

# BiOmega<sup>™</sup> Jr.



Item#144

### What Are Omega-3 Fatty Acids?

Omega-3 and omega-6 fatty acids are polyunsaturated fats. Unlike saturated fats, polyunsaturated fats are chemically active fats that are important structural components of every cell membrane in our body. A large body of research has shown that omega-3 fats are very important for cardiovascular health, and among many other benefits. However, our bodies can't make these polyunsaturated fats, and our everyday diets, especially in Western societies, have become increasingly deficient in omega-3.

Vegetable sources of omega-3 can be converted to long-chain omega-3 fatty acids in the body, which are particularly important. However, many people have difficulty making these conversions. For these people the long-chain omega-3 fatty acids can be obtained directly from oily deep sea fish or marine algae!

Recent reports suggest that children aren't getting enough omega-3s out of their diet for adequate nutrition, causing a widespread public health concern. During development of early childhood years, it is essential that children receive enough vitamins, minerals, antioxidants and essential fatty acids. Significant physical and psychological health problems can result from nutrient deficiency, and substantially effect long term development. A fundamental nutrient deficiency that impacts considerably on brain and eye health, as well as cognitive function is omega-3 fatty acids.

An Australian study conducted in NSW, called the Schools Physical Activity and Nutrition Survey (SPANS), showed that children are not getting enough fish in their diet. It has been recommended by the National Health and Medical Research Council of Australia (NHMRC), that kids should have at least 2-3 meals of fish per week for adequate intake of essential omega-3 fatty acids. Sadly, in the SPANS study only 4-8% of children replied that they eat 3 or more meals of fish per week. This scenario is extremely concerning for children's health, and may represent a significant public health problem. 2 This nutrient concern alone represents a significant health problem, especially for early childhood development.

# What are the Benefits of Omega-3 Fatty Acids?

# Omega-3 Fatty Acids for Concentration & Behaviour

Many people either have, or know someone with, a child who has difficulty sitting still, controlling impulses or concentrating at school. These problems start to have an adverse impact on school performance and behaviour.

How can omega-3 fatty acids help with concentration and behaviour? Most of us are aware of the importance of good nutrition for physical health, but do we think about how food might affect our brain? It may make sense if we consider that the brain, just like the heart, liver, kidneys or lungs, is an organ. The brain influences our learning, moods and behaviour. Therefore if our brain doesn't receive the right nutrients, this is likely to impact on the way we think, feel and behave.

The brain has very high requirements for energy and nutrients from food, and one of the very important nutrients is omega-3 fatty acids. Over half of our brain is fat, and although the body normally has a 10:1 ratio of omega-6:omega-3 fatty acids, the longchain omega-3 fatty acid DHA is the most concentrated polyunsaturated fat in our brain. Therefore it is thought that long-chain omega-3 fatty acids have very important structural and functional roles in the brain, including the maintenance of cell membrane fluidity and the transmission of neural chemical signals.

Research has established that omega-3 fatty acids are crucial for healthy infant brain development, and researchers are also finding that omega-3 deficiencies might be related to a range of mental health problems.<sup>1</sup>

#### Omega-3 for Healthy Bodies

Omega-3 fatty acids, are precursors for eicosanoids, which are mediators of many biochemical processes and influence interactions between cells. Thus, they are necessary for the normal function and production of healthy cells throughout the body, making them vital for ongoing healthy growth and development.

Some research suggests that early nutrition can induce lifelong effects on metabolism, growth, neurodevelopment, and cardiovascular health. Several clinical studies have proven omega-3

fatty acids are beneficial for the heart and vascular system throughout our lives.

#### Omega 3 for Healthy Eyes

Numerous clinical studies have shown that omega-3 fatty acids support healthy eye development. High concentrations of DHA are found in the photoreceptors of the retina, where it plays a role in fluidity of retinal membranes and visual function. DHA deficiency has been linked to structural and functional abnormalities in the eye, due to decreased efficiency of visual signalling pathways.

Regardless of age, everyone needs omega-3 fatty acids in their diets. More so for the developing mind and for learning, omega-3 is crucial for kids. So what can be done about the problem of kids not eating enough fish? Are there any alternatives to fish? A good supplement is a great place to start along with a healthy diet.

### Why **BiOmega™ Jr.**?

As we have seen, omega-3 fatty acids are a key component in getting a child off to a smart start, but are often missing from children's diets. A quality supplement like USANA's **BiOmega Jr.** can make it fun and easy for kids to get the DHA and EPA they need for healthy bodies without taking a supplement full of added sugar. Unlike many popular brands that supply only small amounts of omega-3s, BiOmega Jr. provides an efficacious amount of highly absorbable DHA and EPA in a delectable orange flavoured creamy gel with no fishy taste or after-taste. BiOmega Jr. also supports overall good health. Packaged in single-serve packets, children will love having their very own packet of BiOmega Jr. as a treat every other day. Parents will love the convenience of single serves - to hand out easily and to carry around even when away from home.

## Using BiOmega™ Jr.

Recommended Use: Ages 4 - 12yrs —take one (2.5 g) packet every other day, with or without food.

USANA BIOMEGA JR. NUTRITIONAL INFORMATION SERVINGS PER PACKAGE: 14 SERVING SIZE: 1 PACKET (2.5 G)		
Energy	84 kJ (20 Cal)	3360 kJ (800 Cal)
Protein	0 g `	0 g ` ′
Fat, total	2 g	80 g
- saturated	0.5 g	20 g
- trans	0 g ~	0 g
- polyunsaturated	0.8 g	32 g
- monounsaturated	0.4 g	16 g
Carbohydrate	0 g	0 g
- sugarś	0 ğ	0 g
Sodium	3 mg (0.13 mmol)	120 mg (5 mmol)
Fish Oil	2000 mg	0 g
Omega-3 fatty acids	650 mg "	26 g
DHA	230 mg	9.2 g
EPA	350 mg	14 g

Ingredients: Fish Oil, Water, Pasteurized Egg Yolk, Natural Orange Flavour, Antioxidants (Assorbic Acid, Sodium Ascorbate), Natural Sweetener Stevia, Canola Oil, Antioxidants (D-Alpha Tocopherol, Citric Acid), Preservatives (Potassium Sorbate, Sodium Benzoate), Flavour (Vanillin), Colour (Betacarotene), Thickener (Xanthan Gurn), Menthol.

#### References

- Natalie Sinn et al, "Omega-3, Concentration and Hyperactivity", Nutritional Physiology Research Centre, University of South Australia's & CSIRO Human Nutrition, Vol. 28, Iss.
- Schools Physical Activity and Nutrition Survey (SPANS), Study can be found at http://www.health.nsw.gov.au/pubs/2006/spans).
- de Benoist B, McLean E, Andersson M, Rogers L: Iodine deficiency in 2007: global progress since 2003. Food Nutr Bull 2008, 29(3):195-202

Vitamin supplements should not replace a balanced diet.

USE ONLY AS DIRECTED. ALWAYS READ THE LABEL



Optimizers Micronutrition

### BiOmega™ Jr.

- Delivers an optimal range of Omega-3 fatty acids - 230 mg DHA + 350 mg EPA
- Natural sweetening with Stevia
- Delicious Creamy orange flavour
- 14-Pack of convenient single-serve packets

