



THE DOCTOR'S PRESCRIPTION FOR

healthy living

Practical Insights into the World of Natural Healing

Heart Health

Heart disease has risen over the past 50 years to become the leading killer of Americans, taking an estimated 600,000 lives per year. Although cancer remains the most feared of the “degenerative diseases,” the largely preventable malady of heart disease continues to take its toll on lives here and abroad as people of other industrialized countries adopt the eating habits of their American counterparts.

Diets High in Omega-3 Oils May Reduce the Risk of Coronary Heart Disease

By Jade Beutler, R.C.P., R.R.T.

Eighty years ago, Paul Dudley White brought the invention of the electrocardiogram (EKG) from Germany to America and was told by his peers that the device held no value given the extremely low incidence of heart disease in the United States. Yet only 30 years later, the rise in heart disease in the U.S. was so dramatic that the machine was credited as a most useful diagnostic tool.

Omega-3 fatty acids – lipid structures found abundantly in cold water fish and flaxseed oil – have been extensively researched for their potential to reduce the risk of coronary heart disease. The ways in which Omega-3 fatty acids may combat cardiovascular disease are many; but first, let’s take a look at some of the causes of this modern killer.

Heart Disease on the Rise

Saturated and trans fats (hydrogenated oils such as those found in margarine) possess the tendency to conglomerate (clump together), thickening the blood, causing a rise in blood pressure, and increasing the work-load of the heart. This sticking ability exaggerates the buildup of atherosclerotic plaque on arterial walls. In these instances, the availability of life-sustaining oxygen to the heart muscle may be minimized, causing angina pectoris (chest pain related to heart disease) and, possibly, heart attack.

To complicate this problem, refined fats and oils, such as trans fats, have been shown scientifically to increase triglycerides and the harmful cholesterol low density lipoproteins (LDL), while decreasing the high density lipoproteins (HDL).

Furthermore, a lack of dietary essential fatty acids may also negatively affect the arteries and

therefore the heart. Hormone-like substances, called prostaglandins, are produced from essential Omega-3 and Omega-6 fatty acids. One of the many important functions of prostaglandins is to regulate arterial muscle tone. Any disturbance facilitated by an essential fatty acid deficiency may disrupt this system of checks and balances, resulting in arterial muscle spasm. The resultant increased workload on the heart muscle may lead to enlargement of the right ventricle (cor pulmonale). Is it any wonder why heart disease is the number one killer of Americans?

The Role of Essential Fatty Acids

Supportive, but not conclusive research shows that consumption of EPA and DHA Omega-3 fatty acids may reduce the risk of coronary heart disease. In contrast to saturated and altered fat sources, Omega-3 fatty acids promote healthy blood platelets, both of which support the integrity of the arterial muscle walls. At the same time, these actions decrease blood viscosity, reducing the workload on the heart. A favorable dietary intake of Omega-3 and Omega-6 fatty acids in the form of flaxseed oil ensures balanced prostaglandin production, thus helping regulate proper arterial constriction and relaxation.

Scientific studies have also indicated that supplementation with Omega-3 fatty acids helps maintain normalization of cholesterol and triglycerides that are already in the healthy range.

Further, essential Omega-3 fatty acids are paramount in ferrying oxygen from hemoglobin (the oxygen carrier in red blood cells) to each and every one of our 100 trillion cells. This may represent another way Omega-3s exert their beneficial effect, since the heart is utterly reliant upon oxygen to survive.

Finally, the heart is an electrically driven organ. The aforementioned electrocardiogram (EKG)

Special Reprint with permission of

healthy living

is evidence of this fact. Without electrical conduction, the heart will cease to contract. Unrefined Omega-3 fatty acids carry an electrical charge expressed in their electron cloud. Dr. Johanna Budwig of West Germany explains that these bioelectric dynamos enhance all life functions, including the electrical conduction and contractile strength of the heart muscle.

Reduce Your Risk

Population studies have demonstrated that people who consume a diet rich in Omega-3 oils from either fish or vegetable sources have a significantly reduced risk of developing coronary heart disease. Furthermore, results from autopsy studies have shown that the highest degree of coronary artery disease is found in individuals with the lowest concentration of Omega-3 oils in their fat tissues. Conversely, individuals with the lowest degree of coronary artery disease had the highest concentration of Omega-3 oils.

Case in point: the two populations with the lowest rate of heart disease in the world – the Japanese who inhabit Kohama Island and the Cretans who inhabit the island of Crete – have a relatively high intake of vegetable sources of Omega-3s. Typically, Cretans have a three-fold higher concentration of Omega-3 from vegetable sources compared to members of other European countries, due to their frequent consumption of walnuts and purslane. Another important dietary factor in both the Kohamans and Cretans is their use of oleic acid-containing oils – canola oil and olive oil, respectively. LDL cholesterol largely composed of oleic acid is less susceptible to peroxidation (damage by free radicals). Although the oleic content of the diet offers some degree of protection, the rate of heart disease among Kohamans and Cretans is much lower than populations that consume only oleic acid sources and little vegetable Omega-3. Therefore, the intake of Omega-3 from

vegetable sources is viewed as a more significant protective factor.

Support and Even Improve Your Heart Health

More research is needed; however, the evidence so far indicates that consuming a diet rich in Omega-3 oils may reduce the risk of coronary heart disease. But what about people who already have heart disease? Can a diet rich in Omega-3 oils improve their cardiovascular health? The answer is Yes! Several studies have sought to determine whether dietary recommendations can favorably affect the condition of the heart.

Strict vegetarianism may not be as important as consuming a diet high in fiber and complex carbohydrates, and low in saturated fat and cholesterol. However, it is well established that vegetarians have a much lower risk of developing heart disease, and a vegetarian diet has been shown to be quite effective in supporting healthy cholesterol levels, blood pressure, and arterial integrity. Such a diet is rich in a number of protective factors such as fiber, essential fatty acids (including high levels of Omega-3 fatty acids), vitamins, and minerals including potassium and magnesium.

Two other studies, showing that diet can improve cardiovascular status among those with heart disease, highlight the importance of Omega-3 fatty acids. In the dietary and reinfarction trial (DART) only when the intake of Omega-3 fatty acids (from fish) was increased was heart health affected. The other study, the Lyon Diet Heart Study, determined that increasing the intake of Omega-3s from vegetable sources, such as those found in flaxseed oil, offers the same degree of protection as increased fish intake. The diet used in the Lyon Heart Study is often referred to as the Cretan Diet.

SUMMARY:

The beneficial effects of Omega-3 oils are quite obvious. Omega-3 oils impact many factors linked to heart health: they help maintain cholesterol and triglyceride levels that are already in a healthy range, they support healthy blood pressure, they promote healthy platelets, they support the integrity of the arterial muscle walls, they decrease blood viscosity, and they reduce the workload on the heart.

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.

BARLEAN'S ORGANIC OILS ✓ 100% Satisfaction Guarantee

Everyone knows that fresh foods are healthier and better for you. That's why Barlean's created Fresh Express, a common sense approach to producing and distributing our products at their absolute peak of freshness and nutritional value.

- **Made to Order:** Barlean's Fresh Express means every bottle of flax oil is made to order, air delivered and dated for freshness.
- **Air-Delivered:** Once fresh pressed, we air deliver our flax oil directly to your local health food store. No middleman or distributors, just great tasting, fresh, nutritious flax oil delivered within days of being made.
- **Dated for Freshness:** Each and every Barlean's bottle is freshness dated to ensure you the absolute freshest, best tasting, most nutritious flax oil in the world, naturally.

800-445-3529 Available in finer Health Food Stores nationwide. barleans.com

This reprint provided courtesy of



4936 Lake Terrell Road
Ferndale, WA 98248
800-445-3529
barleans.com