



GENESTRA
BRANDS®

Super DHA Forte Softchew

Delicious softchews with a 5:1 ratio of DHA to EPA

- Helps support cognitive health and brain function
- Aids in the development of the brain, eyes and nerves in children up to 12 years of age
- Offers bioavailable fish oil in the triglyceride form, manufactured utilizing patented pre-emulsification technology for enhanced absorption
- Available in unique emulsified gelatin softchews with a great-tasting, natural lemon-lime flavour
- Provides 250 mg of DHA and 50 mg of EPA per softchew

Super DHA Forte Softchew was specifically designed to support cognitive function with a higher concentration of DHA than EPA. DHA is the most abundant omega-3 fatty acid in the brain, where it helps support membrane fluidity, neuronal signalling and neuron health.¹ DHA is critical for proper brain and retinal development during the final trimester of pregnancy and early childhood, and helps to maintain cognitive health in adults and the elderly.¹ Normal aging is associated with oxidative stress, inflammation and impaired energy metabolism, which can impact learning and memory processes.² DHA may provide cognitive support by reducing inflammation and oxidative damage through the production of resolvins and neuroprotectins; improving cerebral blood flow; and increasing the formation of brain-derived neurotrophic factor (BDNF), a protein involved in learning and memory.³ Super DHA Forte Softchew features exceptionally pure fish oil in the triglyceride form, which has demonstrated greater bioavailability than ethyl esters in clinical research.^{4,5} To further enhance absorption, this formula utilizes patented pre-emulsification technology that has been shown to significantly increase the bioavailability of triglyceride fish oil when compared to a traditional softgel format.⁶ Ideal for those who dislike swallowing capsules, this great-tasting formula is an easy way to support cognitive health in both adults and children.

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EACH SOFTCHEW CONTAINS:

Fish Oil (Anchovy, Sardine and Mackerel)	500 mg
Yielding	
DHA (Docosahexaenoic Acid)	250 mg
EPA (Eicosapentaenoic Acid)	50 mg

Non-Medicinal Ingredients: Xylitol, purified water, erythritol, fish gelatin, trisodium citrate dihydrate, natural lemon-lime flavour, gum arabic, DL-malic acid, beta-carotene, medium chain triglycerides, vegetable oil
Contains: Fish

Recommended Dose

Adults, Adolescents and Children (3 years and older): Take 1 softchew 1 to 2 times daily or as recommended by your healthcare practitioner.

Product Size
36 Softchews

Product Code
10395

NPN 80091787



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Super DHA Forte Softchew

A unique triglyceride-form fish oil emulsion offering enhanced-absorption omega-3 essential fatty acids in a great-tasting, natural lemon lime-flavoured softchew suitable for the whole family

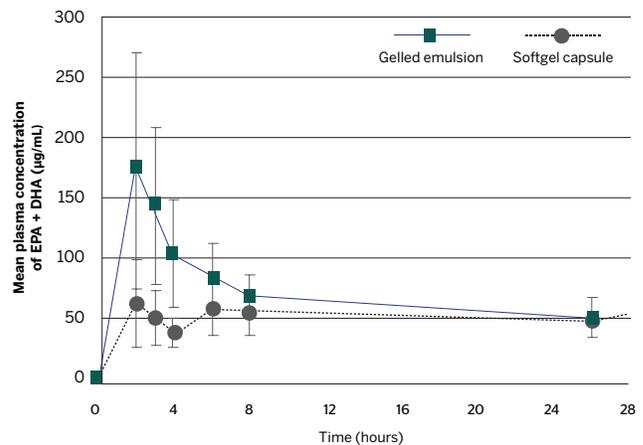
Patented emulsification technology

Absorption of fats is limited and dependent on the presence of dietary fat and adequate bile production to carry the molecule to the absorptive surface of the intestine. An emulsion process encloses the essential fatty acids (EPA and DHA) into tiny water-soluble droplets called micelles. This form enables EPA and DHA to readily cross the intestinal membranes for greater bioavailability and minimal bile dependency.



Emulsification process increases bioavailability

Healthy students (ages 18-30) received 5 g of fish oil as either traditional softgels or as gelled emulsion. The incremental area under the curve (AUC_{0-26h}) of EPA and EPA+DHA in plasma increased in the emulsion by 44.9% and 43.3%, respectively, compared to the softgel. The maximum incremental concentration of EPA and EPA+DHA in the emulsion increased by 100.4% and 105.6%, respectively, compared to the softgel.¹



The Benefits of Fish Oil

- **Cognitive and Neuronal Health:** Supports cognitive health by promoting healthy cytokine balance and neuronal function
- **Docosahexaenoic acid (DHA)** is a component of neuronal cellular membranes and supports healthy neurotransmission and brain function, as well as vision
- **Cardiovascular Health:** Supports cardiovascular health by promoting healthy lipid metabolism and blood flow

Did You Know?

The North American diet is typically low in essential fats, which are critical throughout infancy and adulthood for healthy cellular function and cardiovascular health. Essential fats include omega-3 fatty acids (from fish, flaxseed and walnuts) and omega-6 fatty acids (from vegetable oils, grains and seeds). North Americans typically consume a diet in which the ratio of omega-6 to omega-3 fatty acids is 15:1, whereas research indicates that humans evolved with a dietary ratio closer to 1:1.^{2,3}

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Scientific Rationale:

The human brain contains a high concentration of lipids, including an abundance of omega-3 polyunsaturated fatty acids.¹ Over 90% of these omega-3 fatty acids (and 10-20% of the brain's total lipid content) are comprised of docosahexaenoic acid (DHA).¹ In addition to its presence in the cerebral cortex and hippocampus (areas related to learning and memory), DHA is associated with the frontal lobes (areas responsible for problem solving, attention and planning).^{1,2} The brain also contains small amounts of eicosapentaenoic acid (EPA), at levels approximately 250-300 times less than DHA.³

While both DHA and EPA are required to maintain good health, DHA is especially important for cognitive function.^{1,4} The brain rapidly grows during the final trimester of pregnancy and early childhood, requiring high levels of DHA for normal development.¹ DHA also plays an important role in the development and function of the retina.⁵ As fetal DHA synthesis cannot meet the needs of these growing tissues, DHA accretion largely depends on maternal transfer through the placenta and breast milk.¹ Therefore, maintaining optimal nutritional status during pregnancy and lactation is an important factor in supporting a child's cognitive and visual function.⁵

Randomized, controlled trials have demonstrated that supplementation with 400-500 mg of DHA during pregnancy improved the DHA status of the mother, cord blood and breast milk.^{6,7} Additionally, consuming 200-500 mg of DHA during pregnancy has been shown to promote healthy brain and retinal development in children.⁵ Postnatally, DHA intake during childhood has been demonstrated to support cognitive health.⁵ In one trial, daily consumption of 600 mg of DHA for four months significantly supported cognitive function in underperforming children, as measured by improved reading ability.⁸

In addition to supporting brain development through gestation and adolescence, DHA is required for the maintenance of cognitive function during adulthood and aging.¹ Normal aging is characterized by increases in oxidative stress, inflammation and mitochondrial dysfunction, which may impact cognitive functions such as learning and memory.³ Furthermore, the number of neuronal synapses decreases during normal aging, which leads to changes in cognitive function usually observed after age 65.¹

DHA may support cognitive function during adulthood and aging by promoting proper membrane function, signalling pathways and health of neurons.⁵ By regulating NFκB activation and supporting the production of resolvins and neuroprotectins, DHA may help reduce inflammation and oxidative damage in the brain.^{1,5} One study reported that adding DHA and EPA to lipopolysaccharide (LPS)- or phytohaemagglutinin (PHA)-stimulated

cells derived from aging adults supported a healthy cytokine balance.⁹ As both omega-3 fatty acids targeted different cytokine ratios, researchers suggested that their combination may provide optimal support.⁹ To further support cognitive health, DHA may promote the formation of brain-derived neurotrophic factor (BDNF), a protein involved in memory and learning processes.¹ DHA may also help improve blood flow in the brain to provide additional cognitive support.¹

Observational research has reported an association between serum DHA levels and brain health in adults.¹ In one study, higher DHA levels were significantly linked with measures of cognitive function, such as nonverbal reasoning and mental flexibility, vocabulary, and memory.¹⁰ Similar associations have been reported between the maintenance of cognitive function and DHA and EPA intake in middle-aged and elderly adults.^{11,12} Furthermore, supplementation with a high dose of DHA and EPA daily for six months (1,160 mg DHA and 170 mg EPA) in healthy adults aged 18-45 significantly improved measures of memory and reaction times for memory tasks.¹³ Consuming high doses of DHA (900 mg daily for 24 weeks) also led to improvements in episodic memory and learning in adults over 55 with mild memory complaints.¹⁴

Although research demonstrates the importance of consuming omega-3 fatty acids such as DHA and EPA, modern diets tend to provide a higher level of omega-6 fatty acids (10:1 to 25:1 rather than 2:1 or less).¹ In addition, low consumption of fatty fish in the typical Western diet has resulted in less DHA present in breast milk.⁵ Daily supplementation with a high-quality fish oil is an ideal alternative to increase DHA and EPA intake without the risk of environmental contaminants associated with certain fish species.^{4,15}

The form of supplemented DHA and EPA can have a significant impact on bioavailability.¹⁶ The triglyceride form is highly bioavailable, with clinical studies reporting greater absorption of DHA and EPA in this form when compared to ethyl esters.¹⁷⁻¹⁹ Similarly, supplementation with DHA and EPA in the triglyceride form for six months significantly increased the omega-3 index to a greater extent when compared to the same dose provided in ethyl ester form.²⁰ This measurement of omega-3 status represents the percentage of DHA and EPA in red blood cell membranes, and indicates an individual's long-term intake of omega-3 fatty acids. Research has also demonstrated the bioavailability of DHA and EPA in the triglyceride form to be significantly higher from gelled emulsions when compared to traditional softgels.²¹ Super DHA Forte Softchew offers DHA and EPA in the bioavailable triglyceride form and is manufactured utilizing patented pre-emulsification technology to further enhance absorption.

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