

# OmegAvail™ Liquid



*Omega-3 Triglycerides With a Hint of Lemon Flavor*

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This information is provided as a medical and scientific educational resource for the use of physicians and other licensed health-care practitioners ("Practitioners"). This information is intended for Practitioners to use as a basis for determining whether to recommend these products to their patients. All recommendations regarding protocols, dosing, prescribing, and/or usage instructions should be tailored to the individual needs of the patient considering their medical history and concomitant therapies. This information is not intended for use by consumers.

OmegAvail™ Liquid delivers clinically useful amounts of eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) from fish oil in its natural triglyceride (TG) form with a pleasant lemon taste in a convenient liquid delivery.\* EPA has been shown to support a healthy brain, balanced emotions, skin health, and normal cholesterol metabolism, and to promote a healthy inflammatory response.\* DHA has been shown to support proper brain development and function, visual acuity, eye development, a healthy pregnancy, and maintenance of normal triglyceride metabolism and blood pressure.\*

OmegAvail™ Liquid carries the TruTG™ seal, which contains fish oil in its TG form with 90% to 100% TG-bound omega-3 oils, which are 40% to 50% higher than the industry standard for TG fish oil concentrate products. The process by which this product is molecularly distilled and filtered ensures its purity and maximizes the removal of metals, pesticides, PCBs, and other contaminants. DeltaGold® tocotrienols are added to enhance the stability of the product.

## Formula Highlights

- Delivers 725 mg of EPA and 475 mg of DHA per serving
- Provides fish oil in its natural triglyceride (TG) form (as TruTG™) — contains a minimum of 90% natural TG-bound omega-3 fish oils
- Molecularly distilled and filtered to ensure purity and to maximize the removal of metals, pesticides, PCBs, and other contaminants
- Includes vitamin E isomers (as DeltaGold® gamma- and delta-tocotrienols) for enhanced product stability and to help protect the fragile oils from oxidation and rancidity
- Free of artificial colors, flavors, or sweeteners

## Ingredient Highlights

### EPA

EPA is a long-chain polyunsaturated fatty acid (PUFA) that has been shown to support many aspects of human health, including the support of cognitive function, balanced emotions, skin health, cardiovascular health, and promotion of a healthy inflammatory response.\* Omega-3 PUFAs are believed to support the body's response to inflammation through many pathways, including competition with the formation of eicosanoids from arachidonic acid.<sup>1</sup> EPA and its metabolites also attenuate the infiltration of polymorphonuclear leukocytes (PMNs), increase phagocytosis-induced PMN apoptosis and the anti-inflammatory metabolites of COX-2 enzyme, and reduce fibroblast activation and the levels of pro-inflammatory molecules, such as nuclear factor-kappa beta (NF-kB) and interleukin-12 (IL-12).<sup>1,2</sup>

In support of cardiovascular health, supplementation with omega-3 PUFAs (such as EPA) has been shown in studies to help improve certain cardiac-related parameters. Omega-3 PUFAs have been shown to help reduce very low-density lipoprotein and triglycerides (TGs) by decreasing the activity of sterol receptor element binding protein-1c.<sup>3</sup> In a clinical trial involving more than 56,000 participants with a follow-up between 3 and 20 years, the risk of developing hypertension was 27% lower among the normotensive individuals who consumed the highest amounts of omega-3 PUFAs.<sup>3</sup>

It was previously believed that EPA does not cross the blood-brain barrier due to the comparatively low levels there, but newer research shows that it does enter the brain and it is rapidly metabolized.<sup>4</sup> Although further clinical trials need to be conducted, current research indicates that EPA may downregulate neuroinflammatory processes in support of a balanced mood and resilience in response to stress.<sup>4</sup> EPA inhibits synthesis of prostaglandin E2 (PgE2) due to competition with arachidonic acid. This may have a positive effect on mood because PgE2 is believed to reduce serotonin release.<sup>4</sup>

### DHA

DHA is a long chain omega-3 PUFA that plays an important role in human physiology, and it is believed that DHA played a critical role in the evolution of the human brain.<sup>5</sup> DHA is not considered to be an essential fatty acid. However, only <0.1% conversion efficiency is found in humans from its precursor alpha-linolenic acid, indicating that preformed DHA is most effective in helping maintain sufficient tissue stores of DHA because it cannot be efficiently synthesized.<sup>5</sup>

## Benefits\*

- Supports cardiovascular health
- Promotes a healthy response to inflammation
- Supports memory and cognitive function
- Supports joint health
- May help promote healthy lipid metabolism

## Supplement Facts

Serving Size 5 mL (approx. one teaspoon)  
Servings Per Container about 47

Amount Per Serving		% Daily Value
Calories	40	
Total Fat	4.5 g	6%*
Cholesterol	25 mg	8%*
Omega-3 Fatty Acids (from fish oil)		
EPA (Eicosapentaenoic Acid)	725 mg	†
DHA (Docosahexaenoic Acid)	475 mg	†

\*Percent Daily Values are based on a 2,000 calorie diet.  
†Daily Value not established.

**Other Ingredients:** Natural lemon flavor, DeltaGold® tocotrienols.  
**Contains fish (sardines, herring, mackerel, anchovies).**

Research shows that the shift in modern Western diets away from n-3 PUFA intake and increased omega-6 (n-6) PUFA consumption has resulted in a negative impact on development, aging, and cognitive function.<sup>5</sup>

DHA is a structural molecule stored in phospholipid cell membranes and it is particularly enriched in the mitochondria, endoplasmic reticulum, and synaptic terminals.<sup>5</sup> The amount of DHA in these membrane structures may support improvement in membrane fluidity, neurotransmitter release, signal transduction, lipid raft function, transmembrane receptor function, myelination, gene expression, neuronal differentiation and growth, while also reducing neuroinflammation.<sup>5,6</sup> DHA is the most significant n-3 in the brain, which comprises more than 90% of the brain's n-3 PUFAs and 50% of total lipids in the central nervous system. DHA is especially concentrated in the gray matter, thus, maintaining optimal lipid and DHA composition is crucial for cultivating proper functioning of the brain.<sup>5,6</sup> DHA is necessary for vision and postnatal retinal development, as it is a critical component of retinal epithelial cells and comprises 35% of fatty acids in photoreceptors within the macula.<sup>7,8</sup> Increased levels of DHA inside the membranes of inflammatory cells reduce activation of pro-inflammatory transcription factors (e.g., NF-kB) and mediators (e.g., prostaglandin E2), and it acts as a substrate for specialized pro-resolving mediators, including resolvins D1-D6, maresins 1-2, and neuroprotectin D1 (NPD1), which all have pro-resolutive and anti-inflammatory properties.<sup>6,7,9</sup> NPD1 is specific to brain and photoreceptor cell protection against ischemia and oxidative stress.<sup>7</sup>

#### **The TruTG™ Advantage**

The omega-3 fatty acids in this formula are derived from fish oils in their natural triglyceride form — the same way they naturally occur in fish. Most mass-marketed fish oil supplements come in the synthetic ethyl ester (EE) form. Compared to the TG form, the EE form is more convenient to produce but not as readily recognized, digested, and assimilated by the body, and it is more prone to oxidation and production of free radicals. To receive the maximum benefits from n-3 fish oil supplementation, it is critical for these fats to be provided in the most bioavailable, bioidentical form — the same form that is naturally found in fish and in the tissues of the human body. The TG form is broken down 12% to 15% faster than the EE form by pancreatic lipase enzyme. With the natural TG form being most easily digested and available for the body to use, this TruTG™ advantage is effective at promoting healthy n-3 levels in the body.\*

**Recommended Use:** Take 5 mL (approximately 1 teaspoon) per day with a meal or as directed by your health-care practitioner.

**Warning:** Consult your health-care practitioner before use if you are taking a blood thinner medication or if you are planning to have surgery.

For a list of references cited in this document, please visit:

<https://www.designsforhealth.com/api/library-assets/literature-reference---omegavail-liquid--tech-sheet-references>

Dosing recommendations are given for typical use based on an average 150 pound healthy adult. Healthcare practitioners are encouraged to use clinical judgement with case-specific dosing based on intended goals, subject body weight, medical history, and concomitant medication and supplement usage.

**DeltaGold® is a registered trademark of American River Nutrition, LLC and protected by US Patent Number 8,586,109.**

**\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.**

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