

Dietary Fats and Physical Symptoms

By

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Many health practitioners have recognized that people on low fat or no fat diets are those who have the most health problems. Dietary fats, also called essential fatty acids, or E.F.A.'s for short, or vitamin F, are essential to physical health. The role they play in the body can easily be seen by the physical symptoms that can result when they are lacking.

A few of the more common health disturbances resulting from low E.F.A. levels include:

Stiffness. A body low in essential fatty acids is a body like that of the Tin Woodsman in the Wizard of Oz. It is stiff and "creaky". The person has difficulty bending because their bodies lack the lubrication E.F.A.'s provide.

Hormonal insufficiencies. Every hormone in the human body is made from essential fatty acids. Therefore lack of E.F.A.'s means lack of the building blocks necessary to fuel hormone production. Many problems with hormonal imbalance have as their root cause a lack of E.F.A.'s. This is especially obvious in women undergoing their midlife change. It's a time when women are tempted to battle weight gain by cutting their intake of essential fats right at the time when their bodies especially need it to carry out the hormonal shifts of menopause.

Depression. When the body has too few building blocks to make hormones, their levels fall, which produces depression. A normally technicolor world turns gray, nothing seems interesting, motivation is lost, and because these symptoms seem emotional/psychiatric in nature, they are often treated with anti-depressant drugs instead of being recognized for the fatty acid imbalance or deficiency that is at their root.

Heart Symptoms. E.F.A.'s are essential for keeping the heart healthy. In fact, specifically, lack of omega 3 fatty acids in relation to omega 6's and 9's is a common finding in people with heart problems. Omega 3's are a key supplement for people who need to improve their heart health.

Calcium absorption and delivery problems. Among their many roles, E.F.A.'s act as carriers of fat soluble vitamins (A,D,E and K) and minerals. Lack of E.F.A.'s means lack of carriers of minerals. For example, calcium, so essential to the contraction of muscles, including the heart muscle, can't get transported to where it needs to go when a fatty acid deficiency is present. Therefore the body will deposit calcium wherever it lands awaiting its transportation. This means it gets deposited in soft tissues, which can result in hardening of arteries, deafness (if deposited in the tympanic membrane) or stone formation in the gall bladder or kidneys. It can also mean the formation of bony spurs, because the body tries to pull calcium out of the bones but cannot complete the process due to lack of oils to carry them.

Lackluster or unhealthy skin and hair. Oils are essential to the health of skin and hair. In fact, it is likely that there would be far less incidence (32,000 cases in 1997)ⁱ of malignant melanoma (skin cancer) if people were not so deficient in vitamin F, the essential fatty acids.

Impaired ability to learn and recall information. "A deficiency of essential fatty acids can lead to an impaired ability to learn and recall information."ⁱⁱ In part, that's because key brain nutrients must be carried to the brain in oil form in order to pass the protective blood -brain barrier. Also, the neurotransmitters the brain requires are made of EFAs. And, the layer of insulation around the nerves, the myelin sheath, is composed of fats (the ones named cholesterol, cerebroside, phospholipids and certain fatty acids).ⁱⁱⁱ Without this protection, nerves cannot carry impulses from one place to another; instead, they misfire in a disorganized fashion.

Nervous system disturbances. The existence of some brain seizure disturbances has been linked either to a deficiency of EFA's or a disturbance in their metabolism. Children with hyperactivity and attention problems have "been found to be deficient in omega 3 relative to omega 6 fatty acids." Likewise, excessive anxiety and mood instability in adults may result from an imbalance between 'good' and 'bad' prostaglandins, a disequilibrium due in part to over consumption of hydrogenated oils.^{iv} Lack of essential fatty acids in infant formula has been linked to mental retardation.

Osteoporosis. Porous bones are among the dangers of a low fat diet, especially when the small amount of fat eaten is saturated. A low fat diet exposes the body to the danger of having no carriers to convey new mineral

deposits into the bone bank. Of course, there are numerous other associated problems, such as liver trouble and immune system breakdown. For women, too low a body fat mass is dangerous to bones. When body fat mass is reduced to around 15%, the menses may stop and bone loss begins.

Immune system disturbances. Too low a fat content in the diet can also damage the immune system, a fact Nathan Pritikin, M.D., found out. He lowered his body fat to 2 or 3% and his dietary fat intake to nearly zero in an attempt to avoid heart disease, only to die of leukemia. One wonders how his immune system could function with no essential fatty acids.

The next article will cover the various types of essential fatty acids and their food sources.

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i. 20/20 Broadcast, ABC Network, Apr. 10, 1998.

ii. Balch and Balch, *Ibid.*, p. 51.

iii. Taber's, *Ibid.*, p. M 59.

iv. Hunter Yost, M.D. Molecules for the Mind, Available at: www.azstarnet.com/healthbeat/mole.html.