often very low and not always from fish oil sources.
- Small amounts of Cod Liver Omega-3's can also be found in flaxseeds. However, flaxseeds are also rich in Omega-6 and so oil derived from them may counteract the benefits of Cod Liver Omega-3

- The purest form of Omega-3 can be obtained from fish oil supplements, such as Cod Liver Oil capsules. Capsules are the best deliverer of the most effective form of Omega-3 as they offer a measured dose of Omega-3 and the encapsulation process means they will not oxidise so their Omega-3 benefits are maintained.

What level of Cod Liver Omega-3 do you need?

To prevent potentially harmful imbalances it has been recommended by the ICLO3F experts the **adults** should aim to have an Omega-3 intake of at least **450mg per day** and a **minimum of 200mg** for **children**. Children are thought to require more Cod Liver Omega-3 as they develop. But as people get older adults are the group likely to gain more immediate benefits from cardiac protection and joint mobility.

Are all Omega-3 sources the same?

- The Omega-3's found in Flaxseed Oil are not long chained polyunsaturated fatty acids and therefore are not in the optimum form beneficial for health.
- The amounts of Omega-3 fatty acids differ from product to product. For instance, a consumer would need to drink nearly 3 pints of semi-skimmed Omega-3 enriched milk to get the same level of Omega-3 as normally found in one cod liver oil capsule.
- High quality cod liver oil supplements undergo stringent refining and purification processes to filter out pollutants and protect against oxidation to ensure the highest quality product is delivered to the consumer.



Statement of interest.

David Taylor received no personal fee from contributing to the preparation of this leaflet. Seven Seas made a donation of £500 to the School of Pharmacy, University of London.

¹ Fish Consumption, Fish Oil, Cod liver Omega-3 Fatty Acids and Cardiovascular Disease; AHA Scientific Statement. Circulation 2002; 106:2747-2757.

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For further information regarding Omega-3 please visit www.clo3.com