BALANCE YOUR LIFE *by* BALANCING YOUR FATS



Many of us are **deficient** in EFAs

Early signs of EFA deficiency:

- Fatigue
- Poor memory
- Reproductive problems
- Heart problems
- Mood swings or depression
- Poor circulation
- Immune weakness
- Dry skin, eczema or hair loss

EFAs FOR

HEALTHY BODY...

HEALTHY MIND...

HEALTHY EMOTIONS...

EFAs

WHAT ARE EFAs?

EFAs (Essential Fatty Acids) are polyunsaturated oils - the "good" fats. They are "essential" because our body does not manufacture them, and they must be obtained through our diet on a daily basis for optimal health and well-being. EFAs produce beneficial hormone-like compounds called eicosanoids that affect the function of virtually every system in the body. The most important EFAs are EPA and DHA (Omega-3s) and GLA (Omega-6). They are our ***"Look Good - Feel Good"*** nutrients responsible for cell flexibility, nerve communications, mood support, and even weight control.

Why are EFAs important?

The body must receive a constant and balanced supply of EFAs to ensure proper eicosanoid production. Eicosanoids regulate pain and swelling, help maintain proper blood pressure and cholesterol levels, and promote fluidity in nerve transmission. EFAs are also recommended for many women's health issues. During pregnancy and lactation, its especially important for a woman to get adequate amounts of DHA because the baby is drawing upon her supply. DHA is critical for the healthy development of the brain, eyes, and nervous system.



Where are EFAs found?

The richest and most beneficial EFAs are from EPA and DHA found in cold water fish such as salmon, sardines, mackerel, and herring. Borage and evening primrose oils are rich sources of GLA.

ESSENTIAL FATTY ACIDS

QUESTIONS



Can EFAs be taken with other supplements?

Yes, EFAs can be taken with a wide variety of other supplements. EFAs are extremely well tolerated, natural, efficacious, and of course safe to use everyday. That is why Omega oils have become such a popular and highly recommended nutritional supplement.

Will EFAs interfere with my medical condition or medications?

EFAs are natural blood thinners and are not recommended if you are taking high doses of aspirin, using blood thinners, or are anticipating surgery. If you are diabetic or have other health concerns, check with your healthcare professional before taking EFAs.

How long before I see results?

It will depend on the concentration of the oils, your current nutritional state, dosage, and particular ailment or condition. Some consumers report results in as little as one week, while the average is eight weeks. For better results, reduce your intake of saturated fats and trans fats (deep-fried foods and hydrogenated oils).

Will I experience any side effects?

Consumers typically report they have more energy and greater mental clarity. If you haven't ingested oils for a long period of time, your body may not be manufacturing the fat digestive enzyme, lipase, used to metabolize the oil. It should take about a week for your body to develop the enzyme.

What should I look for when choosing an EFA supplement?

Taste, freshness, and purity are key. Many people balk at taking fish oils because of a fishy taste or repeat. Choose a high-quality, flavored supplement that is odor free for palatability and freshness. Check the label to ensure the level of purity and the absence of PCBs and heavy metals.

& ANSWERS

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WHAT IS EPA?

EPA Supports Cardiovascular Health and Reduces Inflammation

EPA Basics:

Eicosapentaenoic acid (EPA) is a long-chain Omega-3 polyunsaturated "essential fatty acid" found in fish. Omega-3s are "essential" because humans are unable to synthesize them, and therefore they must be obtained through our diet.

EPA, Eicosanoids, and Inflammation:

Beyond their cardioprotective effects, Omega-3s (especially EPA) are believed to be beneficial for many autoimmune and inflammatory disorders[1,2], including arthritis[3,4], asthma[5], inflammatory bowel disease[6,7], systemic lupus erythematosus[8], and psoriasis[9].

Heart Health:

Fish oil is an excellent source of both EPA and docosahexaenoic acid (DHA), another long-chain Omega-3, and appears to be beneficial for cardiovascular health by reducing the risk of cardiac arrest and ischemic stroke. In fact, the evidence is so strong that the American Heart Association has stated that *"people who have elevated triglycerides may need two to four grams of EPA and DHA per day provided as a supplement"*, and the White House has urged the Department of Health and Human Services to revise the nation's dietary guidelines *"to include new information that Omega-3 fatty acids may reduce the risk of heart disease"*.



Psychotherapeutic Action:

Epidemiological and tissue compositional studies have linked low seafood intake to major depression,[10] postpartum depression,[11] and schizophrenia,[12] as well as to the severity of depressive symptoms[13]. Although the clinical study of Omega-3s for use in psychotherapy has only just begun, a few studies have shown that EPA improved symptoms in both schizophrenia[14] and depression[15], and increased remission time in bipolar disorder[16].

American Heart Association
Fighting Heart Disease and Stroke

WHAT IS DHA?

Healthy Mood - Healthy Mind

Docosahexaenoic acid (DHA) is a long-chain polyunsaturated Omega-3 essential fatty acid from fish. Omega-3 fatty acids are "essential" because humans are unable to synthesize them, meaning that they must be obtained through our diet. The brain in particular is very rich in DHA, where it increases membrane fluidity, promotes neurite (axonal and dendritic) outgrowth, and supports functions such as learning, memory, and cognitive development.



Protection Against Stress:

One of the apparent benefits of DHA is to protect against the harmful effects of stress. Supplementation with DHA has been shown to reduce elevations in aggression[17,18] and hostility[19] in response to psychological stress, and may have contributed to a reduction in antisocial behaviors among prisoners given dietary supplements[20]. In addition, DHA may help to protect against the increased risk of heart attack associated with stress[21] and depression[22].

Learning and Cognition:

In clinical trials, low levels of DHA in the body and low fish consumption have been established as risk factors for age-associated cognitive impairments[23], especially Alzheimer's Disease[24,25]. One study even found that Omega-3 treatment improved Alzheimer's Disease-induced cognitive impairments for six months.[26]

Pregnancy and Lactation:

During pregnancy and lactation, proper nutrition with long chain Omega-3s appears to be especially important for the health of both the mother and child. Inadequate maternal Omega-3 intake during pregnancy is a risk factor for premature birth and low birth weight[27,28], diabetes[29], and postpartum depression[30]. DHA also appears to be very important to infants' visual and cognitive development.[31,32] A recent study showed that children whose mothers had taken cod liver oil during pregnancy and lactation had higher IQs at age four than those whose mothers had taken a placebo.[33] However, it is also important to note that exposure to environmental toxins found in certain kinds of fish, are associated with increased risk for low birth weight.[34] It is therefore crucial for expecting mothers to seek out a molecularly distilled source of Omega-3 polyunsaturated fatty acids.

WHAT IS GLA?

Healthy Skin, Hair & Hormones

In general, Western diets contain too few Omega-3 essential fatty acids and too many Omega-6 essential fatty acids[35,36] (found in sunflower oil, safflower oil, corn oil, and other foods), an imbalance that may predispose many towards hyperinflammation. The one exception may be gamma-linolenic acid (GLA), a different type of Omega-6 fatty acid. GLA is concentrated in borage oil and evening primrose oil, and has anti-inflammatory effects through mechanisms similar to those used by EPA. So it is not surprising that studies using GLA have shown that it may be useful in the treatment of arthritis[37], premenstrual syndrome[38] and breast pain[39], inflammatory bowel disease[40], skin disorders[41] such as eczema[42], and other conditions. However, GLA can also metabolize into the pro-inflammatory Omega-6 fat arachidonic acid. Thankfully, taking EPA in conjunction with GLA appears to inhibit this process[43], potentially making the total effect of the two greater than the sum of its parts.



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continued on the back...

TAKING EPA & DHA - WHEN DIET IS NOT ENOUGH



For most people, taking EPA and DHA may be the most effective way to achieve proper EFA balance. Foods traditionally thought to be good sources of EFAs may not supply adequate amounts of EPA and DHA, and may contain harmful heavy metals. Much of the salmon on the market today is farmed, and fed a grain diet instead of fish meal. As a result, the fish can be abnormally high in linoleic acid and pesticides, and low in Omega-3 fatty acids. In addition to insufficient Omega-3 rich foods in the American diet, many factors can lead to a reduced absorption of EFAs including:

- Low levels of key vitamins and minerals
- Alcohol consumption
- Some prescription drugs
- A diet high in hydrogenated & trans fats
- Age
- Compromised immune status
- Poor diet

OMEGA-3 *from* FISH *or* FLAX?

Omega-3 fatty acids fall into two major categories: plant derived (flaxseed, yielding alpha linolenic acid or ALA) or marine derived (fish oil, yielding both EPA and DHA). The human conversion of ALA to EPA and DHA is somewhat slow and can be inhibited by various conditions. Research shows that only about 5% of ALA converts to EPA, and it may not convert to DHA at all.

Lifestyle and health influences that can inhibit the conversion include a diet high in linoleic acid (Omega-6), saturated and trans fatty acids, as well as alcohol intake. A deficiency of any of the vitamin and mineral cofactors (vitamin B3, B6, C, zinc and magnesium) required by elongase and delta-6-desaturase, may inhibit conversion of ALA to EPA and DHA, as well as certain health conditions, such as diabetes and immune weakness.

The majority of research conducted on Omega-3 fatty acids has been done with fish oil, and has focused on the benefits of EPA or DHA. **On a gram for gram basis, fish oils are the optimal means of enhancing EPA and DHA in the body.**