

WATER SOLUBLE OMEGA-3 POWDER

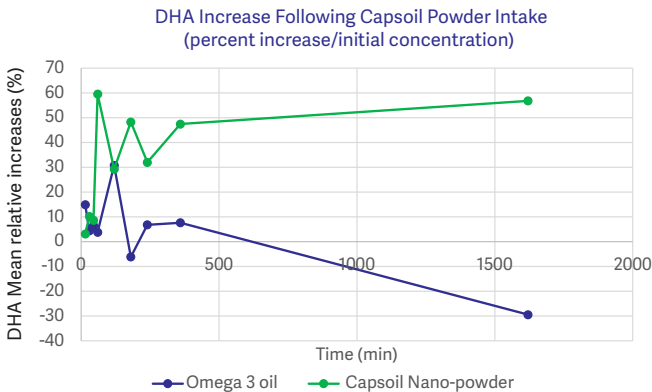
A game-changing solution for the food and beverage, and dietary supplements industries.

caps^oil
food tech | by Prodalim



Capsoil Foodtech's powder ingredients have some unique benefits.

- High oil load (30-60%), relative to 12-20% in existing omega-3 powders
- Capsoil self-emulsifying system makes our omega-3 powder water-soluble
- Higher bioavailability of lipophilic ingredients (shown in pre-clinical studies)*



- Each group of rats was administered the same amount of DHA in a single dose of oil or powder
- C_{max} in plasma is 46% higher in the powder vs. the oil
- T_{max} in plasma is 45 minutes for the powder, compared to 90 minutes for the oil
- DHA blood levels were kept high up to 24 hours after powder digestion



Fortify your products with omega-3 like never before.

Omega-3 fatty acids are possibly the best studied nutrient, with thousands of studies in humans demonstrating the importance of consuming these fats daily. Omega-3 can come from vegan sources such as nuts, seeds, or algae; or from marine sources like fish and krill. Omega-3 fatty acids differ between sources, however. Plant sources such as flaxseed or walnuts contain alpha linolenic acid (ALA), an essential fat, meaning we cannot produce it in our bodies so must get it from our diet. Marine sources contain fatty acids such as EPA, DPA and DHA, often essential because we can produce them in our bodies, if we consume sufficient amounts of ALA. Typically, conversion levels are very low, so we also need to supplement it from dietary sources.

The robust science behind omega-3 led to approval of health claims linking its consumption to various health benefits. In Europe, fatty acids such as ALA, EPA and DHA have EFSA approved health claims. The US and other countries around the world also recognize omega-3's health benefits. The World Health Organization and the Global Organization for EPA and DHA recommend consuming levels of omega-3 as high as 2000mg a day, through the consumption of fish and supplements; and other countries around the world have followed suit.

Because omega-3 is an oil-based ingredient, it's normally taken in a soft gel format. When added to other applications, such as tablets, capsules, gummies or powders, the amount of omega-3 in existing powders on the market is typically much lower than our technology provides.

Capsoil Foodtech's game-changing technology can help! We've developed an innovative production process to create ultra-fine powders from natural oils.



Capsoil Foodtech's unique technology can convert any oil-based or lipophilic ingredient into water-soluble powder.

- Self emulsifying nano-emulsion leading to water solubility
- Better bioavailability (bioaccessibility and absorption)
- High load of oil in powder
- Clean production process – no use of solvents or heat allows the starting material to maintain nutrient content





Discover all the ways Capsoil Foodtech's technology can create value in your products.

We're constantly innovating and testing our technology across a range of ingredients and applications, so contact us today to see how our game-changing technology can help your products stand out.

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* currently internal data