

MARINOL[®]

ENHANCING EVERYDAY HEALTH WITH THE ESSENTIAL
BENEFITS OF OMEGA-3 EPA/DHA



Marinol[®]

Stepan[®]
Lipid Nutrition
The Natural Way to Better Health

OMEGA-3 – ABSOLUTELY ESSENTIAL

People are increasingly looking for food products and ingredients that will help them live longer, healthier lives. One such ingredient that consumers know about and are most interested in is omega-3 fatty acids. These fatty acids are essential to the healthy function of body and mind. The majority of health benefits they provide come from the two principal members of the omega-3 family, eicosapentaenoic acid (EPA) and docosapentaenoic acid (DHA). EPA plays a crucial role in promoting cardiovascular health and safeguarding the health of the body's cells and joints. DHA contributes to the development and function of the brain and nervous system.

THE EASY WAY TO BETTER HEALTH

Marinol's® natural, highly concentrated fish oils and powders from Stepan Lipid Nutrition make it possible for you to easily and effectively help boost your customers' daily intake of EPA and/or DHA to optimum levels. They are composed of the very best marine-based omega-3 fatty acids, ensuring optimum quality and health benefits. What's more, Marinol® offers specific advantages compared to other omega-3 products, including:

- Naturally concentrated fish oil and powder
- Applicable in a wide variety of food applications
- Suitable for all dietary supplements
- Cleaner taste and smell
- Flavor-friendly—no reflux
- FDA GRAS-approved
- Highly concentrated EPA+DHA products
- Highly concentrated DHA products
- Low in saturated fatty acids

This combination of characteristics gives manufacturers maximum flexibility and offers great new opportunities.

A MATTER OF TASTE

Flavor-friendly Marinol® products are made with a natural, enzyme-based manufacturing process that makes them more stable and prevents odors or off-flavors from developing. Also, thanks to their glyceride structure, the acid reflux associated with other omega-3 fatty acid ingredients is reduced. Marinol® products also interfere less with the sensory profiles of the foods they fortify than do other similar ingredients.



THE RIGHT PRODUCT FOR ANY APPLICATION

Marinol® is available in the form of highly concentrated oil and high-stability powder that offer different EPA and DHA ratios to provide specific health benefits. This makes it possible to enhance a wide variety of foods and dietary supplements, and customize them at the same time. Different products can offer EPA and DHA ratios tailored to the needs of specific groups according to their age, state of health and other factors.

The highly versatile application properties of Marinol® make it easy to give everyone the optimum amounts of EPA and DHA they need. Although this is possible via tablet or capsule supplements, there are those such as children or the elderly who may be forgetful or less compliant about taking them. Stepan Lipid Nutrition's specially developed Marinol® powder and oil can be integrated into foods that everyone eats and enjoys on a day-to-day basis, for instance: in fruit sticks for children or convenient breakfast drinks for the elderly. These are just two examples. The potential food applications are almost limitless:

- Fruit beverages and dairy drinks
- Margarines and dairy spreads
- Frozen desserts and ice cream novelties
- Fish cakes, sticks and fillets
- Yogurts and yogurt beverages
- Soups, pastas and pasta sauces
- Processed meats
- Cereals, breads, cookies and crackers

MARINOL[®]

ENHANCING LIFELONG HEALTH
IN BODY AND MIND



THE HEALTHIEST FISH OILS AND POWDERS

Marinol[®]

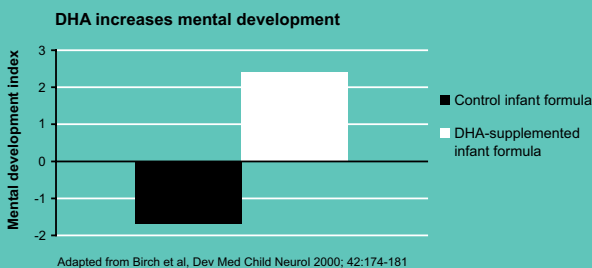
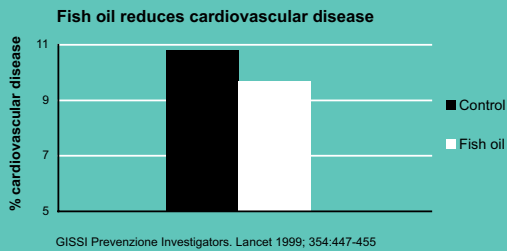
PROVEN RESULTS

THAT OFFER NEW MARKET POSSIBILITIES

The beneficial effects of the omega-3 fatty acids in fish oil have been extensively studied over recent decades. Scientists are still discovering new health benefits associated with diets that are rich in these essential fatty acids. Some have been proven more conclusively than others. These include the way they reduce the risk of cardiovascular disease, suppress inflammation (particularly in joints), and facilitate pre- and post-natal development of the brain, retina and nervous system.

EPA AND CARDIOVASCULAR HEALTH

The positive impact of EPA in fish oil on the cardiovascular system has been known for a long time. People who eat a lot of fish have a markedly reduced risk of cardiovascular disease. A study by a leading Italian institute proves this reduced risk can also be achieved by taking fish oil in the form of dietary supplements and food products.



DHA AND NEURAL DEVELOPMENT

DHA plays a particularly crucial role in processes involving the brain, retina and nervous system. Research shows that there is a significant increase in the fetus's need for DHA during the third trimester of pregnancy, and this need continues until well after birth. It can only be met via the mother's diet during gestation and, afterward, through breastfeeding or DHA-supplemented infant formula. A study by Birch et al has shown that children born to mothers who receive fish oil supplementation during pregnancy score better on intelligence tests at four years of age. Other research has documented similar benefits in children who received DHA-enriched formula during infancy. These benefits include higher mental development, better complex problem-solving skills, and improved visual function.

Evidence is also starting to suggest that the significant impact DHA has on the brain is even wider-reaching. Shortages of it may play a role in a variety of conditions such as ADHD, epilepsy, depression, and neurological illnesses such as Alzheimer's and Parkinson's disease. Diets rich in this fatty acid also appear to lead to better eye and brain function in the elderly. Other research is beginning to show possible preventative and beneficial impact on an even more diverse group of conditions and diseases including breast and prostate cancer, Type 2 diabetes and asthma. It's no wonder that a rapidly growing number of consumers are looking for natural ways to include more omega-3 fatty acids in their diets.



GET WHAT YOU NEED

Stepan Lipid Nutrition's Marino[®] products are all very effective thanks to their highly concentrated nature, and the fact that their fatty acid structure is exactly the same as in natural, marine sources of omega-3. You not only have the choice between oil and high-stability powder, but also between different Marino[®] concentrations and ratios of EPA and/or DHA.

Nutritional experts agree that most people do not get enough EPA or DHA in their diets. The best source of both EPA and DHA by far is from marine-based fatty fish oil, but fatty fish do not make up a large part of most people's daily food intake. Medical research has suggested that excessive levels of omega-6 acids, relative to omega-3 fatty acids, may increase the probability of a number of diseases. And the more omega-6 in the diet, the less omega-3 is converted into beneficial EPA and DHA. Modern Western diets typically have ratios of omega-6 to omega-3 in excess of 10 to 1, some as high as 30 to 1. The optimal ratio is thought to be 5 to 1. This makes it all the more important for people to deliberately increase the amount of omega-3 they consume on a daily basis.

High amounts of the beneficial omega-3 fatty acids EPA and DHA occur naturally in oily fish. The body can also synthesize them from vegetable omega-3 fatty acids (alpha-linolenic acid—ALA). However, the conversion rate from ALA to EPA and DHA in healthy adults is inefficient; it's estimated to be only 6% and 4%, respectively. A dosage of around 500mg is necessary for the beneficial effects of omega-3 EPA and DHA to occur. Natural marine sources are obviously much more efficient than ALA in providing the amount of EPA and DHA needed to maintain health.

GIVING YOU ALL THE SUPPORT YOU NEED

Creating and introducing a new health-food product to the market is never a simple process and there are many factors that need to be considered: regulatory requirements, processing parameters, consumer trends, promotion, marketing and more. Our experts provide sound advice on all fronts—from formulas to technical assistance and regulatory matters. We make it easy for you to create the best product possible, helping to ensure its market success.



Expert regulatory advice: When you sell customers a product designed to improve their health and fitness, you're making promises. It's important that they be clearly and appropriately made. Marino[®] has numerous important benefits, but how these may be communicated differs from market to market. Stepan Lipid Nutrition provides expert advice on how to get your message across most effectively.

Scientific and nutritional backup: The many ways that Marino[®] works in the body have been documented by scientific research. We can back up our claims with sound scientific information and research results—which means you will be able to do so, too.

CONTACT US

Would you like to know more about Marino[®]? We'd be happy to provide you with any additional information you need, as well as personal consultation on how our products can improve your products—and your business. You can also visit www.lipidnutrition.com.



STEPAN LIPID NUTRITION USA
100 West Hunter Avenue
Maywood, New Jersey 07607
Phone: +1 201 845 3030

STEPAN LIPID NUTRITION EUROPE
Museumlaan 16
1541 LP, Koog aan de Zaan
The Netherlands
Phone: +31 (0) 75 727 10 00

www.lipidnutrition.com
Email: food.health@stepan.com

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