The human brain is a miracle made up of approximately 86 billion neurons and the remarkable ability to re-wire itself. We used to think the brain couldn’t generate new neurons. It turns out that when the right nutrients are available, the brain makes, on average, 700 healthy new brain cells every day and new neuronal connections are made throughout one’s life.

Neurogenesis and neuroplasticity are dependent on an ample supply of Brain-Derived Neurotrophic Factor (BDNF). BDNF is a naturally occurring protein that is responsible for the growth, maintenance and survival of neurons. It has been discovered that the omega-3 fatty acid docosahexaenoic acid (DHA) is one of the most important ingredients to boost BDNF levels stimulating the production of new brain cells and strengthening existing ones (1,2,3).

Safety & Sustainability
Fish oils are extracted from fish where there is no control over their diet or exposures. Oils derived from wild fish have unpredictable and varying levels of many known (and unknown) toxins like mercury, PCBs, dioxins, and furans.

Omega-3s are originally formed within algae and mainly in the form of DHA. Algae are the base of the food chain for fish. Fish consume algae and metabolically concentrate EPA and DHA omega-3s in their tissue. EPA and DHA from an algal source is equally bioavailable to a fish source.

Algal oil has been certified as generally recognized as safe (GRAS) by the United States Food and Drug Administration (FDA) and is an efficient, environmentally friendly, and sustainable source of DHA and EPA.

One kilogram of our algal omega-3 ingredient has the potential to replace as much as 12 kg of wild fish which won’t need to be caught to make fish oil (4).

Transparency & Traceability
The history of our product begins in outer space. In the early 1980s, a NASA program explores the use of microalgae as a food supply, oxygen source, and waste disposal catalyst on long duration interplanetary missions.

Martek becomes a leader in microalgae research and development and its research soon identified a special type of Crypthecodinium cohnii algae that produces very high levels of DHA omega-3 fatty acid.

The Brain Armor line is born. It features DSM’s micro-algal oil called life’s™OMEGA60 which contains a larger proportion of DHA than EPA. It is the first high potency, vegan omega-3 fatty acid product on the market.

 scientist continued work independently after the completion of the program, founding what would become Martek Biosciences. In 2011 Martek was acquired by DSM a leading global supplier of both marine and unique vegetarian-based omega-3 ingredient solutions.
Formulated using an ultra-pure, algal source of Omega-3s with a 2:1 ratio of DHA:EPA, Vitamins D3 & E, MCTs from coconut oil, and natural flavors.

**ACTIVE INGREDIENTS:**

- Total Omega-3s: 3,667 mg
- DHA: 2,250 mg
- Vitamin E: 90 IU
- Medium Chain Triglycerides: 2,250 mg

**Directions:** Shake well before each use. For adults, take two teaspoons (10 mL) or as directed by your healthcare professional.

**Refrigerate after opening.** Do not purchase or consume if tamper evident seal is broken or damaged.

**EVIDENCE & EFFICACY**

Omega-3 is among the most researched nutrient in the world with over 25,000 published papers to date illustrating the positive health benefits of a diet rich in omega-3 essential fatty acids. DHA is an omega-3 fatty acid that accounts for approximately 97 percent of the omega-3 fats in the brain. Among the plethora of indications, dietary omega-3 fatty acid supplements, especially DHA, have also been shown to significantly improve brain health and neuronal development, as well as enhance cognitive function.

Brain Armor contains a non-fish source of both EPA and DHA that delivers twice the natural potency of the highest omega-3 containing species of fish.

Brain Armor also contains Medium Chain Triglyceride (MCT) oil. All fats are made up of strings of carbon and hydrogen. Short-chain fats have fewer than 6 carbons (e.g. butyric acid), long-chain fats have 13 to 21 (e.g. Omega 3s) and medium-chain fats have 6 to 12. MCTs are made up of medium-chain fatty acids. The goMCT™ oil we formulate with in Brain Armor contains C8 and C10 MCTs, the most effective in converting to ketones, a potent alternative energy source for the brain. MCT oil enhances the ability to think clearly and process information effectively.

The formula wouldn’t be complete without supplemental vitamin D3 which is associated with a wide range of benefits, including increased cognition.

A trial conducted by Brain Armor monitored the effects of daily Brain Armor supplementation on participant Omega-3 index (O3i) over a period of 90 days (n=64). At the end of the trial, 100% of the participants who supplemented with Brain Armor appropriate for their age showed an increase in O3i, including those who were supplementing with different sources of Omega-3 prior to the start of the trial. Similar results were true for two other beneficial health markers: ratio of Omega 6:Omega 3 and AA:EPA ratio.

**PURITY & POTENCY**

Fish bioaccumulate the Omega-3 they ingest from algae. On this basis we can go straight to the source, bypass further “processing” by fish and extract these healthy fatty acids from algae, the same natural route that fish do.

During the fermentation process, our algae cells are only fed nutrients of certified quality. Our omega-3’s come from micro-algae fermenters that rely on pure, natural ingredients. All components are food-grade (or better) and are sourced from trusted and certified suppliers. We know everything that goes into the algae, so we can be confident about everything that comes out.

**OUR INGREDIENTS:**

**Omega-3 DHA/EPA**

Life’sOMEGA6® is derived from the marine algae, Schizochytrium sp and contains 60 per cent total omega-3, with a minimum content of 300 mg/g DHA and 150 mg/g EPA in a natural triglyceride form for optimum bioavailability. It contains rosemary extract. Ascorbyl palmitate and tocopherols, as antioxidants, are also added to provide stability.

**Medium Chain Triglycerides**

goMCT™ enhances ketone production, helping people feel more alert, aware and focused. Busy professionals, on-the-go moms and dads, or even college students looking to maximize cognitive potential can benefit from the MCT in Brain Armor.

**Vitamin Profile**

Brain Armor uses VegaDELight™, a vegan source of vitamin D3 naturally extracted from Lichen (Cladonia rangiferina) as a standard and stable D3 alternative to lanolin (sheep wool grease). The Vitamin E is as d-Alphatocopheryl Acetate.

**Other Ingredients:**

High Oleic Sunflower Oil, Natural Flavors, Rosemary Extract, Tocopherols, Stevia Leaf Extract, and Ascorbyl Palmitate.

**REFERENCES**


