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Editorial

Importance of Fish Oil Consumption

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Changes in the consumption habits of people have made nutrition out of physical need in time and made it a tool that individuals use to be healthier and longer lifetime. Have become more vigorous and intelligent, more immune, more fertile, more resistant to physical activities, more beautiful and less depressive. As a result of research on the functional properties of foods, researches on fish oils have increased.

Omega-3 fatty acids derived from fish oil; EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) are marketed worldwide as valuable dietary supplements with numerous benefits for children and adults. Fish meat is a source of iodine, phosphorus and zinc and the nutritional value of dietary fiber is high. Fish meat has 66 - 84% water, 15 - 24% protein, 0.1 - 22% fat, 0.8 -2% mineral substance and 1 - 3% glycogen and fish oil has 20% saturated fatty acid and 80% unsaturated fatty acids [1].

Most of the unsaturated fatty acids are Polyunsaturated fatty acids. Fish oils are the source of EPA (C20:5 benefit 3, eicosapentaenoic acid) and DHA (C22:6 3, docosahexaenoic acid) [2]. Essential oils provide functional benefits to human health and support metabolism. The essential oils found in fish are linoleic and α-linolenic acid.

Long chain fatty acids cannot be readily synthesized by humans and should therefore be taken with dietary supplements. Fatty acids of marine lipids are more complex than land plants and animals. The length of the carbon chain is generally between C14 and C24. The fatty acids of marine lipids are particularly highly unsaturated fatty acids. C14 and C16 fatty acids contain unsaturated bonds while C20 and C22 fatty acids contain 4, 5 and 6 double bonds. It is found in n-3 types of polyunsaturated fatty acids (PUFAs) of fish lipids [3].

PUFA are fatty acids representing omega-6 and omega-3. Fatty acid content of fish lipids depends on various factors such as nutrition, geographic region, environmental temperature, season, body length and lipid content. The ratio of pollenoids to saturated fatty acids is 1:3 in marine fish and 1:0 in freshwater fish. Freshwater fish n-6 polyunsaturated fatty acids contain more than marine fish, while n-3 fatty acids contain less. The n-6 content of the fish obtained by aquaculture is higher than that obtained by natural fishing [3].

The American Heart Association recommended that all adults consume at least 2 times a week of oily fish [4]. The optimal ratio for Omega6/omega3 uptake should be between 1/1 and 4/1 [5]. In Western cultures, this ratio increases in proportion to the impact of fast food nutrition and adversely affects human health. The British Nutrition Foundation (BNF) emphasized that people who are on a balanced and healthy diet should receive 0.2g of EPA + DHA every day [6].

Several studies have shown that omega-3 PUFAs increase the efficacy and tolerability of chemotherapy. In particular, studies on Eskimos have shown that ALA and LA sources have a mitigating effect on sudden cardiac death of fishery products [7]. Fish intake has been reported to be protective against stroke, arteriosclerotic heart disease, depression and some types of cancer [8]. It is known that DHA promotes brain development, development of sensory, sensory, cognitive and motor nervous systems, decreases blood pressure, increases blood fat levels and prevents sudden heart attacks.

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