

March 8, 2009

## **YES TO FISH – Very Important In preventing & Managing Cardiovascular Disease**

I never thought that fish could be vital to my life. We learned to grow up eating meat, pork, and beef. Now we are realizing that we are killing ourselves by our eating habits. As Dr. Bill Roberts from Baylor University Medical Center said, “We kill the cows to eat and eventually they kill us.”



Omega-3 was recently introduced into our life. In the early 1900s, we discovered that there are certain polyunsaturated fatty acids essential to our life, and the deficiency of those essential fatty acids then led to the development of several diseases, including heart disease. Until the 1980s, we were not sure about the exact role of omega-3.

### **What is omega-3?**

In the early 1900s, the scientist discovered essential fatty acids, which would lead them to outside source, since the body cannot synthesize them. The essential fatty acids are an important part of each individual cell and is highly recommended in maintaining the health of the individual cell. Their presence can make cells more stable and resistant. The human being diet has both omega-3 and omega-6. The omega-3 are the ones that have an anti-inflammatory effect, while the omega-6 has an opposite action. The most important omega-3s are ALA (which is alpha-lipoic acid), DHA, and EPA. DHA and EPA are purely derived from the fish, especially the fish from cold water. Namely salmon, which has the highest content of it, but also other fish like tuna and herring.



**Salmon**



**Salmon Dinner**

ALA are derived from the vegetable source, and it is not as important as the other two are. The DHA and EPA are intangible to the human health, and depletion leads to several bodily ailments. As I mentioned, omega-6 has an opposite effect and prone to develop inflammation and thrombosis. Omega-6 is also known to participate in plaque buildup in the heart, brain dysfunctioning, as well as arthritis and skin disorders. Mostly, omega-6 we get from the animal source, especially from the beef, meat, and pork.

Western diet is very deficient in omega-3 currently. For that reason, the incidence of heart disease and other ailments are very high in the U.S.A. The usual ratio of omega-3 and omega-6 should be 1:4, while in most of the North America, it is 1:10, and in some cases it is 1:25. That means we should all take a supplement to counterbalance the diseases of modern civilization, i.e. metabolic syndrome, diabetes, hypertension, and cardiovascular diseases.

## Clinical benefits

- ✓ Lower blood pressure.
- ✓ Reduce triglycerides.
- ✓ Slow the development of plaques in the arteries.
- ✓ Reduce the chance of abnormal heart rhythm.
- ✓ Reduce the likelihood of heart attack and stroke.
- ✓ Lessen the chance of sudden cardiac death in people with heart disease.

It is certainly confusing to a consumer to find out the right brand and how much to take. Without naming any brand, any fish oil brand has to be a certified brand of IFOS (International Fish Oil Standard). For more information, the consumer should visit CRN (Council for Responsible Nutrition). The FDA states that taking no more than 3 grams of fish oil daily is Generally Recognized as Safe (GRAS). Also, the Omega Association recommends a dose up to 1 gram supplementation.

For people with the known disease, as mentioned above, recommendations are from 2 – 3 grams a day. More than 3 grams a day is only recommended for a known history of coronary artery disease and treatment of hypertriglyceridemia. However, under this condition, you should not be taking a higher dose without a physician's consultation. Taking more than 3 grams of fish oil daily may increase the risk of bleeding and interaction with several medications and therefore, physician approval is necessary.

Widespread use of omega-3 needs education of both consumer and physician. Now the American Heart Association is almost making it mandatory to take omega-3 supplements on a daily basis. Maybe in the future, primary prevention will become one of the priorities of our country instead of trying to manage and treat disease. Say "yes" to fish and Omega – 3.

M. Akram Khan, M.D., F.A.C.C., F.S.C.A.I.

**Please feel free to forward to a friend or Love One**