



Fat Can Be Your Friend

Too Much Body Fat Is Unhealthy

Let's start out by establishing right away that *being* fat is not a good idea. The extra poundage that so many Americans carry around with them aside from making it hard to buy bathing suits may contribute to clogged arteries, high blood pressure, serious heart disease and even some forms of cancer.

Fats Essential to Health

On the other hand, *eating* fats especially the right kinds of fats in the right amounts is not only good, it is *essential*. According to *The Omega Diet*, by Artemis P. Simopoulos, M.D., and Jo Robinson, "Monounsaturated fatty acids, the type found in olive oil and canola oil, help protect your cardiovascular system. They also *reduce* the risk of certain metabolic disorders such as 'insulin resistance' and diabetes, and are linked with a lower rate of cancer."

FDA's Approval of Monounsaturated Fat for Reduced Heart Attack Risk

Although the authors noted this some five years ago, and even suggested then that "this good news is beginning to reach the public," it is only now that officialdom seems to have caught on. For evidence, consider the Food and Drug Administration's (FDA's) November 1 approval of a qualified health claim for monounsaturated fat from olive oil and reduced risk of coronary heart disease (CHD).

The claim reads, "*Limited and not conclusive scientific evidence suggests that eating about 2 tablespoons (23 grams) of olive oil daily may reduce the risk of coronary heart disease due to the monounsaturated fat in olive oil. To achieve this possible benefit, olive oil is to replace a similar amount of saturated fat and not increase the total number of calories you eat in a day. One serving of this product [Name of food] contains [x] grams of olive oil.*"

Consumers Can Make More Informed Decisions

"With this claim, consumers can make more informed decisions about maintaining healthy dietary practices," said Dr. Lester M. Crawford, acting FDA commissioner. "Since CHD (coronary heart disease) is the number one killer of both men and women in the U.S., it is a public health priority to make sure that consumers have accurate and useful information on reducing their risk."

This claim is the third qualified health claim FDA has announced for conventional food since the process for establishing such claims took effect last year. Among these claims was this one, announced on September 8: "*Supportive but not conclusive research shows that consumption of EPA and DHA omega-3 fatty acids may reduce the risk of coronary heart disease. One serving of [name of food] provides [x] grams of EPA and DHA omega-3 fatty acids.*"

EPA and DHA Essential for Good Health

EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) are the two best known of the so-called essential fatty acids. Why essential? Because, as noted in *The Omega-3 Phenomenon*, the

body cannot produce them, and they, therefore, must be obtained from either the diet or supplementation. Authors Donald O. Rudin, M.D. and Clara Felix (with Constance Schrader) say, "The amount of essential fatty acids (EFA) needed is small. But even though it is small, the average person still doesn't get an adequate amount."

Why EFAs (Essential Fatty Acids) are Important

Loma R. Vanderhaeghe, B.Sc., and Karlene Karst, B.Sc., R.D., co-authors of *Healthy Fats for Life*, offer an explanation of why EFAs are so important: "The three main functions of EFAs," they say, "are to regulate cellular processes, influence membrane function and integrity, and produce hormones." Among the cellular processes that are affected are the following: regulation of enzymes; regulation of cell signaling pathways; attachment of proteins to fatty acids; regulation of gene expression; gene activation; receptor function and activation; membrane permeability; ion channels (the transport system for potassium and sodium); transport properties; oxidation of fats; communication from the cell membrane to the nucleus of the cell; and lipid signaling.

With regard to cell membrane integrity, say Vanderhaeghe and Karst, "EFAs are integral components of cell membranes, determining fluidity and other physical properties as well as affecting the structural functions such as the maintenance of enzyme activity. Cell membranes built with EFAs are less rigid and more fluid (as opposed to membranes built with saturated fats.)"

Finally, the authors report, "Some of the most potent effects of essential fatty acids are related to their conversion into a series of eicosanoids, or hormones. These agents of intracellular communication control the balance of virtually every system in the body, including the mechanisms for inflammation, blood clotting and blood vessel dilation. They include, but are not limited to, anti-inflammatory and inflammatory prostaglandins (PGE series 1,2,3) and other immune system respondents, such as thromboxanes, leukotrienes and hydroxy fatty acids."

Food Sources of Essential Fatty Acids

Strict vegetarian consumers who want to get in on the goodness of these good fats can do so by increasing their use of such foods as green leafy vegetables, plant oils (canola, flaxseed and soy), and nuts (walnut oil and walnuts). Those who are willing to eat omnivorously, however, will probably have better results with fish, particularly herring, salmon, mackerel, sardines and tuna, say James V. Donadio and Joseph P. Grande, authors of a study that appeared in the May 2004 edition of *Seminars in Nephrology*. The researchers also had kind words for two products that are available as pharmaceutical-grade fish-oil concentrates, Omacor (Pronova Biocare, Oslo, Norway) and Coromega (European Reference Botanical Laboratories, Carlsbad, CA).

Essential Fatty Acids Should Be Balanced

One more point to keep in mind when considering EFAs, say Simopoulos and Robinson: "There are two families of EPAs, 'omega-6' fatty acids and 'omega-3' fatty acids." They argue that the "body functions best when your diet contains a balanced ratio of EFAs, yet the typical Western diet contains approximately 14 to 21 times more omega-6 fatty acids than omega-3s." And, they warn, "This imbalance is now being linked with a long list of serious conditions and diseases." **WF**

References:

1. *The Omega Diet*, by Artemis P. Simopoulos, M.D., and Jo Robinson News release, Food and Drug Administration (FDA), November 1 2004
2. *The Omega-3 Phenomenon*, by Donald O. Rudin, M.D., and Clara Felix (with Constance Schrader)
3. *Healthy Fats for Life*, by Loma R. Vanderhaeghe, B .Sc., and Karlene Karst,B.Sc.,R.D.
4. "The Role of Fish Oil/Omega-3 Fatty Acids in the Treatment of IgA Nephropathy," by James V. Donadio and Joseph P. Grande, *Seminars in Nephrology*, May 2004

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