# OmegAvail™ Ultra with Vitamin D3, K1 & K2



High potency omega-3s with added vitamins D3, K1 and K2

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OmegAvail™ Ultra with Vitamin D3, K1 and K2 is a novel fish oil product containing the same high potency omega-3 oil found in our OmegAvail™ Ultra TG softgel, with the added benefit of the fat-soluble vitamins D and K, plus lipase for enhanced digestion and absorption.¹²

## **TruTG™ Quality**

The TruTG™ seal is exclusive to our fish oil product line and guarantees a minimum 90 to 100% triglyceride-bound EPA and DHA fatty acids — a level that is 40 to 50% higher than the industry standard for most TG fish oil concentrate products. Triglycerides are the naturally occurring molecular form of fats, including omega-3 fatty acids, typically found in most food sources such as fish.³ Most commercial omega-3 fatty acids are delivered as synthetic ethyl esters, being more cost-effective and convenient to manufacture.⁴⁵ The TG form of fish oil has superior absorption, compared to esterified fish oil, due to possessing its own monoglyceride substrate which is more readily hydrolyzed by pancreatic enzymes and absorbed by enterocytes.⁴⁵

The fish oils in OmegAvail™ Ultra with Vitamin D3, K1 and K2, as with all of our fish oils, are molecularly distilled and filtered to ensure purity and to maximize the removal of heavy metals, pesticides, solvents, PCBs, and other contaminants.

## Why include vitamins D & K?

While the benefits of fish oil are well-researched, many of these benefits are powerfully enhanced and optimized with the inclusion of vitamins D3, K1, and K2 — vitamins which target the same systems as omega-3 fatty acids. Considering that deficiencies in vitamins D and K may be more prevalent than expected, adding vitamins D and K in fish oil may ensure that the health benefits from fish oil are optimized.<sup>8,9,10</sup>

# Highlights\* Cardiovascular Health

Numerous randomized controlled trials (RCTs) and retrospective epidemiologic studies give evidence for the role of omega-3 oils in the prevention of primary and secondary cardiovascular disease (CVD) by decreasing the incidence and progression of atherosclerosis, myocardial infarction, heart failure, arrhythmias, and stroke." These outcomes are accomplished through a reduction in triglycerides, alteration in membrane fluidity, modulation of cardiac ion channels, and anti-inflammatory, anti-thrombotic, and anti-arrhythmic effects." However, vitamin D is also reported to prevent cardiovascular disease by improving cardiac function through various mechanisms while hypovitaminosis D is associated with an increased prevalence of CVD risk factors. Likewise, vitamins K1 and K2 are bioactive compounds in regulating atherosclerosis and inflammatory diseases such as CVD. Vitamin K2 protects against vessel calcification, reducing arterial stiffening and improving vessel elasticity. 15.16

# OmegAvail™ Ultra with D3, K1 and K2 may be beneficial for\*:

- Cardiovascular health
- Atherosclerotic support
- · Metabolic syndrome
- · Bone health
- Immune support

## **Supplement Facts**

Serving Size 2 softgels Servings Per Container 60

Amount Per Serving		% Dai	ly Value	
Calories		20		
Total Fat		2 g	3%*	
Vitamin D (as Cholecalciferol)	25 mcg	(1000 IU)	125%	
Vitamin K (as Vitamin K1 Phyto	nadione	525 mcg	438%	
500 mcg; Vitamin K2 Menaquinone-7 25 mcg)				
Omega-3 Fatty Acids (from fish	oil)			

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EPA (Eicosapentaenoic Acid)	600 mg	t
DHA (Docosahexaenoic Acid)	400 mg	t
Other Omega-3 Fatty Acids	200 mg	†

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

Other Ingredients: Bovine gelatin, purified water, glycerine, annatto (color), natural lemon flavor, DeltaGold\* tocotrienols, lipase Contains fish (Alaska pollock).

### **Bone Health**

A combination of vitamins D and K was shown to significantly sustain an increase in bone density in a 2-year RCT of 244 healthy, nonosteoporotic women." While vitamin D is typically recommended with calcium for bone health, vitamin D supplementation, in the presence of inadequate levels of vitamin K, can increase the risk of calcium deposition in arteries and soft tissue. Further, research shows that omega 3-fatty acids from fish oil improve bone health by enhancing calcium absorption, reducing bone loss and maintaining bone mineral density.<sup>20</sup>

## **Metabolic Health**

Omega-3 oils improve various markers of metabolic health including weight, systolic blood pressure, lipid profile, and markers of inflammation and autoimmunity, thereby lowering the presence of metabolic syndrome. An inverse association between vitamin D and metabolic syndrome has also been shown in a cross-sectional study of 1790 subjects, while a 10-year follow-up cross sectional and longitudinal study confirmed that a high intake of vitamin K is associated with a lower occurrence of metabolic syndrome.

## **Immune Health**

Research shows that omega-3 fatty acids and vitamin D are important compounds for supporting immune health by inhibiting pro-inflammatory mediators, promoting anti-inflammatory functions, modulating cell-mediated immunity, altering antigen-presenting cell functions, and enhancing communication between the innate and adaptive immune systems.<sup>25,26</sup>

#### **Recommended Use**

Take two softgels per day with meals, or as directed by your health care practitioner.

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

http://www.designsforhealth.com/techsheet-references/omegavail-ultra-d3-k1-k2-references.pdf

Dosing recommendations are given for typical use based on an average 150 pound healthy adult. Health care 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 Numbers 6,350,453 and 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.

To contact Designs for Health, please call us at (860) 623-6314, or visit us on the web at www.designsforhealth.com.