Polyunsaturated Fatty Acids

Polyunsaturated fats (or PUFAs) are essential fatty acids, meaning that

the body cannot produce them and therefore they must be obtained

through the diet. PUFAs are important in the body because they can

both promote inflammation, which is necessary to some degree, as

well as reduce inflammation.

**Omega-6 Fatty Acids**

One of the main types of PUFAs are omega-6 fatty acids, which *promote* inflammation. Inflammation can occur in two forms. The first type is localized inflammation, a defense mechanism used by the body to fight off infections and promote healing after an injury.

Monitoring your omega-6 intake is important to prevent chronic inflammation, which has negative effects on the body. Chronic inflammation is the inflammation that we cannot see, spreading throughout the entire body, such as with autoimmune diseases.

However, one omega-6 that is an *anti*-inflammatory is GLA (Gamma-linolenic acid). GLA supplements can halt the inflammatory promoters, reducing the symptoms of rheumatoid arthritis, eczema, and psoriasis.

**Omega-3 Fatty Acids**

Another type of PUFA is omega-3 fatty acids, which *reduce* inflammation in the body and are very beneficial. Various studies have shown that omega-3s can reduce the risk of coronary artery disease, slow the heart rate and improve heart rhythm, improve blood vessel flexibility, and act as a blood thinner. Omega-3 fatty acids have also been linked to the prevention of cancer growths. They lower the risk for developing Alzheimer’s disease and help with normal brain function. This includes helping with depression, bipolar disorder, impulsive behavior, hostility, and physical aggressiveness. Lastly, omega-3s have proven to help with dry eye syndrome. DHA and EPA are popular Omega 3’s found in fish oils.

**What Foods Contain PUFAs?**

Ways to incorporate omega-6s into your diet are through seeds, nuts, cooking oils (i.e. corn, peanut, safflower, soybean oil), and soybean products.

Sources of omega-3s are leafy green vegetables (i.e. kale, dark lettuces, swiss chard, collard greens, mustard greens), flaxseed, certain oils (i.e. canola, walnut), and coldwater fish (i.e. salmon, herring, tuna).

It is recommended to have an omega-6 to omega-3 ratio of approximately 3:1 to help prevent chronic inflammation. Steer clear of processed foods, which generally exceed the ratio guidelines. The typical American diet generally works out to a ratio of 23:1, when fast, processed, restaurant, and snack foods are included.

Resources:

1. Covington MB. Omega-3 Fatty Acids. *Am Fam Physician.* 2004;70(1):133-140.
2. Furay A. Natural Sources of Omega-3. Live Strong Web site. 2011. Available at: http://www.livestrong.com/article/269247-natural-sources-of-omega-3/
3. Challem J. Figuring Out Fats: The Key to Boosting Your Body’s Natural Anti-Inflammation.