

Omega-3 fortified protein bar

Product application



Research through the past decade highlights that Omega-3 DHA has been linked to beneficial impacts on cardiac and skeletal muscle function, oxygen consumption, cognitive function and a reduction in inflammation and oxidative stress. The following information outlines the preparation of a protein bar containing Omega-3 DHA. We recommend the use of Nu-Mega™ Ingredients' patented microencapsulated product, Driphorm® HiDHA® 360 (D307.010), for this application. It is the highest-concentration, marine-based DHA powder commercially available, offering 36% active DHA and 6.5% active EPA as triglycerides.

Benefits of using Nu-Mega's Driphorm® HiDHA® 360 (D307.010) made with patented microencapsulated technology:

- Ultra-high DHA levels compared to similar products
- Multiple product development opportunities for nutritional foods and beverages including meal replacement bars, gummies, bakery and dairy products
- 24-month shelf life at ambient temperature
- Allows higher DHA fortification rates with no negative sensory impact
- Key accreditations for worldwide applications
- Input for organic production
- All ingredients non-GMO by origin
- Halal certified.

Nu-Mega's Driphorm® HiDHA® 360 (D307.010) usage rates

Elite athletes are always seeking a competitive edge and are increasingly interested in nutrients and approved supplements that can improve performance, muscle condition and exercise recovery, increase metabolic capacity, delay the onset of fatigue and shorten recovery periods. But despite this growing emphasis on nutrition, many athletes do not consume nearly enough food that is naturally high in essential nutrients.

By adjusting the addition level of Nu-Mega's Driphorm® HiDHA® 360 (D307.010), protein bars fortified with Omega-3 DHA can deliver varying levels of DHA. The following table outlines one common level of preformed DHA delivery to produce a fortified bar providing a DHA content of 250 mg per serve (40g) with a minimum DHA + EPA content of 268mg per serve. Recipes can be created that deliver higher or lower levels of DHA if desired.

Table 1: Addition rates for Driphorm® HiDHA® 360 (D307.010)

Typical addition rate of Driphorm® HiDHA® 360 (D307.010) per kg of finished product	22.0g
Protein Bar will deliver the following minimum fatty acid profile per serve (40g):	
Docosahexaenoic Acid (DHA) min.	250mg
Eicosapentaenoic Acid (EPA) min.	18mg
EPA + DHA min.	268mg

Incorporation of Nu-Mega's Driphorm® product range

Nu-Mega's Driphorm® products can be incorporated at a variety of points depending on the manufacturing process. Nu-Mega™ Ingredients recommends incorporation of Driphorm® powders with any other dry powders and ingredients into the process to better facilitate dispersion of the high value nutritional powder.

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