

Fats



Are You Eating Enough of Them?

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Fats

In a society that despises fat, it's hard to believe that fats have anything positive to offer. To add insult to injury, the USDA food guide pyramid tells us to use fats sparingly. The truth is not all fats are bad. I think we all know what fats to limit, you guessed it, SATURATED FATS!!!!!!

Essential fats, on the other hand, can be very beneficial. These essential fats, consisting mainly of omega-3 and omega-6-fatty acids, convert into hormones called *prostaglandins*, which are of three types—series 1, 2, and 3. It is the proper ratio of these prostaglandins that govern the beneficial effects. Refer to the definitions on the following page for more details.

Type of Fat	Sources	Health Benefits	Comments
Omega 6	<ul style="list-style-type: none"> -Safflower oil -Sunflower oil -Hemp oil 	<ul style="list-style-type: none"> -Relaxes blood Vessels=decreased BP -Decreases platelet aggregation (clotting) -Potentiates the effect of insulin= stabilizes blood sugar -Improves T-cells=boosts immunity 	<ul style="list-style-type: none"> -Safflower oil is best if it is unrefined and in an opaque container. -Hemp oil is considered the best source of omega-6.
Omega 3	<ul style="list-style-type: none"> -Cold water fish (salmon, trout, mackerel, sardines) [contains EPA & DHA] - Flax oil [contains alpha linolenic acid*] 	<ul style="list-style-type: none"> -Decreases inflammation -Decreases tryglycerides -Weight loss (helps our kidneys get rid of excess water in the tissues). -<i>This is only a partial list.</i> 	<ul style="list-style-type: none"> -Omega 3's block the production of series 2 prostaglandins have many negative effects on the body.



*Alpha linolenic acid occurs naturally in nuts, vegetables and flaxseed oil. Alpha linolenic acid is also considered an omega 3 fatty acid since it is partially converted (about 15%) to EPA and DHA in the body.

Suggested dosage of Omega 3 =3 grams/day (source: National Institute of Health, 1999)

Definitions

Omega 6: A family of related fatty acids essential for human health. These are amply supplied by Western diets. In fact, their consumption has doubled in the last 50 years. From Omega 6 fatty acids, the body makes series 1 and series 2 prostaglandins. Excess of the latter can cause inflammation, water retention, increased blood pressure, sticky platelets, and decreased immune response.

Omega 3: A second family of related fatty acids essential to human life but lacking from most Western diets. Our intake of these has decreased to 1/6 of their level in 1850. From Omega 3 fatty acids, our body makes series 3 prostaglandins, which prevent the negative effects of series 2 prostaglandins by preventing their production.

Omega 6:3 Balance:

The balance of omega 6 to omega 3 fatty acids leads to optimum health. Researchers consider a 4:1 ratio optimal. That is, four omega-6 to each omega-3 a good balance. Most Western Diets, however, are between 10 and 20 in favor of omega-6, far too high in omega-6. This ratio can encourage **overproduction** of series 2 prostaglandins consequently causing negative effects on your health.

TAKE HOME MESSAGE: Consume more Omega 3's, either in supplements* or food sources (i.e., salmon or any cold water fish). Eliminate safflower, corn and sunflower oil (which are of the omega 6 family) and consume more of the omega 3 oils— soybean, olive and canola oil. If you choose fish oil supplements, choose one that is molecular distilled.* The best flaxseed oil on the market (in my opinion) is Udo's perfect blend, available at Whole FoodsTM.

The recommended daily dosage is 1 TBSP for every 50 pounds of body weight.

Note: It is in your best interest to introduce fish oils gradually to your diet as a sudden increase may induce the side effects these nutrients are known for, notably nose bleeds (due to their ability to reduce blood clotting) and gastrointestinal upset. Individuals taking coumadin (a blood thinning medication) should consult with their physician before supplementing with fish oils.

It should also be noted that fish oil supplementation may need to be accompanied with Vitamin E (400 IU) to protect the oil from oxidative damage. Diabetics, specifically insulin dependent diabetics (Type 1) should consult their physician before supplementing or increasing their intake of fish oil consumption since these oils may increase blood sugar and reduce insulin secretion.

*It appears that a minimum daily dose of 3 grams of Eicosapentaenoic (EPA) and docosahexaenoic (DHA) is necessary to derive the expected benefits. For those who count pills, this represents a minimum of 10 fish oil capsules per day if one were to take the common variety that contains 180 mg of EPA and 120 mg of DHA.¹ **Check with your physician prior to taking this dosage.**

¹ Seaman, D.(1998). Clinical Nutrition for pain, inflammation and tissue healing. pp. 130, NutrAnalysis, Inc. Hendersonville, NC

Long-Chain Omega-3 Fatty Acid Content in Fish

Fish (3.5-ounce servings)	Total Omega-3 (grams)	Servings Required to Equal 1 Tbsp. Cod liver oil
Mackeral	1.8	1.4
Lake Trout	1.6	1.6
Herring	1.5	1.7
Sardines	1.4	1.8
Tuna (fresh)	1.3	1.9
Salmon	1.1	2.3
Trout (others)	0.5	5.0
Catfish	0.4	6.2
Cod	0.2	8.3
Snapper	0.2	12.5
Tuna (canned)	0.2	12.5
Sole	0.1	25.0

Source: Sears, B. (2002). *The Omega Rx Zone. The Miracle of the New High-Dose Fish Oil.* Harper Collins, New York, NY. Pp.65

For a more detailed explanation on FATS and how to determine if the supplement you are consuming is pharmaceutical grade, refer to my website:

http://coreessentials.biz/Multi_Media.html

Refer to the Zone Diet (Part 5) for details.

Other sources: Erasmus, U. (1998). Fats that heal, Fats that Kill. Alive Books, Canada.