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The importance of Omega-3 in your diet

- Food sources
- Benefits
- Pregnancy
- Heart disease
- Cancer
- Inflammatory disorders
- Mental health

What are omega-3 fats?

Omega-3 fatty acids are polyunsaturated fats that are considered vital for good health. Many of their benefits are now well recognized thanks to recent scientific research. Numerous studies have found that omega-3 fatty acids promote optimal health and may help prevent heart disease and other chronic illnesses.

Omega-3 fatty acids are found in 3 main forms, the short-chain alpha linolenic acid (ALA) and the long-chain eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Recent research suggests that the long-chain omega-3 fatty acids, EPA and DHA, are especially important for promoting good health.[1]

Are we getting enough omega-3?

North Americans consume an average of about 1000 to 2000 mg of omega-3 per day. Most of that is in the form of ALA, with less than 10% or about 100 to 150 mg as EPA and DHA. That is less than one-fifth of the long-chain omega-3 considered necessary for optimal health. Although ALA can be converted in our bodies to EPA and DHA, that conversion is very inefficient (only about 4% to 10%). Thus, experts recommend that people consume more EPA and DHA from foods and supplements due to their importance for good health.[10, 11, 12]

Omega-3 Fats	Abbreviation
Alpha linolenic acid	ALA
Eicosapentaenoic acid	EPA
Docosahexaenoic acid	DHA

NATUREGG™

Naturegg™ has an Omega-3 Egg for you!

Naturegg™ Omega 3

- Source of omega-3 fatty acids
- 75 mg of DHA omega-3*

Naturegg™ Omega Pro™

- Source of omega-3 fatty acids
- 125 mg of DHA omega-3*
- 1 mg of lutein*

**per 53 g egg*

Naturegg™ has an egg that's right for you!

Naturegg™ Omega Pro™ liquid eggs

- Source of omega-3 polyunsaturates
- 125 mg of DHA and 125 mg of EPA omega-3 fatty acids*
- 1 mg of Lutein*

*per 1/4 cup (63 g) serving.

IT'S NOT JUST ANY EGG. IT'S NATUREGG.™

"A healthy diet low in saturated and trans fats may reduce the risk of heart disease. Omega Pro™ Liquid Eggs is low in saturated and trans fats."

Selected food sources of omega-3 fatty acids.
Common and Recommended Foods

Food Source	Serving Size	Omega-3 Fats mg/serving		
		Total	DHA+EPA	ALA
Fish/Seafood				
Mackerel	100g	2,990	2,500	100
Herring	100g	2,110	1,600	100
Salmon	100g	1,570	1,200	200
Trout	100g	600	500	100
Halibut	100g	500	400	100
Tuna	100g	450	400	<50
Shrimp	100g	240	200	<50
Cod	100g	340	300	<50
Egg Based Foods				
Omega Pro™ liquid eggs	100g	650	400	30
Flax Based Omega 3 eggs	100g	800	165	635
Omega Pro™ eggs	100g	800	270	530
Regular egg	100g	80	40	40
Plant-Derived Foods				
Flaxseed	75g	17,000	0	17,000
Walnuts	50g	3,000	0	3,000
Canola Oil (Non-hydrogenated)	14g	1,400	0	1,400
Soya Oil (Non-hydrogenated)	14g	980	0	980
Vegetables (mixed)	75g	300	0	300
Beans/Peas (Common)	75g	300	0	300
Nuts (mixed)	75g	150	0	150
Olive Oil	14g	Trace	0	Trace
Corn Oil	14g	Trace	0	Trace
Most Vegetable Oils (e.g. safflower)	14g	Trace	0	Trace

Food sources

What foods contain EPA and DHA omega-3? EPA and DHA are primarily found in fatty fish such as salmon, tuna, swordfish, mackerel, sardines and herring, fish oil supplements, Omega Pro™ liquid eggs and omega-3 enhanced eggs. Common plant sources of omega-3 fatty acids provide no EPA or DHA, only the short-chained omega-3, ALA.

Benefits

What are the benefits of EPA and DHA omega-3? Higher intakes of EPA and DHA have been linked to improved overall health. These omega-3 fatty acids have been shown to improve the development of the brain and retina (the central area of the eye). They have also been found to be beneficial for managing various chronic illnesses including heart disease, inflammatory disorders and neurological conditions. More recent studies suggest a possible decreased risk of some types of cancer. EPA and DHA are also important for women during pregnancy and breastfeeding.

Pregnancy

Pregnancy It is widely accepted that omega-3 fatty acids, specifically DHA, are vital for the early development of the brain, nerves and visual acuity. Research indicates that it is important for pregnant women to receive sufficient DHA before and during pregnancy to promote optimal fetal development. A recent study showed that the daily consumption of one egg enriched with 133 mg of DHA during the third trimester resulted in longer pregnancies and may lead to enhanced fetal growth. Researchers found that women who consumed plenty of DHA while breastfeeding also had higher levels of DHA in their breast milk. Studies with infants given formula lacking DHA compared to infants given formula with DHA showed that providing infants with DHA early in their lives was a major factor in improving their performance on the mental development index.[2,3,17,18]

Heart disease

Heart disease Extensive research suggests that higher intakes of EPA and DHA offers considerable protection against heart disease and reduce the risk of death from a heart attack. The Multiple Risk Factor Intervention Trial found that increasing intakes of EPA plus DHA to about 650-700 mg per day over several years was associated with a lower risk of death from heart disease as well as from all causes. The American Heart Association recommends 900 mg of EPA and DHA daily to people at risk of heart disease.[4,5,6,7,8,9] University of Guelph researchers recently showed that daily consumption of a liquid egg product enriched with 125 mg of EPA and 125 mg of DHA (levels comparable to those in Omega Pro™ liquid eggs) lowered blood triglyceride levels by up to 32% over a 3 week period. It also lowered blood pressure without negatively affecting blood cholesterol. High blood triglyceride levels and high blood pressure are both considered risk factors for heart disease and stroke.[14]

Cancer

Cancer Population studies have shown that higher intakes of fish (rich in EPA and DHA) are associated with lower rates of some types of cancer. About one-third to half of studies that have examined the relationship between higher intakes of EPA and DHA (from supplements or food) and cancers of the breast, prostate, endometrium or ovary reported a significant lower risk of these cancers. However, this research is still very preliminary and more studies are necessary before any major conclusions can be made.[13]

Inflammatory disorders

Inflammatory disorders Many studies have found that increasing EPA and DHA intakes improved symptoms in patients with inflammatory conditions like arthritis, psoriasis, asthma, gingivitis, ulcerative colitis and Crohn's disease. In some cases, omega-3 supplements have been used to lower dosages of anti-inflammatory drugs. In general, large omega-3 intakes have resulted in relatively small improvements. Researchers continue to explore the potential for omega-3 to lower dosages of anti-inflammatory drugs.[19,20]

Mental health

Mental health DHA is the most abundant fatty acid in the grey matter of the brain, hence its importance in brain development and function. Research suggests that increasing daily omega-3 intakes, specifically DHA, may help protect against Alzheimer's disease and other forms of dementia and mental disorders. Studies have found that Alzheimer's sufferers as well as elderly people with other forms of dementia all had lower levels of DHA in their blood compared to elderly people with normal mental functioning. Research on DHA's potential to reduce depression and Attention Deficit Hyperactivity Disorder (ADHD) is ongoing.[15,16]