

MD+ EFA+ Version III

Essential Fatty Acids - Plus



EFA+ is an enhanced essential fatty acid formula containing optimum levels of the essential fatty acids as well as several other additive and synergistic ingredients.

The complex, scientifically based formulation provides much more than other essential fatty acid products.

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Ingredients in EFA+

Dr. Mauro Di Pasquale formulated EFA+ to be a balanced combination of essential fatty acids (EFAs), and other ingredients that work additively and synergistically to maximize the beneficial effects of the essential fatty acids on health, inflammation and body composition.

For example, the co-factors **zinc, magnesium, Vitamins. C, B3 and B6** must be present for the benefits of the essential fatty acids to be realized.

Some of the added vitamins and minerals, besides optimizing the use of the essential fatty acids, also have other beneficial properties related to the effects of the essential fatty acids. For example **vitamins B3 and B6** have significant antioxidant properties and also beneficial effects on serum cholesterol and triglycerides. **Magnesium and zinc** are also heart friendly and have beneficial effects on the immune, cardiovascular and neuromuscular systems.

EFA+ also contains several lipotropic factors and other ingredients, including **conjugated linoleic acid, L-carnitine, methionine, serine, choline** and **inositol** that optimize the utilization, transport and metabolism of fat, working to decrease body fat, normalize serum lipids including cholesterol, enhance energy levels, and fight inflammation in the body.

The **antioxidants** present in EFA+ serve several purposes. First of all they help preserve the natural state of the EFAs by protecting them from oxidative damage and becoming rancid while in the capsule so that what you get are all the good effects that EFA+ has to offer and none of the bad.

That's one of the reasons why EFA+ combines several antioxidants, including **vitamin A, vitamin C, vitamin E, conjugated linoleic acid (CLA), alpha lipoic acid,** and **glutathione**, with fish oil and other sources of essential fatty acids.^{1, 2}

As well, the association of antioxidants with the omega-3 essential fatty acids, such as the fish oil and other ingredients found in EFA+, act in concert to enhance the beneficial effects of the essential fatty acids on inflammation and on the immune and cardiovascular systems.^{3,4}

On top of all this the antioxidants counteract some of the adverse effects that these essential fatty acids might have. For example, although it's been shown that fish oil increases oxidation of LDL cholesterol, the "bad" cholesterol in the body that's been implicated in cardiovascular disease, it has also been shown that the use of antioxidants counteracts this negative effect of fish oil.^{5,6}

Omega-3, 6 and 9 Oils

EFA+ contains omega 3, 6 and 9 fatty acids, including EPA and DHA, the longer chain fatty acids found mostly in fish oil. The plant based oils are mechanically pressed under low heat, light and oxygen-free environment ensuring the extremely high quality of the formula. As well, pharmaceutical grade fish oil is used in the formulation. The formula is mercury free and free of harmful trans fatty acids.

The emphasis in EFA+ is on the omega 3 essential fatty acids and on GLA, an important omega 6 fatty acid, but EFA+ also contains omega 6 linoleic acid as part of flax seed oil and oleic acid, an omega-9 fatty acid, which is also present as a natural constituent of flax seed oil.

Omega 3 and omega 6 fatty acids are precursors for hormones and determine the composition of our cell membranes, influencing the production of pro- and anti-inflammatory substances.⁷

Omega-3 fatty acids, found in fish oils (mainly **EPA** and **DHA**) and flaxseed oil, have been shown to:

- Reduce oxidant stress⁸ (oxidative stress or free radical damage is a factor of importance in the development of inflammatory events).
- Suppress the production of pro-inflammatory compounds in the body and therefore influence inflammatory conditions such as **arthritis, diabetes, inflammatory bowel disease, cancer, autoimmune disorders, and aging.**^{9,10,11,12,13,14,15,16,17,18,19,20,21}

- Improve serum lipids and provide cardiovascular protection,^{22,23,24,25}
- Provide protection against stress,²⁶ cognitive aging^{27,28} and depression.²⁹
- Aid in weight and fat loss, especially when combined with CLA (see below).

Conjugated Linoleic Acid

Conjugated Linoleic Acid (CLA) is a mixture of isomers of linoleic acid, which is found preferentially in dairy products, meat, and in cheese, milks and yogurt that have undergone heat treatment.

CLA has a wide range of biological effects. It has potent antioxidant activity and has shown potential as an anticarcinogen. Studies in animals and humans indicate that CLA supplementation decreases body fat and increases lean muscle mass. The increase in lean muscle mass is most pronounced in individuals who are exercising regularly.

CLA appears to reduce the ability of fat cells to take up fats from the bloodstream; it also inhibits the formation of new fat cells. CLA also helps cells burn fat at a higher rate, while fueling and preserving muscle, leading to a reduction in fat and an increase in lean muscle mass.

Gamma linolenic acid (GLA) is important for health and has suppressive effects on both acute and chronic inflammation, and effects on decreasing the response to anxiety and stress.^{30,31,32,33,34,35} It also works synergistically with some of the essential fatty acids to decrease inflammation and stress responses.^{36,37,38}

GLA is needed by the body for the manufacture of certain hormone-like substances called Prostaglandins. These substances have beneficial regulatory effects on the immune system, circulation and the menstrual cycle. Their purpose is to help control and regulate cell growth and to maintain hormonal balance. Also helps to maintain healthy skin.

The use of EPA with GLA (as in EFA+) decreases some of the possible inflammatory effects of using GLA supplements. That's because GLA can be a precursor for arachidonic acid (AA, a "bad" type of prostaglandin that increases platelet aggregation and inflammation) and the addition of EPA reduces AA accumulation in some cells and tissues secondary to GLA supplementation.³⁹

Choline, Phosphatidylcholine, Phosphatidylserine, Serine and Policosanol

Choline, phosphatidylcholine, phosphatidylserine, and **serine** are involved in phospholipid metabolism and augment the effects of the EFAs on cell wall structure and integrity, as well as molecular signaling properties.⁴⁰ These ingredients are needed for cell membrane integrity and to facilitate the movement of signaling compounds between cells and the movement of fats in and out of cells.⁴¹ They have significant effects on nerve cell membranes, and are required for nerve growth and function.⁴²

Policosanols are a blend of compounds isolated from natural plant waxes. **Policosanol** contains several long chain fatty alcohols, including octocossoanol, hexacosanol and triacontanol. Animal and in-vitro research has shown that these compounds may support the cardiovascular system and inhibit lipid peroxidation as well as support macrophage activity.

Policosanol helps lower cholesterol levels by slowing the body's own production of cholesterol in the liver, as well as reducing the risk of blood clots and enhancing circulation. Some studies have shown that policosanol, like some EFAs can significantly reduce both total cholesterol and LDL (bad) cholesterol.^{43,44,45,46}

EFA+: A great way to get EFAs and then some

The bottom line is that EFA+ is a multi-purpose formulation designed to provide the full gamut of all the essential fatty acids and supporting ingredients that are so important in optimizing your metabolism, enhancing weight loss, body composition, and the anabolic and fat burning effects of exercise, boosting your immune system and decreasing counter productive inflammation in the body secondary to exercise, aging and various diseases.

EFA+ Nutritional Panel

Supplement Facts:		Serving Size: 4 Softgels Servings Per Container: 30		
	Amount Per Serving	% Daily Value	Amount Per Serving	% Daily Value
Calories	18		Glutathione (Reduced)	100 mg *
Calories From Fat	18		Alpha Lipoic Acid	150 mg *
Total Fat	2 g	1.5%	GLA (Gamma Linoleic Acid)	300 mg *
Saturated Fat	0 g	0%	• (Borage Oil Extract)	
Cholesterol	0 mg	0%	Flaxseed Oil	1000 mg *
			Conjugated Linoleic CLA	150 mg *
Vitamin A (as Retynl Palmitate)	2,000 IU	40%	• (CLA Isomers)	
Vitamin C (as Ascorbic Acid)	100 mg	167%	Omega-3 Fish Oil	1000 mg *
Vitamin D (as Cholecalciferol)	100 IU	25%	• EPA (Eicosapentaenoic acid)	330 mg
Vitamin E (as dl-Alpha Tocopheryl Acetate)	100 IU	333%	• DHA (Docosahexaenoic acid)	220 mg
Vitamin B3 (as Niacinamide)	10 mg	50%	EFA+ Proprietary Blend 470 mg	
Vitamin B6 (as Pyridoxine HCL)	10 mg	500%	Choline, Inositol, Methionine, Phosphatidylcholine, Phosphatidylserine,	
Magnesium (as Magnesium Chelate)	100 mg	25%	Policosanol, Serine	
Zinc (as Zinc Monomethionine)	10 mg	67%		
Other Ingredients: Gelatin, Water, Glycerin, Sorbitol, Natural Caramel Color, Titanium Oxide.				
*Daily Value Not Established				

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