





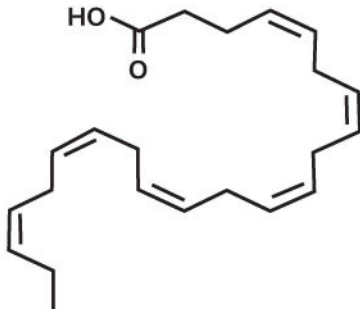


Vegan DHA

ODOURLESS ALGAL POWER

-  COGNITIVE FUNCTION
-  CARDIOVASCULAR SUPPORT
-  VISUAL HEALTH
-  MUSCLE HEALTH

Vegan-DHA



Docosahexaenoic acid (DHA) is a long-chain omega-3 polyunsaturated fatty acid, commonly present in marine & algal oils. A key component of all cell membranes, DHA is particularly abundant in the grey matter of the brain & in the outer rod segments of the retina^{1,2}. **This essential fatty acid contributes to approximately 97% & 93% of the total omega-3 PUFA (Polyunsaturated Fatty Acids) in these organs, respectively².**



Odourless



Water
Dispersible



Clean Label



Stable

Bio-gen Extracts manufactures high-quality, odourless Algal DHA 20% powder from *Schizochytrium* sp. using a distinctive manufacturing process. **This cost-effective & water-dispersible powder is suitable for various convenient applications like powder drink mixes, infant formula, gummies, bars, snacks & bakery, ideal for today's demanding consumers.**

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure or prevent any disease.

 **Bio-gen**
Extracts

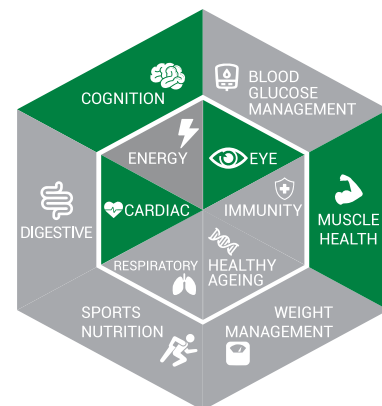
Choose Good Health™

 **Nutralliance**

Exclusively Represented by Nutralliance
sales@nutralliance.com | www.nutralliance.com
(844) 410-1400

Unlike the photosynthetic cells in algae & higher plants, mammalian cells lack the specific enzymes (elongase & desaturase enzymes) required for the **de novo synthesis of short-chain omega-3 fatty acid, alpha-linolenic acid (ALA)**, the precursor for all omega-3 fatty acid synthesis. Hence **endogenous synthesis of DHA from ALA in humans is much lower & more limited**, necessitating a dietary supplementation of this essential fatty acid^{3,4}.

DHA plays a crucial role in the structure & function of cell membranes, maintaining cell membrane fluidity & flexibility. **It is essential throughout all life stages** from infant health to cardiovascular health, cognitive function & visual health in adults⁵.



Recommended Daily Intake:
250-500 mg/day⁶

Doses of 250mg to 1000mg have been used in several studies.

Supplemental intakes of DHA alone up to about 1g/day do not raise safety concerns for the general population⁶.



RESEARCH

COGNITIVE FUNCTION
CARDIOVASCULAR SUPPORT
VISUAL HEALTH
MUSCLE HEALTH

COGNITIVE FUNCTION

Cortical activation was observed with a daily DHA supplementation of 400 mg & 1200 mg for 8 weeks in 33 healthy boys aged 8-10 years⁷.

A significant reduction in depression in the HAM-D score was seen in 28 subjects with mild to moderate major depressive disorder (MDD) with 8-week supplementation of low doses of DHA of 260 mg & 520 mg per day⁸.

A multicentre study on 485 healthy subjects aged ≥55 with age-related cognitive decline, showed improved learning & memory function with supplementation of 900 mg of DHA daily for 24 weeks⁹.

CARDIOVASCULAR SUPPORT

A vital study in 25,871 participants aged 50 years & older, monitored for an average of 5.3 years, lowered the risk of heart attack by 28%, the risk of fatal heart attack by 50% & reduced the rate of angioplasty procedures by 22% with a daily intervention of 380 mg of DHA & 460 mg of EPA along with Vitamin D3¹⁰.

A study in 121 healthy subjects with 600mg per day of DHA supplementation for 6 weeks reduced postprandial TG & had divergent effects on cardiovascular risk markers¹¹.

A daily supplementation of 700 mg of DHA for 3 months in 38 healthy subjects aged 40-65 showed a reduction in diastolic blood pressure¹².

VISUAL HEALTH

Subjective symptoms of dry eye disorders (DEDs) significantly improved along with a reduction of DED biomarkers like IL-1β & IL-6 in tears of 66 patients with mild to moderate DEDs with 350 mg of DHA in combination with antioxidants & 42.5 mg EPA when taken twice a day for 3 months¹³.

Neuroprotective effects on corneal nerves were observed with daily supplementation of 500 mg of DHA & 1000 mg of EPA for 3 months in a study involving 12 participants¹⁴.

MUSCLE HEALTH

8-week supplementation of 260 mg of DHA & 600 mg of EPA per day in 24 healthy men before exercise attenuated the reduction of muscle strength, reduced muscle soreness, limited range of motion & improved the symptoms associated with muscle damage¹⁵.

References:

1. Krauss-Etschmann Susanne et al. The American Journal of Clinical Nutrition, Volume 85, Issue 5, 2007, Pages 1392-1400
2. Li Jia et al. 2021; Food Science & Nutrition 9(1)
3. Bradbury J. Nutrients. 2011;3(5):529-54
4. Gómez-Pinilla F. Nat Rev Neurosci. 2008;9(7):568-78
5. D Swanson et al. Adv Nutr. 2012;3(1):1-7
6. Carlo Agostoni Q-2011-00834-European Food Safety Authority Journal, 2012
7. RK McNamara et al. Am J Clin Nutr. 2010;91(4):1060-7
8. DJ Smith et al. Nutr Neurosci. 2018;21(3):224-228
9. Yurko-Mauro K et al. Alzheimers Dement. 2010;6(6):456-64
10. Manson JE et al. J Steroid Biochem Mol Biol. 2020; 198:105522
11. Asztalos B, Ivor et al. j. metabol. 2016;07,010
12. Theobald Hannah E. et al. The Journal of Nutrition. 2006;137(4):973-978
13. Pinazo-Durán MD et al. Clin Interv Aging. 2013; 8:139-48
14. Chinnery R, Holly et al. oyo 2017; 10:1111.12365
15. Tsuchiya Y et al. Eur J Appl Physiol. 2016;116(6):1179-88