

LIQUIMEGA Liquicaps: An Effective Supplement for Everybody, for Everyday, for Life

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ABSTRACT

Omega-3, 6, 9 fatty acids are considered as essential fatty acids. They are necessary for human health but the body can't make them. Research shows that omega-3, 6, 9 fatty acids reduce inflammation and may help lower risk of chronic diseases such as heart disease, cancer, arthritis etc. Omega-3, 6, 9 fatty acids are highly concentrated in the brain and appear to be important for cognitive (brain memory and performance) and behavioral function. In fact, infants who do not get enough omega-3, 6, 9 fatty acids from their mothers during pregnancy are at risk for developing vision and nerve problems. Symptoms of omega-3, 6, 9 fatty acid deficiencies include fatigue, poor memory, dry skin, heart problems, mood swings or depression, and poor circulation. This study emphasizes the role of Liquimega liquicaps for overall human health.

Keywords: Omega-3, 6, 9 fatty acids; Inflammation; Deficiencies; Heart problems; Liquimega liquicaps.

Introduction

Table 1: Nutritional Information about Flaxseed

Principle	Nutrient Value	% of RDA
Energy	534 Kcal	27%
Carbohydrates	28.8 g	22%
Protein	18.3 g	32.5%
Total Fat	42.16 g	170%
Cholesterol	0 mg	0%
Dietary Fibre	27.3 g	68%
Vitamins		
Folates	87 mcg	22%
Niacin	3.08 mg	19%
Pyridoxine	0.473 mg	36%
Riboflavin	0.161 mg	12%
Thiamin	1.64 mg	137%
Vitamin A	0 IU	0%
Vitamin C	0.6 mg	1%
Vitamin E	19.95 mg	133%
Vitamin K	4.3 mcg	3.5%
Electrolytes		
Sodium	30 mg	2%
Potassium	813 mg	17%
Minerals		
Calcium	255 mg	22.5%
Copper	1.12 mg	124%
Iron	5.73 mg	72%
Magnesium	392 mg	98%
Manganese	2.48 mg	108%
Zinc	4.34 mg	39%
Phyto-nutrients		
Carotene-β	0 mcg	--
Lutein zeaxanthin	651 mcg	--

Source: USDA National Nutrient data base

Table 1 shows the nutritional information of flaxseed is sufficient to meet the daily intake. Flaxseed contains protein (23.4%), lipids (45.2%) and mineral (3.5%) which are nutritionally very important. Lipid flaxseed composition makes it an important source of ω3 fatty acids, especially ALA which constitute up to 52 percent of the total fatty acid.

Hence, it considered as a functional food or source of functional ingredients. Flax protein is relatively rich in arginine, aspartic acid and glutamic acid, and the limiting amino acids are lysine, methionine and cysteine. Flaxseed contains highest amounts of lignans and secoisolariciresinol diglucoside (SDG) which also provides additional health benefits.

Flaxseed contains total fibre around 25 to 28 percent – and major fibre fractions are cellulose, mucilage gums, and lignin. These may prevent or reduce the risk of various diseases, such as diabetes, lupus nephritis, arteriosclerosis and hormone-dependent types of cancer.

Composition of Liquimega liquicaps

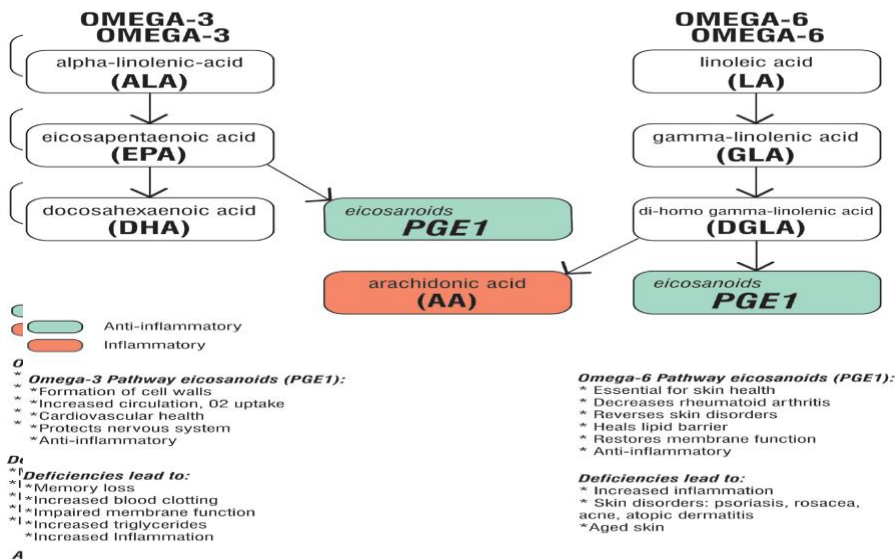
Supplement Facts

Serving Size : 1 Veg Liqui Capsule Servings per container : 90

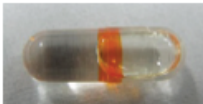
Each veg liqui capsule contains :

Omega-3, Omega-6, Omega-9, Essential Fatty Acids
Derived from FLAX SEED OIL 500mg
(Alpha Linolenic Acid, Linoleic Acid, Oleic Acid).

METABOLISM



Mechanism of Action of Liquimega Lquicaps



Liquimega in Veg Lquicaps Form Offers Higher :-

Absorption Rate

Dosage Accuracy

Bioavailability

Omega-3, 6, 9 fatty acids are considered as essential fatty acids: They are necessary for human health but the body can't make them. Research shows that omega-3 fatty acids reduce inflammation and may help lower risk of chronic diseases such as heart disease, cancer, and arthritis. Omega-3, 6, 9 fatty acids are highly concentrated in the brain and appear to be important for cognitive (brain memory and performance) and behavioral function. In fact, infants who do not get enough omega-3, 6, 9 fatty acids from their mothers during pregnancy are at risk for developing vision and nerve problems. Symptoms of omega-3, 6, 9 fatty acid deficiencies include fatigue, poor memory, dry skin, heart problems, mood swings or depression, and poor circulation.

Nutrients Composition of LIQUIMEGA LIQUICAPS and Health Benefits

Flaxseed is well-known for the content of chemical compounds with specific biological activity and functional properties: polyunsaturated fatty acids (PUFA) omega-3 family, soluble dietary fibers, lignans, proteins and carbohydrates.

Omega-3 fatty acids in LIQUIMEGA LIQUICAPS and health benefits

Of all lipids in flaxseed (approximately 30%), 53% are α -linolenic acid (ALA), 17% linoleic acid (LA), 19% oleic acid (Figure), 3% stearic acid, and 5% palmitic acid, which provides an excellent n-6: n-3 fatty acid ratio of approximately 0.3:1 [1]. Therefore, the seed may be an alternative for supplying this fatty acid to populations

concentrated in regions of the world where there is not large access to marine foods, which are the best sources of n-3 fatty acids [2].

The tissue's fatty acid composition is not homogeneous. The linolenic acid contents in embryos, testa, and endosperm are all higher than that in the embryo axis. ALA is classified as an omega-3 fatty acid, a group that also includes long-chain metabolites of ALA [3].

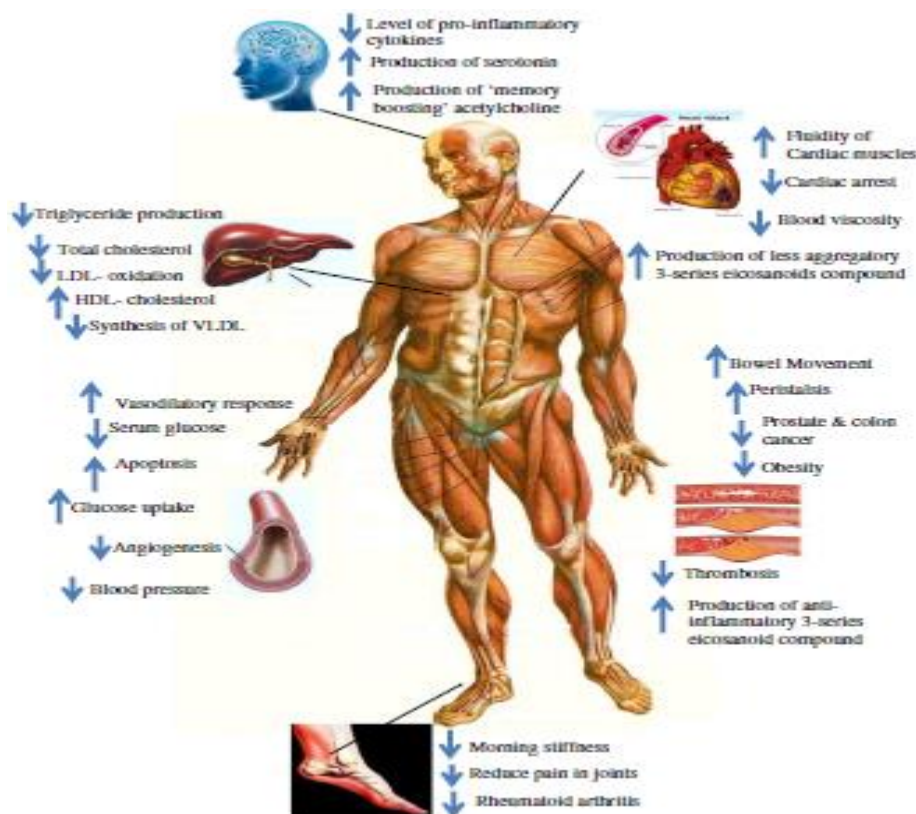
Researchers are investigating whether omega-3 fatty acids contained in flaxseed may help protect against certain infections and in treating conditions including ulcers, migraine headaches, attention deficit/hyperactivity disorder, eating disorders, preterm labor, emphysema, psoriasis, glaucoma, Lyme disease, lupus, and panic attacks [4]. Dugani et al., 2008 evaluated the anti-ulcer activity of the oil and mucilage obtained from flaxseed in a rat model of ethanol-induced gastric ulcer. Results indicated how the pre-treatment of rats with flaxseed oil and mucilage significantly reduced the number and length of gastric ulcers induced by ethanol. Even if flaxseed oil was found to have a higher capacity in reducing the number of ulcers, both flaxseed oil and mucilage were pointed to provide a cytoprotective effect against ethanol-induced gastric ulcers in rats [5]. Same results about antiulcer and anti-secretory properties of flaxseed oil were obtained by Kaitwash et al., 2010. The oil also exhibited significant inhibitory effect on gastric secretion/total acidity and on aspirin-induced gastric ulceration in rats [6]. Clark WF et al., 2001 studied the influence of flaxseed fatty acids on lupus nephritis disease. Plasma lipids and serum viscosity were unaltered by the flaxseed supplementation whereas serum creatinine in the compliant patients declined. Flaxseed appeared to be reno-protective in lupus nephritis, but authors suggested that their interpretation was affected by under powering due to poor adherence of patients [7].

Dupasquier et al., 2007 investigated the anti-atherogenic capacity of flaxseed in an animal model that represents the human atherosclerotic condition. Supplementation of the cholesterol-enriched diet with ground flaxseed lowered plasma cholesterol and saturated fatty acids, increased plasma content of ALA and inhibited plaque formation in the aorta and aortic sinus compared with mice fed a diet supplemented with only dietary cholesterol. Authors demonstrated that dietary flaxseed can inhibit atherosclerosis through a reduction of circulating cholesterol levels and, at a cellular level, via anti-proliferative and anti-inflammatory actions [8].

Although direct studies on flaxseed and blood pressure are limited (and mostly confined to flaxseed oil versus ground flaxseed), numerous studies have shown the ability of increased omega-3 fatty acid intake to help regulate and reduce blood pressure in persons who have been diagnosed with hypertension. Furthermore, a diet low in saturated fats and rich in monounsaturated and polyunsaturated fats, including omega-3 fatty acids from flaxseed, can reduce heart disease. Preventing the occurrence of cardiovascular disease with nutritional interventions is a strategy that is widely focusing attention of researchers. Rodriguez-Leyva et al., 2010 analyzing epidemiological investigations and experimental studies suggested that ALA intake from flaxseed has been demonstrated to combat cardiovascular disease [9]. Caligiuri et al., 2014 focused on flaxseed consumption and blood pressure in patients with hypertension. The objective was to examine whether flaxseed consumption altered plasma oxylipins in a manner that influenced blood pressure. After the clinical trial, authors concluded that α -linolenic acid in flaxseed may have inhibited soluble epoxide hydrolase, which altered oxylipin concentrations that contributed to the

antihypertensive effects in patients with peripheral arterial disease [10]. Eicosapentaenoic Acid (EPA) and Docosahexaenoic Acid (DHA), derivatives of ALA, have cardioprotective properties.

Pharmacology



Omega-3 fatty acids are considered as essential fatty acids: They are necessary for human health but the body can't make them. **LIQUIMEGA LIQUICAPS** contains *organic Flaxseed oil provides Omega-3, 6 & 9 fatty Acids.*

- Promotes cardiovascular health
- Promotes a healthy immune response
- Supports joint function and mobility
- Provides natural vitamin E & C, potent antioxidants
- Promotes healthy cognitive function
- Studies shows that During Pregnancy that Omega-3- fatty acids in LIQUIMEGA LIQUICAPS are required to prevent premature rupture of cervical membrane & thus prevents pre-term delivery. Improves brain development in fetus.
- **LIQUIMEGA LIQUICAPS plays an important role in Heart Health Coronary heart disease, Arrhythmias**
- Have a beneficial effect on heart rate, a major risk factor for sudden cardiac death
- Reduce risk of arrhythmia, a risk factor for sudden cardiac death

- Reduce triglyceride levels, which is an independent risk factor for coronary artery disease
- Minimize the risk of angina, heart attack, and stroke
- **LIQUIMEGA LIQUICAPS helps minimize the symptoms of:**
- Depression
- Schizophrenia
- Developmental coordination disorder / dyspraxia
- Dementia
- Huntington disease
- **LIQUIMEGA LIQUICAPS has a positive effect on Brain Cognitive Health & Development**
- Normal development of the brain, retina (eyes), and nervous system of the fetus
- Cognitive development of infants
- Duration of gestation and infant size at birth
- Postpartum depression
- Alzheimer's disease
- **LIQUIMEGA LIQUICAPS provides benefit as Anti-Inflammatory Joint Pain & in Digestion**
- Reducing tender joints
- Reducing the duration of morning stiffness
- Alleviating symptoms for ulcerative colitis, an inflammatory bowel disease (IBD)
- DHA & EPA influence inflammatory balance.
- In Asthma
- Omega 3, 6, 9 fatty acids helps to promote respiratory health & lesser the effects of oxidative stress for patients who have Asthma.
- Low intake of omega 3, 6, 9 fatty acids had an increased risk of chronic bronchitis, wheezing & Asthma.

Indications

- Promotes cardiovascular health
- Promotes a healthy immune response
- Supports joint function and mobility
- Potent antioxidants

- Promotes healthy cognitive function
- Prevent premature rupture of cervical membrane & thus prevents pre-term delivery. Improves brain development in fetus.
- **LIQUIMEGA LIQUICAPS plays an important role in Heart Health, Coronary heart disease, Arrhythmias**
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- **In Asthma**
- Promote respiratory health & lesser the effects of oxidative stress for patients who have Asthma.
- Low intake of omega 3, 6, 9 fatty acids had an increased risk of chronic bronchitis, wheezing & Asthma.

Supplement Facts

Presentation: LIQUICAPS

Usage

- Promotes cardiovascular health
- Promotes a healthy immune response
- Supports joint function and mobility
- Potent antioxidants
- Promotes healthy cognitive function
- Prevent premature rupture of cervical membrane & thus prevents pre-term delivery. Improves brain development in fetus.

Contra-indications: This product is contra-indicated in persons with Known hypersensitivity to any component of the product hypersensitivity to any component of the product.

Recommended usage: *Adults:* 1-2 liqui caps twice a day with water or liquid of choice twice daily.

“Do not exceed the recommended daily dose”.

Administration: Taken by oral route at any time with food.

Precautions: Food Supplements must not be used as a substitute for a varied and balanced diet and a healthy lifestyle. Do not exceed the recommended daily dose.

Warnings: If you are taking any prescribed medication or has any medical conditions always consults doctor or healthcare practitioner before taking this supplement.

Side Effects: Very Mild side effects like nausea, headache and vomiting in some individuals may be observed.

Storage: Store in a cool, dry and dark place.

Declarations

Source of Funding

This study was supported by Lactonova Ayurvedic Nutrition Research Centre, Hyderabad.

Conflict of Interest

The authors declare that they have no conflict of interest.

Consent for Publication

The authors declare that they consented to the publication of this study.

Authors' Contribution

All the authors took part in literature review, research, and manuscript writing equally.

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