



GENESTRA BRANDS®

## Great-tasting children's chewable DHA formula

- Features a ~5:1 ratio of DHA to EPA
- Supports cognitive health and brain, eye and nerve development in children 3 years and older<sup>‡</sup>
- May help to increase cerebral blood flow<sup>‡</sup>
- Helps to increase erythrocyte DHA levels<sup>‡</sup>
- · Delicious natural orange flavor with no fishy aftertaste or odor
- Improved formula:
  - Higher amount of DHA/EPA per softgel (110 mg/20 mg compared to 65 mg/15 mg)
  - Concentrated, bioavailable triglyceride fish oil
  - Antioxidant preservative system (natural mixed tocopherols and rosemary extract) maintains optimal freshness<sup>‡</sup>
  - Sourced from anchovy/sardine/mackerel (compared to tuna)
  - Enhanced flavor with added monk fruit extract

DHA Pediaburst was specifically designed to support cognitive health in children 3 years and older, with a higher concentration of DHA than EPA. As the most abundant omega-3 fatty acid in the brain, DHA helps support membrane fluidity, neuronal signaling and neuron health, and may provide additional cognitive benefit by increasing cerebral blood flow. It is critical for proper brain and retinal development during the final trimester of pregnancy and early childhood, and has demonstrated cognitive health benefits in children, including improved reading ability in underperforming children. DHA supplementation has also been shown to increase erythrocyte DHA levels, which is associated with improved literacy and behavioral outcomes in children. DHA Pediaburst features exceptionally pure fish oil in the triglyceride form, which has demonstrated greater bioavailability than ethyl esters in clinical research. Ideal for those who dislike swallowing capsules, this easy-tochew and great-tasting formula supplies the DHA that children need for healthy brain development.<sup>‡</sup>



### SUPPLEMENT FACTS

Serving Size 3 Chewable Softgels Servings per Container 60

	Amount Per Serving	% DV for Children 3 Years Old	% DV for Adults, Adolescents and Children 4 Years & Older
Calories	10		
Total Fat	1 g	3%^^	1%^
Cholesterol	5 mg	2%	2%
Fish Oil (from Anchovy, Sardine and Mackerel) Yielding	750 mg	*	*
DHA (Docosahexaenoic Acid)	330 mg	*	*
EPA (Éicosapentaenoic Acid)	60 mg	*	*

Daily value (DV) not established

^ Percent daily values (DV) are based on a 2,000 calorie diet

^^ Percent daily values (DV) are based on a 1,000 calorie diet

Other ingredients: Bovine gelatin, glycerin, purified water, potato starch (non-GMO), sunflower lecithin, natural flavors, monk fruit extract, mixed tocopherols concentrate, rosemary leaf extract Contains: Fish

#### **Recommended Dose**

Children (3 years and older), Adolescents and Adults: Chew 3 softgels 1-2 times daily or as recommended by your health professional.

Size 180 Chewable Softgels Product Code 10533



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# DHA Pediaburst

## Scientific Rationale:

The human brain contains a high concentration of lipids, including an abundance of omega-3 polyunsaturated fatty acids.<sup>1</sup> Over 90% of these omega-3 fatty acids (and 10-20% of the brain's total lipid content) are comprised of docosahexaenoic acid (DHA).<sup>1</sup> 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).<sup>1,2</sup> The brain also contains small amounts of eicosapentaenoic acid (EPA), at levels approximately 250-300 times less than DHA.<sup>3</sup>

While both DHA and EPA are required to maintain good health, DHA is especially important for cognitive function.<sup>1,4</sup> The brain grows rapidly during the final trimester of pregnancy and early childhood, requiring high levels of DHA for normal development.<sup>1</sup> DHA also plays an important role in the development and function of the retina.<sup>5</sup> 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.<sup>1</sup> Randomized, controlled trials have demonstrated that supplementation with 400-500 mg of DHA during pregnancy improves the DHA status of the mother, cord blood and breast milk.<sup>6,7</sup> Additionally, consuming 200-500 mg of DHA during pregnancy has been shown to promote healthy brain and retinal development in children.<sup>5</sup> Therefore, DHA supplementation is an effective strategy to maintain optimal nutritional status during pregnancy and lactation to support a child's cognitive and visual function.5<sup>‡</sup>

Postnatally, DHA intake during childhood has been shown to increase DHA levels in red blood cells.<sup>8</sup> In one trial, daily supplementation with low and high doses of DHA (400 and 1,200 mg) for eight weeks significantly increased erythrocyte DHA status in healthy boys.9 Greater effects were observed in the high-dose group, which also led to decreased erythrocyte arachidonic acid levels.<sup>9</sup> This increase in erythrocyte DHA was also significantly associated with changes in brain activity during a cognitive test.9<sup>‡</sup>

Increasing the erythrocyte DHA status may be especially important in supporting children's learning and behavioral outcomes.<sup>10</sup> Two randomized, placebo-controlled trials involving children who took high-dose DHA supplements reported that higher omega-3 fatty acid erythrocyte levels (in particular DHA) were associated with better reading, spelling, attention, activity, and parent-rated behavior.<sup>10,11</sup> The beneficial effects of DHA on children's brain health were further demonstrated in a study reporting that daily DHA consumption (600 mg for four months)

significantly supported cognitive function in underperforming children, as measured by improved reading ability.12‡

In addition to supporting brain development through gestation and adolescence, DHA is required for the maintenance of cognitive function during adulthood and aging.<sup>1</sup> Clinical trials have reported that consuming high-DHA fish oil (over 900 mg daily) has led to cognitive benefits, such as improved measures of memory and reaction times for memory tasks in healthy adults, and improvements in episodic memory and learning in adults over 55 with mild memory complaints.<sup>13,14</sup> Similarly, observational research has found associations between serum DHA levels and brain health in adults.<sup>1,15-17‡</sup>

DHA may support cognitive health by improving blood flow in the brain.<sup>1</sup> In a double-blind, placebo-controlled study involving healthy adults, supplementation with 1 g of DHA-rich fish oil for 12 weeks significantly increased cerebral blood flow during a cognitive task, as measured by an increase in oxygenated and total hemoglobin levels.<sup>18</sup> DHA may further support cognitive health by promoting proper membrane function, signaling pathways and neuron health, as well as by regulating cytokine production and oxidative damage in the brain.<sup>1,5,19‡</sup>

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).<sup>1</sup> In addition, low consumption of fatty fish in the typical Western diet has resulted in less DHA present in breast milk.<sup>5</sup> 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.4,20‡

The form of supplemented DHA and EPA can have a significant impact on bioavailability.<sup>21</sup> The triglyceride form is highly bioavailable, with clinical studies reporting greater absorption of DHA and EPA in this form when compared to ethyl esters.<sup>22-24</sup> 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.<sup>25</sup> 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. DHA Pediaburst offers DHA and EPA in the bioavailable triglyceride form to support optimal cognitive health and brain function.<sup>‡</sup>

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