

Omega-3 Fatty Acids

What are Omega-3 Fatty Acids?

- Polyunsaturated fatty acids
- Essential Fatty Acids not made in the body and must be eaten

Health Benefits to Omega-3 Fatty Acids:

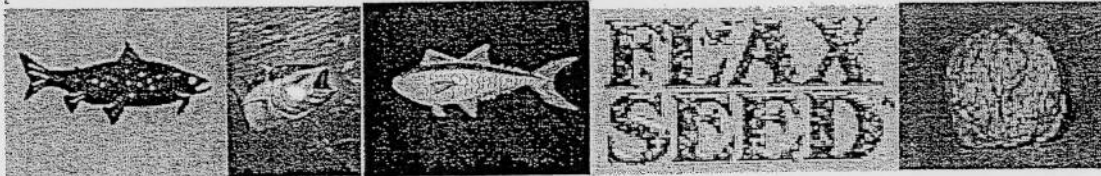
1. Inflammatory conditions: Improves rheumatoid arthritis, psoriasis, asthma, and some skin conditions
2. Ulcerative colitis and Crohn's disease: reduces the severity of symptoms
3. Cardiovascular disease: Lowers triglycerides and raises HDL (good cholesterol), improves circulation, reduces clotting, improves vascular function, and lowers blood pressure
4. Type 2 Diabetes Mellitus: Reduces hyperinsulinemia and insulin resistance
5. Renal disease: Preserves renal function in IgA nephropathy; potentially reduces vascular access thrombosis in hemodialysis patients and is cardio-protective
6. Mental function: Reduces severity of several mental conditions such as Alzheimer's disease, depression, and bipolar disorder; improvement in children with attention deficit hyperactivity disorder and dyslexia also noted.
7. Growth and Development: neurodevelopment and function of the brain and also the retina of the eye where visual function is affected.

What sources contain Omega-3's:

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|----------------|---------------------------------------|
| 1. Flax seed | 5. Wheat Germ Oil |
| 2. Canola Oil | 6. Oily Fish- Salmon, Trout, Sardines |
| 3. Soybean Oil | 7. Tuna |
| 4. Walnuts | |

FOOD SOURCES	AMOUNT OF OMEGA-3
1. Salmon, Alaskan/Californian- Wild (3 oz cooked)	1.6 gm/serving
2. Sardines, Pacific (3 oz)	1.4 gm/serving
3. Trout, Rainbow- Wild (3 oz cooked)	0.8 gm/serving
4. Tuna, Albacore- 3 oz (packed in water)	0.7 gm/serving
5. Flax Seed, ground- 1 Tablespoon	1.8 gm/serving
6. Canola Oil- 1 Tablespoon	0.9 gm/serving
7. Soybean oil, 1 Tablespoon	0.9 gm/serving
8. Walnuts, 1 oz	2.5 gm/serving
9. Flax Seed Oil, 1 Tablespoon	8.0 gm/serving

* Check out the web site www.montereybayaquarium.org to find the best seafood choices for personal health and environmental consciousness.



Recommended Intakes of Omega-3 Fatty Acids:

Age	Amount		Amount for Females
0-4 months	0.5 grams		
5-12 months	0.5 grams		
1 year	0.6 grams		
2-3 years	0.7 grams		
4-6 years	1.0 grams		
Amount for Males		Amount for Females	
7-9	1.2 grams		1.0 grams
10-12	1.4 grams		1.1 grams
13-15	1.4 grams		1.2 grams
16-18	1.8 grams		1.2 grams
19-24	1.6 grams		1.2 grams
25-49	1.5 grams		1.1 grams
50-74	1.3 grams		1.1 grams

Ways to Eat more Omega-3 Fatty Acids:

- *Discover Fish*- Eat at least two serving per week of cold-water fatty fish like salmon, sardines, trout and albacore tuna.
- *Use Canola Oil*- terrific choice for cooking or baking.
- *Consider Flax Seed (preferably organic to decrease pesticide residue)*- Can be sprinkled or added to foods, or stirred into a liquid beverage.
This is a better option than flax seed oil:

1. Contains lignans: phytoestrogens (plant estrogens) that act as an antioxidant.
2. Contains fiber: both soluble and insoluble. Insoluble fiber helps maintain regularity while soluble fiber helps to decrease cholesterol levels.

- *Consider Flax Oils (preferably organic)*: can be mixed in with salad dressings, sprinkled over rice, potatoes, or pasta.

*** Please Note: Flax oil is sensitive to heat, it is best not to fry or bake with it.

*** Excellent cookbook: Flax Your Way to Better Health, Jane Reinhardt-Martin, RD (1-877-623-7266)

- *Other Healthy Foods*: Green leafy vegetables, legumes, and nuts
- *Designer Eggs (hens are fed diets containing flax, fishmeal, and algae)*: Check brand names such as; Gold Circle Farms and Egglord's Best

Other Fish Contamination Resources:

1. Environmental Protection Agency
www.epa.gov/waterscience/fishadvice/advice.html
2. FDA Outreach and Information Center
www.fda.gov/fdac/reprints/mercury.html
3. Office of Environmental Health Hazard Assessment
www.oehha.ca.gov/fish.html

References:

1. Rigby, Alison J. Omega-3 Choices: Fish or Flax? *Today's Dietitian*. 2004; page 37-39.
2. Simopoulos AP. Essential fatty acids in health and chronic disease. *Am J Clin Nutr*. 1999; 70 (suppl)560S-569S.
3. *Omega-3 Fatty Acids: The Fats of Life and Good Health*. The Dietary Supplement. March-April 2003. Issue No. 15. Volume 4, Number 2.

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