LipoEsar® Nutraceutical



What is LipoEsar?

LipoEsar® is a nutritional with 100% natural ingredients supplement obtained from the muscle of the marine species *Sardina pilchardus* (European sardine, family *Clupeidae*), by non-denaturing biotechnological processes that enable the preservation of all the healthy properties of the original species.

Composition

E-SAR-94010[®] extract. Marine proteins of high biological value. Essential fatty acids, omega 3, 6 and omega 9. Vitamins, essentially D, $B_{_{12}}$ and $B_{_6}$. Minerals, essentially potassium and phosphorus.

Reference Analysis per 100 g

PROTEINS: 60 - 7	75%	LIPIDS: 15 - 309	6			
Amino acids % - Esse	Amino acids % - Essential		Saturated (% in Lipids)		MINERALS	
LEUCINE	5.8	PALMITIC	24.1	POTASSIUM	1049.3 mg	
LYSINE	4.7	MYRISTIC	8.7	PHOSPHORUS	1036.5 mg	
VALINE	4.1	STEARIC	4.4	CALCIUM	661.0 mg	
ARGININE	4.1			SODIUM	389.5 mg	
PHENYLALANINE	3.7	Monounsaturated (% in	Lipids)	MAGNESIUM	112.8 mg	
THREONINE	3.5			ZINC	5.9 mg	
ISOLEUCINE	3.2	OLEIC	12.1	IRON	4.3 mg	
HISTIDINE	1.8	GADOLEIC	10.0	MANGANESE	0.3 mg	
METHIONINE	1.8	GI ID OLLIO		COPPER	650 mcg	
Amino acids % - Non-essential		Polyunsaturated (% in Lipids)				
GLUTAMIC ACID	9.8	EPA	9.1	VITAMINS		
ASPARTIC ACID	7.3	EICOSATETRAENOIC	5.3	VITAMIN C	7.3 mg	
PROLINE	4.2	DHA	3.2	PANTOTHENIC ACID	3.2 mg	
ALANINE	4.0			INOSITOL	29.6 mcg	
OLVOINE	30	CARBOHYDRATES: 0 - 3 %		VITAMIN D	7.1 mcg	
GLYCINE	5.5	CARDUNT DRATES:	0 0 /0			
SERINE	3.2	CARBOHTDRATES:	0-0 %			
SERINE TYROSINE	3.2 2.5	CARBONTDRATES:	0 0 78			
SERINE TYROSINE CYSTEINE	3.2 2.5 0.9	CARBONTDRATES:	0-070			

Ebiotec

Data Sheet

BRAND NAME LipoEsar®

MANUFACTURER EuroEspes Biotechnology S.A. (EBIOTEC).

NATIONAL CODE (SPAIN) 182745.6

ORIGIN

Sardina pilchardus (European sardine, Clupeidae family).

PRODUCT E-SAR-94010®

STUDIES

Supported by basic and clinical scientific studies (see bibliography).

COMMERCIAL PRESENTATION

Box of 30 capsules, containing 3 blisters and one leaflet.

RECOMMENDED DOSE

3 capsules/day during meals. Recommended treatment for a minimum of 3 months.

COMPOSITION

250 mg of E-SAR-94010[®], 100% extract of *Sardina pilchardus* in hard gelatin capsules.

NUTRITIONAL ANALYSIS	(per 3 capsules)
ENERGY VALUE	14.37 kJ 3.42 kcal
TOTAL FATS OF WHICH SATURATES	150 mg 72 mg
TOTAL CARBOHYDRATES OF WHICH SUGARS	12 mg 0.75 mg
PROTEIN	507 mg
SALT	26.4 mg
E-SAR-94010®	750 mg

Note: For health professionals only

The information contained in this data sheet is directed to health professionals.

Bibliography

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WHAT IS A NUTRACEUTICAL?

Nutraceuticals are products derived from natural sources whose nutritional and functional characteristics provide benefits to help improve health and therefore reduce the risk of suffering diseases; they may be combined with other active ingredients or exogenous nutrients such as vitamins, minerals, antioxidants, fatty acids, etc.; however, this type of products, which cover a wide range of possibilities, should be taken as part of a healthy, balanced diet and never as a replacement for it.

Indications

Main benefits: LipoEsar[®] balances the levels of cholesterol, triglycerides, glucose, uric acid and liver enzymes in the blood. LipoEsar[®] is recommended for contributing to the maintenance of cardiovascular health and the prevention of cerebrovascular accidents and atherosclerosis.

Nutritional properties

- 1. E-SAR-94010[®], extract is the structural base of LipoEsar[®]. It contains all the biological properties of the original species.
- Lyophilization is the core technology used in the manufacture of LipoEsar[®]. This technology allows the extraction and concentration of nutrients and active molecules in a pharmaceutical form. The application of this technique enables all the healthy properties of the original raw material to remain unchanged.
- **3.** LipoEsar[®] contains essential fatty acids omega 3 (EPA and DHA), omega 6 (linoleic acid), and omega 9 (oleic acid). The omega 3 and 6 fatty acids accomplish fundamental physiological functions in the organism, and have important health properties, the most notable being cardioprotection.
- 4. LipoEsar[®] contains proteins with a high nutritional value due to its content in essential amino acids. Proteins are fundamental structural and functional elements within each cell of the body and are involved in a wide range of physiological functions. All cells, tissues and organs contain proteins that are essential for their growth and repair, and therefore for the maintenance of good health.
- 5. LipoEsar® contains vitamins, mainly D, B₁₂ and B₆. Minerals, such as potassium and phosphorus.

Precautions

LipoEsar[®] contains a purified extract of blue fish. Not suitable for persons allergic to any of its ingredients. Not suitable for people with phenylketonuria. Do not exceed the recommended daily dose. Keep out of the reach of children. Should not be used as a substitute for a balanced diet.

Does not contain gluten or additives.



LipoEsar® is a nutritional supplement belonging to the marine line of nutraceuticals developed and manufactured by EuroEspes Biotechnology S.A. (Ebiotec).

The nutraceutical bioproducts manufactured by EuroEspes Biotechnology are not limited to a particular nutrient (e.g. omega 3) or to a set of minerals and vitamins, or a specific protein complex, but because of their structure they contain a set of healthy substances that will help in many aspects of life for the maintenance of good health. Origin: A single species. The raw material comes from sustainable fishing, which is not the case of some omega 3 that comes from endangered species or species that maintain the balance of the trophic chain of oceans and seas. Our products are 100% natural and in the manufacturing process no synthetic chemical industrial processes are used (free of additives, etc).

Scientific Studies

01. Effects of LipoEsar[®] on the atheroma plaque of the abdominal aorta of patients suffering from chronic dyslipidemia.

Thirty patients diagnosed with chronic dyslipidemia had developed atheroma plaques in their abdominal aorta, as shown by the CT-SCAN. The group of 30 patients were supplemented with LipoEsar[®] (1500 mg per day) for 3 months. Daily oral supplementation of LipoEsar[®] for 3 months reduces the average size of atherosclerotic plaques on the aortic wall by 10%, in patients with chronic dyslipidemia.



Atheroma plaque after LipoEsar® 90 days

ipoEsar°



02. The physiological effects of LipoEsar[®] supplementation on healthy human volunteers.

During two weeks, a group formed by 10 volunteers supplemented their normal diet with 500 mg/day of LipoEsar[®] (2 capsules daily). Their biochemical plasma levels were recorded prior to the study and after 2 weeks.



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03. The physiological effects of LipoEsar[®] supplementation on patients suffering from chronic dyslipidemia.

Three hundred patients diagnosed with chronic dyslipidemia were supplemented with 750mg (3 capsules a day) of LipoEsar® and advised to follow a low-fat diet for a period of 3 months. Their total plasma biochemical levels were recorded prior to and after study.



04. Main Effects of LipoEsar® supplementation on laboratory rats.

Sixty male rats were divided into 3 groups: Control group, was fed ad libitum for 12 weeks. The other 2 groups were administered a food supplement of either 1 mg per day or 5 mg per day of LipoEsar[®]. The plasmatic levels of cholesterol and triglycerides were recorded prior (basal), every 2 weeks and at the end of the study. After 12 weeks of supplementation, cholesterol levels decreased by 47 % and 38% in supplemented rats when compared to the control group. Triglyceride levels decreased by 12-14% in supplemented rats when compared to the control group.

