



## Bio-Omega 3&6

Bio-Omega 3&6 is a dietary supplement in the form of soft gelatin capsules with a combination of Borage oil and fish oil. Each capsule contains 360 mg of gamma linolenic acid (GLA) and 140 mg of fish oil. In addition, a small amount of arachidonic acid. Both GLA and the omega 3 fatty acids in the Bio-Omega 3&6 are in the form of free fatty acids. Bio-Omega 3&6 capsules are soft and easy to swallow and because of the free fatty acids they have a high bioavailability in the body.

### What is gamma linolenic acid?

Seeds from the Borage plant with the Latin name *Borago officinalis* has a natural high content of the poly-unsaturated omega-6 fatty acid gamma linolenic acid (GLA). It is considered non essential, as normal healthy adults can form the substance in the body. This conversion occurs predominantly from linoleic acid, which is a component of many plant oils. GLA is a precursor of prostaglandins of the type E1. Prostaglandins are a specific group of fatty acids which are produced by the cells of the body and released into the intracellular fluid where they affect the surrounding cells in different ways depending on the type of prostaglandin. By increasing the intake of GLA in the diet you are able to increase the production of prostaglandin E1. This does not take place with other omega-6 fatty acids.

It is quite normal for the body's own production of gamma-linolenic acid to be reduced with age. This is due to a decreasing function of the enzyme delta-6 desaturase which are necessary for the conversion of linoleic acid to GLA.

The best sources of GLA comes from food items not normally included in our daily diet. The plant Borage (*Borago officinalis*) contains up to 20% GLA. Blackcurrant seed oil contains from 15-17% and in third place we find the plant Evening Primrose with 8-10% GLA. Hemp oil contains small amounts.

### Where is GLA found?

- Borage
- Blackcurrant
- Breast milk
- Evening Primrose
- Algae



## Bio-Omega 3&6

### Essential fatty acids

#### 2 capsules contain

Borago oil	720 mg
which GLA	160 mg
Fish oil (free fatty acids)	280 mg
Of which EPA	90 mg
DHA	66 mg
AA	11 mg

### Dosage

1 capsule 2 times daily, unless otherwise advised.  
Do not exceed the recommended daily dosage.  
Swallow the capsules preferably during/after dinner with a glass of water.

Dietary supplements should not replace a varied diet.

A healthy lifestyle and a varied balanced diet is important for maintaining good health.

### Ingredients

Borago oil (*Borago officinalis* L. oil), purified fish oil, free fatty acids, gelatin, glycerol.

### Storage

Dark, dry and at room temperature.  
Keep out of reach of young children.

It is recommended to combine this supplement with eg. Bio-Selenium+Zinc or Bio-Multivitamin.

### What is Omega 3?

Omega 3 fatty acids are a group of vital polyunsaturated fatty acids which are predominantly found in fish, especially fatty fish such as herring, salmon and mackerel. Two essential omega-3 fatty acids are eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). EPA and DHA supports the function of the brain\*, vision\* and heart\*\*. Omega 3 fatty acids are precursors of prostaglandins of type E3 and E4.

\*min. 200 mg DHA a day

\*\*min. 250 mg DHA/EPA a day



### High bioavailability with free fatty acids

Bio-Omega 3&6 has an extraordinarily high bioavailability. This is because of the fatty acids in the product, which are in the form of free fatty acids. Fatty acids are usually in the form of triglycerides, which first must be digested and broken down into "free" fatty acids in the intestine before they can be absorbed into the body. This is done with the aid from the digestive enzyme lipase. In Bio-Omega 3&6 the fatty acids are already split up and therefore readily absorbed from the intestine without the help of the body's digestive enzymes. This is especially beneficial for people with reduced fat absorption.

### Difficult to overdose

Bio-Omega 3&6 is difficult to overdose, as normal ingestion of common fatty acids in our diet far exceed the content from the capsules. A normal, healthy adult person is able to form approx. 20 mg/kg/day, DGLA. Infants get a large amount of GLA through breast milk. Omega 3 fatty acids are essential, which means it is important for life because the body can not produce them.

If you take 1 to 2 capsules a day it is equivalent to a supplement of additional 2-4 mg/kg body weight.