### Supercritical CO<sub>2</sub> Triglyceride

# DESCRIPTION

QÜELL Fish Oil® Clinical Strength DHA is Supercritical CO<sub>2</sub> extracted docosahexaenoic acid (DHA) in triglyceride form, manufactured exclusively for Douglas Laboratories. The product contains 90% essential omega-3 fatty acid DHA which has been shown in recent research to support cardiometabolic biomarkers.<sup>†</sup>

QÜELL Fish Oil is unique among other fish oils for its' supercritical extraction, purity, bioavailability and concentrations.

### **Supercritical Extraction**

Supercritical  $CO_2$  advanced technology is the superior protection against oxidation. The extraction method of fish oil uses less heat and no chemical solvents when compared to molecular distillation, resulting in fewer unwanted isomer formations and "cleaner" oil.

#### Purity

Supercritical fluid extraction uses CO<sub>2</sub> (carbon dioxide) instead of oxygen to gently extract the fatty acids, which also protects them from microorganisms that can't survive without oxygen. No chemical preservatives, solvents, or undesirable compounds are found in QÜELL Fish Oils. Heavy metal and contaminant levels measure significantly lower than the standard.

#### Bioavailability

Recent scientific data shows the triglyceride form of fish oil is better absorbed when compared to ethyl esters. Recent data have demonstrated that omega-3 fatty acids delivered in a triglyceride form may result in greater plasma levels and a higher omega-3 index compared with omega-3 fatty acids delivered in the form of ethyl esters.†

#### Concentration

Many fish oils contain only about 30% omega-3 fatty acids, of which roughly 18% is EPA and 12% DHA. The remaining 70% is a varying mixture of other components. In other words, regular fish oil contains less than a third of the desired active ingredients and more than two thirds of "other" components. These other components may include cholesterol, omega-6 fatty acids, saturated fatty acids, oxidation products and contaminants. Highly concentrated fish oil, like QÜELL Clinical Strength DHA, provide 90% active ingredients, leaving less room for non-essential compounds.

### **FUNCTIONS**

DHA is the long chain (22:6n-3) omega-3 fatty acid typically found in marine sources which may be beneficial in supporting healthy serum triglycerides and heart health, as well as age-related macular eye support.<sup>†</sup> There is a growing body of evidence that suggests long-chain omega-3 polyunsaturated fatty acids, primarily EPA and DHA can help support healthy body composition, metabolism, and cardiovascular health.<sup>†</sup> A randomized crossover head-to-head comparison of EPA and DHA supplementation trial was completed using 3 grams daily of DHA fish oil to assess systemic biomarkers and blood lipid levels in obese men and women. DHA was shown to be effective at modulating specific biomarkers such as CRP, interleukin-18, TNF-alpha, and adiponectin to support cardiometabolic health.<sup>†</sup> DHA may also have a greater effect on promoting normal triglyceride levels and HDL cholesterol compared to EPA alone.<sup>†</sup>

### **INDICATIONS**

QÜELL Fish Oil® Clinical Strength DHA is indicated for those individuals that want to supplement with the omega fatty acid DHA to support cardiovascular, cognitive, or general health.<sup>†</sup>

## QÜELL FISH OIL® Clinical Strength DHA Supercritical CO<sub>2</sub> Triglyceride

FORMULA (#202248)

Serving Size 1 fish gelatin softgel contains:

Other Ingredients: Gelatin (capsule from fish [Tilapia], glycerin, purified water, natural-source mixed tocopherols) This product contains fish oil (anchovies, sardines, mackerel).

## SUGGESTED USE

Adults take 1 softgel, 1-3 times daily or as directed by your health care professional.

# SIDE EFFECTS

No adverse effects have been reported.

## STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

# REFERENCES

Cho E, Hung S, Willett WC, Spiegelman D, Rimm EB, Seddon JM, Colditz GA, and Hankinson SE. Am J Clin Nutr 2001;73:209–18. [DHA].

Erkkila AT, Lehto S, Pyorala K, Uusitupa MI. Am J Clin Nutr 2003;78:65-71. [DHA]

Allaire J, Couture P, Leclerc M, Charest A, Martin J, Lepine MC, Talbot D, Tchernof A, Lamarche B. Am J Clin June 8, 2016. [DHA]

Erkkila AT, Matthan NR, Herrington DM, Lichtenstein AH. J Lipid Research, Vol, 47 2006. [DHA].

Nilsson A, Radeborg K, Salo I, Björck I. Nutr J. 2012 Nov 22;11:99. doi: 10.1186/1475-2891-11-99. [Omega-3].

Neubronner J. Eur J Clin Nutr. 2011 Feb;65(2):247-54. [Omega-3].

Micallef M.A., Munro I.A., Garg M. L. European Journal of Clinical Nutrition 2009 63,1154-1156. [Omega-3].

Zampolli A, Bysted A, Leth T, Mortensen A, De Caterina R, Falk E. Atherosclerosis. 2006 Jan;184(1):78-85. Epub 2005 Jun 8. [Omega-3].

Bucher HC, Hengstler P, Schindler C, Meier G. Am J Med. 2002 Mar;112(4):298-304. [Omega-3].

## For more information on QÜELL FISH OIL™ Clinical Strength DHA visit douglaslabs.com

† 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.

Manufactured for Douglas Laboratories 600 Boyce Road Pittsburgh, PA 15205 800-245-4440 douglaslabs.com

