

OMEGA-3 FATTY ACIDS

Fact sheet

WHAT ARE OMEGA-3 FATTY ACIDS?

Omega-3 fatty acids are essential fatty acids. Essential means they cannot be made by our bodies and so we must get them from the food we eat. Omega-3 is a type of polyunsaturated fat and polyunsaturated fats are commonly referred to as “good fats”, because unlike saturated fats (or “bad fats”), they do not increase cholesterol levels in the blood. There are three types of Omega-3 fatty acids. These are:

- > ALA = alpha-linolenic acid
- > EPA = Eicosapentanoic acid
- > DHA = docosahexanoic acid

All three are examples of omega-3 fatty acids that you can get from food, but EPA and DHA can also be made by our bodies provided our diets contain ALA (the primary member of the Omega-3 family).

WHAT DO OMEGA-3 FATS DO?

Omega-3 fats ensure the health of cell membranes and help us absorb fat-soluble vitamins. They are needed for the normal growth and development of our bodies, and play a positive role in infant brain and eye development. What's more, recent research has shown that Omega-3 fatty acids have a number of additional health benefits including:

- > Helping to protect our hearts by both reducing the risk of sudden cardiac death^{1,2} and reducing triglyceride levels in the blood.^{3,4}
- > Playing an important role in the production of powerful hormone-like substances called prostaglandins which can reduce platelet aggregation (and blood clotting), and improve blood flow.
- > Having anti-inflammatory properties which helps to reduce the pain associated with rheumatoid arthritis^{5,6} and other inflammatory conditions.

Many other potential benefits of Omega-3 are currently being investigated, such as the role Omega-3 fatty acids play in the treatment of depression^{7,8}.

WHICH FOODS ARE SOURCES OF OMEGA-3 FATTY ACIDS?

Generally the primary Omega-3 fatty acid, ALA, comes from plant based foods, while EPA and DHA come from marine and animal foods. Sources of ALA include flaxseed oil, canola oil (including margarines derived from canola oil), walnuts, wheat germ, linseed, soybeans, seaweed and dark green leafy vegetables. Good sources of EPA and DHA are found in breast milk and oily cold water fish such as salmon, mackerel, sardines, herring, halibut, and to a lesser extent, tuna. Fish get their Omega-3 fatty acids from the algae they eat and so there may be a difference in the Omega-3 concentrations of farmed and wild caught fish.

Eggs are also a good source of Omega-3 and, while lean red meat does contain some Omega-3 fats, it is not a rich source. Many foods are now being ‘fortified’ with Omega-3 fats including milk, margarine, bread, breakfast bars, yoghurt and orange juice. Look out for this on food product labels.

HOW MUCH DO YOU NEED?

It is believed that our dietary intake of Omega-3 fatty acids has significantly declined over the last 100 years as the availability of meat and agricultural products has increased. Our reduced intake of these ‘anti-inflammatory’ fats is thought to have contributed to the growing prevalence of heart disease and depression now seen in many Western countries^{9,10}

The National Heart Foundation recommends that we all have at least two serves of oily fish a week and include foods containing ALA every day. The National Health and Medical Research Council recommends an intake of 90mg a day for women and 160mg a day daily men. Vegetarians who do not eat fish should include at least 4 serves of ALA rich foods daily. One serve of eggs (2 large eggs) has been shown to provide on average 114mg of the long-chain Omega-3 fats (EPA and DHA), which represents 71% of the adequate intake (AI) for men and 127% AI for women¹¹. Eggs are thus a good source of these essential fats for ovo-vegetarians.¹²



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TIPS FOR BOOSTING OMEGA-3 FATS IN YOUR DIET

- › Make a tuna, light mayonnaise and salad sandwich for lunch
- › Add some tinned fish to a salad e.g. niçoise salad with tuna, green beans, potato, tomato, olives and low-fat canola mayonnaise
- › Add fish to pasta dishes e.g. smoked salmon and capers or Tuna, olive and tomato fettucine
- › Make a tuna or salmon mornay
- › Include eggs in your diet e.g. poached eggs on toast for breakfast
- › Try a smoked salmon and asparagus omelette or quiche
- › Fish patties are always a hit
- › Look out for Omega-3 fortified products
- › Enjoy a handful of walnuts as a snack
- › Add some nuts to a stir-fry e.g. chicken, vegetables and cashews
- › Add some nuts to a salad e.g. waldorf salad with walnuts, celery, apple and low-fat canola mayonnaise
- › Add nuts to cakes e.g. banana and walnut cake
- › When you need to use oil in cooking, use canola oil
- › Use canola margarine in place of other vegetable oil based margarines
- › Use multigrain or soy and linseed bread
- › Offer a dark green leafy vegetable dish as a side e.g. sautéed spinach or steamed Asian greens
- › Reduce the saturated 'bad' fat in the menu by trimming excess fat from meat. Remove skin from chicken and choose low fat dairy products



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