

Our expertise – your success

Omega-3

EPA + DHA

Eicosapentaenoic acid (EPA) and Docosahexaenoic acid (DHA) are long-chain polyunsaturated Omega-3 fatty acids abundant in seafood and other marine products such as oils from fish, krill and algae. Humans can only synthesize fatty acids at a slow rate. EPA+DHA can support health in every stage of life from conception and early life development through chronic diseases to frailty. Moreover, they are recognized to reduce cardiovascular risk.



Why are Omega-3's so important?

Omega-3 fatty acids are important structural components of the phospholipid cell membranes of the tissues. The composition of the phospholipids influences the characteristics of the cell membrane as fluidity and permeability to other molecules. DHA is one of the major PUFAs in the brain, nervous tissue and retina. Research shows that DHA is essential for the visual process in the retina and for proper brain functioning. EPA is a precursor for eicosanoids. These are substances which play an important role in processes like blood pressure, renal function, blood coagulation, inflammatory and immunological reactions. Eicosanoids derived out of EPA have anti-inflammatory, anti-thrombotic, vasodilatory and triglyceride lowering properties. Due to these effects a high consumption of **Omega-3** fatty acids are related to a lower risk for cardiovascular diseases. For **Omega-3**, there is a lot of scientific evidence available, which proves the effect of **Omega-3** for many health concerns along all life stages.

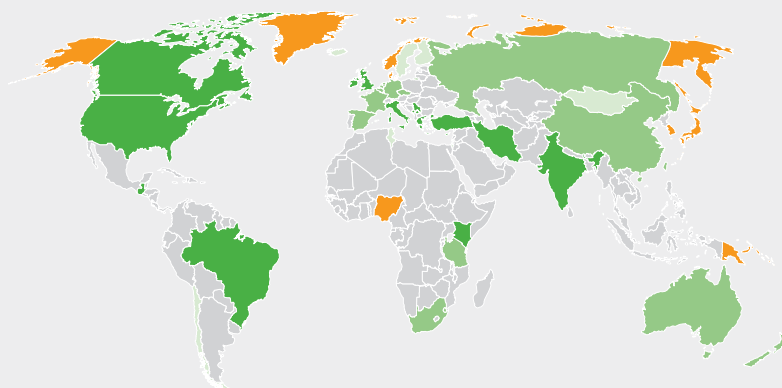
Global blood levels of EPA+DHA and dietary EPA+DHA intake recommendations

Global EPA+DHA recommendations for adults

- Global Organization for EPA and DHA (GOED, 2016)
0.50 g/day
- International Society for the Study of Fatty Acids and Lipids (ISSFAL, 2004)
0.50 g/day
- FAO/WHO Expert Consultation (2010)
0.25 g/day

0.50 g EPA+DHA

per day already reduces the risk of CVD mortality¹



Erythrocyte or plasma EPA+DHA, as % of total fatty acids

■ ≤4
 ■ >4-6
 ■ >6-8
 ■ ≥8
 ■ insufficient data

¹ Sala-Vila et al. 2016 J Am Heart Assoc 5:e002543

Global blood levels adapted from: Stark et al. 2016 Progress in Lipid Research 63:132

Target groups

Pregnant women

Typically 0.2 – 0.4 g DHA (1 – 2 DHA enriched capsules) per day are recommended in order to

- reduce the risk of premature birth
- support growth and development of the fetal brain, nervous system and eyes
- help prevent pregnancy-related depression
- improve chances for pregnancy

Infants, toddlers and school children

DHA and EPA are components of human milk. Infants who cannot benefit from breast milk should receive DHA in infant formula. Consuming DHA and EPA regularly during infancy and childhood supports

- development of brain, nervous system as well as cognitive functions, mood and behavior
- immune system functions

Adults

DHA and EPA should be consumed regularly to help













- reduce the risk of cardiovascular disease by improving lipoprotein profiles
- support brain health and cognitive function, lessen mood disorders
- support immune function and prevent inflammatory diseases
- reduce the risk of non-alcoholic fatty liver disease in overweight and obese people

Elderly people

The elderly benefit in particular from supplementation because DHA and EPA are involved in many essential cellular functions at a time when the body's own synthesis is further reduced

- maintain heart health and brain function
- slow down of age related degenerative and inflammatory conditions

Our offer to the market

Product	Form	Additional Information	Suitable for	Product No.
		Fish Oil		
Omega Oil 1812 TG Gold	oil	min. 30% Omega-3; contains 160mg/g EPA and 100mg/g DHA		30634620
Omega Oil 0525 TG Gold	oil	min. 30% Omega-3, DHA rich		30634621
PronovaPure 360:240 EE EU	oil	Fish oil ethyl ester concentrate, min. 360mg/g EPA and 240mg/g DHA		30593640
PronovaPure 400:200 EE EU	oil	Fish oil ethyl ester concentrate, min. 400mg/g EPA and 200mg/g DHA		30593642
PronovaPure 500:200 EE EU	oil	Fish oil ethyl ester concentrate, min. 500mg/g EPA and 200mg/g DHA		30603676
PronovaPure 150:500 EE EU	oil	Fish oil ethyl ester concentrate, min. 150mg/g EPA and 500mg/g DHA		30603621
PronovaPure 360:240 TG EU	oil	Fish oil concentrate, min. 360mg/g EPA and min. 240mg/g DHA		30593580
PronovaPure 400:200 TG EU	oil	Fish oil concentrate, min. 400mg/g EPA and 200mg/g DHA		30593582
PronovaPure 500:200 TG EU	oil	Fish oil concentrate, min. 500mg/g EPA and 200mg/g DHA		30603677
PronovaPure 150:500 TG EU	oil	Fish oil concentrate, min. 150mg/g EPA and 500mg/g DHA		30603622
Dry n-3 12 Food	powder	Microencapsulated fish oil; contains 60 – 90mg/g EPA and 20 – 55mg/g DHA		30521809
Dry n-3 5:25 C	powder	Microencapsulated fish oil; contains 25mg/g EPA and 67mg/g DHA		30056967
Dry n-3 DHA 11 - D	powder	Microencapsulated fish oil; contains 40mg/g EPA and 105mg/g DHA		30470218
Dry n-3 DHA 11 HC	powder	Microencapsulated fish oil; contains 40mg/g EPA, 105mg/g DHA and 50mg/g Vit. C		30696524
		Algae Oil		
DHA Algal Oil	oil	oil from the micro-algae Schizochytrium sp.; min. 380mg/g DHA		30599327
Dry n-3 DHA 11A	powder	Microencapsulated oil from the micro-algae Schizochytrium sp.; 105mg/g DHA		30602682

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