

WHAT IS SHARK LIVER OIL?

Shark liver oil is a natural remedy with amazing properties and for this reason it is also called the "sea gold". The use of shark liver oil has a long tradition in folk medicine in Scandinavia and the Far East. Its use is mentioned in an Icelandic medical textbook dating back to 1830. Over the centuries it has been used by coastal communities as a medicine for immune deficiencies, infections, allergies, and to improve the healing of wounds. Shark liver oil was also ingested for rapid physical rehabilitation and to regain strength. Modern research has confirmed the outstanding quality of this food and has attributed this ability to a group of active ingredients known ALKYLGLYCEROLS.

WHY SHARKS?

The shark is considered the healthiest animal as it is extremely resistant to cancer and other diseases. It is unsurpassed in terms of force and physical strength its immune system is very similar to humans.

Scientists have studied sharks and their amazing immune system for over 70 years. The Smithsonian Institute found only one case of malignant tumor in over 25,000 sharks studied, whereas one in four humans contracts a cancer (shark 1/25,000 - man 1/4). Biologists inform us that when a shark dies, it is only due to "old age". At first, it was believed that the shark's immunity was associated with its cartilage. In 1922 scientists isolated a therapeutically active component produced by the shark's liver: Alkylglycerols. These are the elements that are primarily responsible for their incredible resistance to disease. It was also shown that the liver of certain species of sharks living in cold, deep water, especially the Greenland shark, is exceptionally rich in Alkylglycerols.

Alkylglycerols are also found in humans, mainly in breast milk; these give children natural protection against infection and help in the development of the immune system. They are also present in bone marrow and the thymus but there are 1,000 times more Alkylglycerols in shark liver oil than in humans, and adults proportionally need higher doses of Alkylglycerols than children.

THE GREENLAND SHARK

The Greenland Shark, also known as the Sleeper Shark, or Somniosus microcephalus, swims in the Arctic waters of the North Atlantic at a depth of approximately 1000-1200 meters. The Greenland shark's liver is about a third of the size and weight of the animal and can provide up to 220 kilograms of oil, containing more than 30% Alkylglycerols.

The liver of sharks used is usually a waste product from deep-sea fishing. The Greenland shark has an abundant and vigorous population and is in no danger of extinction.

WHAT ARE ALKYLGLYCEROLS?

Alkylglycerols are chemically constituted by a glycerol molecule with an alkyl group attached with an ether bond.

Alkylglycerols are active substances that give breast-fed infants crucial protection against infection and stimulate the formation of the infant's immune system. For many years the main producers of alternatives to breast milk have spent considerable sums of money, in vain, trying to incorporate Alkylglycerols into their products to create a product as similar as possible to natural breast milk. However, since Alkylglycerols are oily substances, the result of the processes of desiccation or freeze-drying was not at all effective.

Alkylglycerols are also present in the organs responsible for the production of blood cells of all mammals and are an essential group of compounds for immune system function.

Pharmacologists affirm that Alkylglycerols seem to be as important for white blood cells as iron is for red blood cells.

In-depth scientific research has also found that Alkylglycerols are not simple immunostimulants but are powerful activators of the immune system; it has been observed that they activate macrophages and killer T lymphocytes. Furthermore they are involved in the process of normalization of the levels of hematic blood cells as they are essentially **IMMUNOMODULATORS.**

The therapeutic effects of Alkylglycerols are confirmed by over fifty years of extensive clinical and laboratory trials and by over 200 published scientific studies.

In 1952 a young Swedish doctor, Astrid Brohult, noticed that many drugs used in the treatment of leukemia caused severe bone marrow depression and so she tried feeding bovine bone marrow to her young patients. She discovered that the bone marrow stimulated the production of white blood cells. It was later shown that the stimulating factor was a group of substances known as Alkylglycerol.

All studies have demonstrated and affirmed the effectiveness of Alkylglycerols for:

The activation and the modulation of the production of white blood cells, red blood cells and platelets in the treatment of blood diseases and damage caused by radiation. (Prof. Reznikov J, M Krotkiewski).

The increase in the absolute count of B lymphocytes, phagocytic activity, the counts of CD4 and CD8 cells (lymphocyte cells).





Duemme Trade Srl - Strada degli Angariari, 25 47891 Falciano (RSM) Tel 0549 970499 Fax 0549 877012 www.duemmetrade.com info@duemmetrade.com



Alkylglycerols, as already mentioned, are **IMMUNOMODULATORS** and this capacity seems to derive from a variation in the synthesis of PAF (platelet activating factor) and diacylglycerol (DAG) (Lewkowicz et al., 2006).

Other studies have confirmed the activating action on the macrophage (Yamamoto et al., 1998) and others have studied the clinical, immunological and biochemical effects of shark liver oil supplements in healthy volunteers (Lewkowicz et al., 2005) which highlighted the stimulation of neutrophil response and the ability to counteract bacterial, viral and fungal infections.

Alkylglycerols are also considered the most powerful antioxidants present in nature with the characteristic of inactivating free radicals inside and outside the cells. They are also unique in crossing the blood-brain barrier thus carrying out an important antioxidant action (neuro protective action).

WHAT ORDEMAR IS NOT

ORDEMAR (shark liver oil) is NOT cod liver oil rich in vitamins A and D.

ORDEMAR (shark liver oil) is NOT fish oil rich in EPA and DHA fatty polyunsaturated acids.

ORDEMAR (shark liver oil) is NOT squalene or shark cartilage constituent isolated from shark liver.

WHAT ORDEMAR IS

ORDEMAR (Alkylglycerols) is a completely natural nutraceutical supplement derived from the liver of deep-water sharks and then purified.

ORDEMAR (Alkylglycerols) contains a mixture of effective and extremely similar Alkylglycerols to those found in breast milk.

ORDEMAR (Alkylglycerols) acts on all elements of the immune system by stimulating humoral immunity (IgA, IgG, IgM antibodies) and cell-mediated (increased lymphocyte count and activation of macrophages and killer T cells).

ORDEMAR (Alkylglycerols) is unique in its ability to **balance the immune system** by normalizing the function of the bone marrow and modulating the activation of kinase C protein and secondary mediators (PAF).

Essential Bibliography

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ORDEMAR (Alkylglycerols) is considered one of the most powerful antioxidants.

It has the ability to neutralize free radicals both inside and outside the cells and to cross the blood-brain barrier acting as a radical scavenger in the central nervous system.

ORDEMAR (Alkylglycerols) has a strong restorative action.

INDICATIONS

ORDEMAR (Alkylglycerols) can be useful to:

strengthen the immune system, prevent and treatment allergies, aid the recovery phase after a convalescence or a period of high stress, prevent disorders linked to pollutants, counter skin aging and as a cardio and neuro protector.

INGREDIENTS

Shark liver oil (source of Alkylglycerols), contains on average 20% Alkylglycerols. The Alkylglycerols come from shark liver oil which has been totally and precisely, controlled and purified.

RECOMMENDED DOSE

To maintain good health:

From 1 to 2 softgels daily.

For diseases such as influenza, asthma, infections, allergies, etc:

From 3 to 4 softgels daily

In combination with radiotherapy or chemotherapy: 4 softgels daily

Side effects are almost zero and they can also be administered in conjunction with other therapies.

ΤΟΧΙCΙΤΥ

ORDEMAR (Alkylglycerols) **is safe to use**, no adverse side effects were observed and it has a very low toxicity. At very high doses, shark liver oil has the same undesired effects as excessive ingestion of other oils, for example olive oil.

