Збірник тез доповідей III Всеукраїнської науково-практичної конференції «Інноваційні тенденції підготовки фахівців в умовах полікультурного та мультилінгвального глобалізованого світу»

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ALTERNATIVE SOURCES OF GETTING OMEGA 3

BACKGROUND: Fatty acids of omega-3 are considered to be irreplaceable nutrients. Unlike fish and eggs, vegetal sources of omega-3 are characterized by phytonutrients that have a positive effect on your health. They have a unique ability to fight inflammation - by supplementing them with antioxidants and vitamins. In addition, these fatty acids help reduce the risk of heart disease, certain cancers, arthritis and neurodegenerative disorders such as Alzheimer's syndrome and dementia. They are important for the normal development of hair and skin, as well as for adequate visual, nervous and reproductive functions of the body. These fatty acids have proven to be a priority for normal fetal development during pregnancy and childhood [1].

CHIEF CAUSES: Since our body is not able to provide itself with this basic nutrient, it is good to know what foods should be in the diet to meet the needs of the body. A healthy adult body should strive for a figure of 250-2000 mg of omega-3 per day, taking into account the recommendations of the physician.

Most people prefer the use of fish. Salmon, tuna, sardines and mackerel are great sources of these fatty acids. Today, the fishing industry annually grows its largest fish stocks for the supply of shelves for human food supermarkets, as well as forage feeds for industrial fish farms and fish oil supplements, which significantly affects the level of fish and the ability to extinction of the population. In this review, I introduced The benefits of omega-3 for health and provided examples of alternative plant sources for the production of these compounds based on recent research [2].

CONTROL MEASURES: The use of alternative sources of synthesis of fatty acids from unicellular organisms (such as microalgae, bacteria and yeast) has raised interest in replacing fish oil. This is largely due to the growing concern of the world's food security organization and the conservation of fish stocks in the world, as well as significant accumulation of toxic substances in fish [3]. Consider other sources rich in omega 3:

1. Seeds of flaxseed are rich in fiber, proteins, manganese, magnesium, and, of course, omega-3 acids. Seeds and oils are extremely popular means that promote the treatment and prevention of obesity, high cholesterol, high blood pressure and cardiovascular disease, vascular system. And you will not need a large amount of product: 30 grams of seed contains an impressive 6388 mg of omega-3 fatty acids.

2. Walnuts are some of the most useful types of nuts for health. They contain incredibly valuable sources of essential monounsaturated fats for the heart, essential for the heart, omega-3, manganese, vitamin E, copper, and vitamin H. In thirty grams of walnuts, more than 2500 mg of omega-3 is present, as well as more than half the recommended daily intake of copper and manganese - two extremely important trace elements. Clinical studies have shown that walnuts can improve memory, learning ability, and, in general, cognitive function - which is especially relevant for Alzheimer's syndrome.

3. Chia seeds are the most well-known source of omega-3 fatty acids, and not just that: you will need less than 30 grams of this product to consume your recommended daily allowance. These small seeds contain a decent amount of omega-6 fatty acids, which is very important, as your body needs an optimal ratio of omega-3 and omega-6 fatty acids for better nutrition and health benefits.

4. In fact, microalgae oil contains the same fatty acids as salmon and other marine products. Algae oil has an incredibly high content of monounsaturated fats, and since it has a high smoke and mild taste threshold, it is suitable for frying.

Investigation of the omega-3 biosynthesis of algae on oilseeds such as canola and soybeans. But this did not bring much success, and other ways to solve the problem were found. The production of omega-3 fatty acids at the expense of Збірник тез доповідей III Всеукраїнської науково-практичної конференції «Інноваційні тенденції підготовки фахівців в умовах полікультурного та мультилінгвального глобалізованого світу»

genetic modification of plants brings more efficiency. The production of these fatty acids by means of algae requires higher costs and investments [4].

RESULTS: So, we found that Omega-3 polyunsaturated fatty acids are essential fatty acids, since the body is not able to produce them on their own. In this regard, it is vitally important for us to include in our daily diet of omega-3 products to get all these extremely important and useful compounds.

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COLOR AS THE MAIN ELEMENT OF DESIGN

Of all the Elements of Design, color is probably the most challenging to understand. We have to learn a little science to fully understand the nature of color. Color has three main properites: hue, value and intensity. Why should you care about