- * Due to the heavy pollutions of the oceans with heavy metals and other toxins, fish might no longer be the ideal dietary supplement. This is why the fish oil needs to be molecularly distilled, which means that the fish oil went through a purification process where all possible contaminants have been removed.
- * Ideally you should buy fish oil that contains only a little bit of Vitamin E and nothing else, otherwise, it is not pure fish oil

This information should help you choose high quality pure Omega 3 fish oil, which is free from toxins and pesticides and which contains a high concentration of EPA and DHA- the two most important fatty acids. The recommended amount of EPA and DHA per capsule is shown below.

Suppleme	nt Fa	cts
Serving Size 1 Soft Gel Servings Per Container 18	0	
1 Soft Gel Contains	Amount Per Serving	% Daily Value
EPA	420 mg	*
DHA * % Daily Value not establis	300 mg	*

Ingredients: Purified marine triglyceride concentrate, Vitamin E mixed tocopherols, gelatin, glycerin and purified water.

	1	1	
Food	Serving Size	Amt (g)	World's Healthiest Food Rating
Flaxseeds	2 tbs.	3.51	Excellent
Walnuts	0.25 с.	2.27	Excellent
Salmon, chinook, baked/broiled	4 oz-wt	2.09	Excellent
Herring	3 oz.	2.0	Excellent
Sardines	3 oz.	0.810	Excellent
Cloves, dried, ground	2 ts.p	0.20	Very good
Oregano, dried, ground	2 tsp.	0.12	Very good
Cauliflower, boiled	1 c.	0.21	Very good
Mustard Seeds	2 tsp.	0.20	Very good
Cabbage, shredded, boiled	1 c.	0.17	Very good
Broccoli, steamed	1 c.	0.20	Very good

Table from www.whfoods.org

* Resources available upon request

FOODS WITH OMEGA 3



OMEGA 3:

- What is it?
- Why is it important for your health?
- What foods contain Omega 3?
- How to buy fish oil supplements.

Compiled by **Cheryl Wardlaw**Adapted for **Johnson & Johnson Physical Therapy**by Stephanie Byrd, SPT & Kaysi Atkinson, SPT,
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Omega 3's

Omega 3's are polyunsaturated fatty acids, which cannot be produced by the body. Omega 3 is contained in the essential fatty acids (EFA), EPA and DHA. Omega 3's must be obtained from external sources. The benefits of Omega 3 include anti-inflammatory properties, inhibition of atherosclerosis, and decreasing triglycerides and LDL's.

The National Institute of health recommends that 2% of your daily calories should come from Omega 3 fatty acids. Therefore, consuming 2000Kcal/day should provide approximately 4g (4000 mg) of omega 3 per day. In fact, research shows that a minimum of 3000 mg per day is necessary to produce an antiinflammatory effect the in musculoskeletal system.

Omega 6's

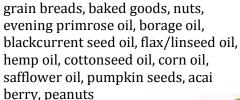
Omega 6's are inflammatory fatty acids that are needed to fight infection. Too much of Omega 6 can create a system wide inflammation of the connective tissues. Omega 6 is a pro-thrombotic, pro-inflammatory, and pro-constrictive.

Top foods with Omega 3

* Salmon, Mackeral, Sardines, Flaxseeds, Walnuts, Cloves, Cauliflower, Mustard Seeds, Cabbage, Oregano, Romaine Lettuce, Broccoli * See table on back of brochure for recommended amounts

Foods rich in Omega 6:

* Palm oil, soybean oil, grape seed oil, sunflower oil, most vegetable oils, poultry, eggs, cereals, wholegrain breads, baked good evening primrose oil, borblackcurrent seed oil, flax hemp oil, cottonseed oil, o



Proper Ratio

Both Omega 3 and Omega 6 are essential, however, you must be careful to consume them in the correct ratio. The ideal intake of Omega 6 to Omega 3 should be no more than 4:1. Typical western diets provide as much as a 30:1 ratio. The Omega 6 intake is way too high and there is a strong lacking of Omega 3. This plays an important role in chronic inflammation and, therefore, chronic pain.

Fish Oil Capsules

You can obtain pure Omega 3 oil from fish oil capsules; however, there are a few important points to consider:

- * The quality of omega 3 oils depend on the type of fish and where it comes from
- * When you buy pure fish oil make sure that it comes from salmon, mackerel, or herring since these are the best sources for Omega 3 (DHA and EPA)
- * The fish oil needs to be molecularly distilled

Resources

Simopoulos, Artemis P. (September 2003). "Importance of the ratio of omega-6/omega-3 essential fatty acids: evolutionary aspects". *World Review of Nutrition and Dietetics* (Karger) **92** (Omega-6/Omega-3 Essential Fatty Acid Ratio: The Scientific Evidence): 1–174.

Articles of Omega 3 as a Connective Tissue anti-inflammatory:

Galarraga B. Cod liver oil (n-3 fatty acids) as an non-steroidal anti-inflammatory drug sparing agent in rheumatoid arthritis. *Rheumatology (Oxford)*. 2008 May;47(5):665-9.

Other resources:

- Clinical application of omega-3-fatty acids (codliver oil). *Klin Med (Mosk)*. 2005.
- Diet, nutrition, and rheumatoid arthritis. Clin Ter. 2005.
- Nutritional management of rheumatoid arthritis: a review of the evidence. J Jum Nutr Diet. 2003.
- Omega-3 fatty acids in inflammation and autoimmune disease. J Am Coll Nutr. 2002.