

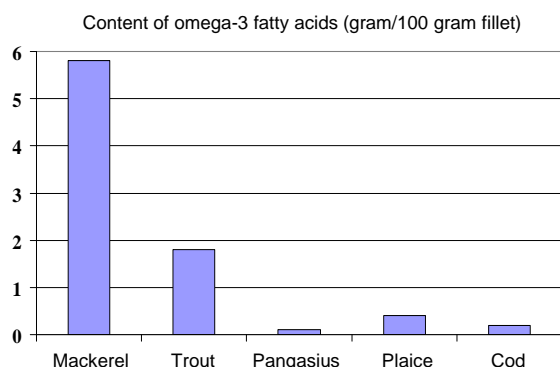
Marifunc – Why is it healthy to eat fish?

Background/purpose

Marifunc is a Nordic network consisting of 25 experts with either a scientific or an industrial background in marine functional foods. The network has – as part of a major network project – undertaken literature studies and collected knowledge about why fish is healthy – and whether there are differences between various species.

Does it matter which fish you eat?

There are major differences in the content of fat and omega-3 fatty acids between fish species. The total content of omega-3 fatty acids per gram of fish flesh is determined partly by the fat content and partly by the composition of that fat



Both factors are related to the life cycle of the fish (e.g. is the fish ready to spawn) and not least the feed composition during growth. We become what we eat and this also applies to fish. Most fish species are not able to synthesize omega-3 fatty acids.

Omega-3 fatty acids are often mentioned as being the compounds responsible for the nutritional benefits of eating fish but 95–99.9% of fish consist of other substances than omega-3 fatty acids. Consumption of fish and fish products provide other important nutrients such as protein, peptides, taurin, vitamin D and minerals (e.g. selenium and iodine). It is actually these nutrients that have been the focus of the *Marifunc*-project..

What do we know about the health benefits from eating fish?

These effects are documented:

- Preventive effect on the development of cardiovascular diseases (especially in relation to patients with a prior history of cardiovascular diseases)
- High intake of fish reduces the blood pressure by 1-2 mm Hg

- Intake of fish reduces the fat content (triglycerides) in the blood
- Relieving the symptoms associated with arthritis in some patients

These effects are less well-documented:

- Reduction of incidents of premature birth
- Reduction of post natal depression
- A high supply of DHA to the embryo during pregnancy adds long term benefits to intelligence, memory and behaviour (sleep, aggression, depression and attention)
- Reduction of incidents of asthma and other chronic lung diseases
- Reduction of incidents of intestinal cancer
- Reduction of weight loss and improvement of well being in relation to cancer patients
- Reduction of incidents of type 1 diabetes associated with children

What do we recommend?

An intake of 200-300 gram fish per week is recommended.

Eat fish twice a week and at least one serving should be an oily fish

Fish may contain minor quantities of harmful substances like dioxin and mercury but the benefits from eating fish more than makes up for this.

Conclusions:

- Fish is a healthy and nutritious food
- Fish contains many healthy nutrients and the effect of omega-3 fatty acids is scientifically proven
- Further research is needed in order to document the health benefits of other nutrients in fish.

Project partners:

See www.marifunc.org

Further information:

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