

Optimizing Your Fat Intake

The fatty acids linoleic acid (LA) and linolenic acid (LNA) are known as **essential fatty acids**. This means that the human body has to acquire them, as it cannot make them, and must, therefore, get them from food sources. **Flax pumpkin seed, chia seed and hemp seed** are the main sources of also good sources. The key here is to either use the whole seeds, raw and unprocessed, kept fresh in the refrigerator or freezer or use the oil in the natural non-processed state.

Flax seeds should always be ground before eating to ensure adequate digestion and availability of fatty acids.

Both the seeds and the oils can be eaten in the form of sauces and dressings, added after cooking. This spares the valuable essential oils from exposure to excess heat and oxygen and thus their possible oxidation. Purchase any oils you buy in dark bottles, and either refrigerated or nitrogen packed, with expiration dates clearly indicated. *The expiration and the pressing dates on flax seed oil should be no longer than four months apart to ensure its freshness.*

The conversion of the shorter chain omega 3 fatty acids found in nuts and seeds to the longer chain fatty acids (EPA and DHA) found in fish and to a lesser extent in purslane (a wild edible green vegetable) and brown varieties of blue green algae is very inefficient. Many nutrient cofactors are required for this conversion - nutrients typically found to be deficient in the standard American diet such as Vitamin C, B3 and B6, magnesium and zinc. *It has been shown that this conversion can be increased tenfold if coconut or coconut oil is consumed along with an omega 3 rich plant food such as flax, hemp, chia or pumpkin seed.*

Fish is high in the long chain fatty acids EPA and DHA. EPA and DHA can be synthesized by our bodies from LA in the presence of adequate B vitamins and minerals. Some researchers believe that this conversion is very inefficient while others believe that the inefficiency is due to eating diets high in refined foods and deficient of essential nutrients, and becomes more efficient as the necessary nutrients are replenished. I believe that this needs to be evaluated on a case by case basis. If you choose to use fish or fish oils as a source of fatty acids, it is important to choose it carefully. Be sure that the fish is cold water fish from deep in the ocean to reduce exposure to heavy metals and toxins. If you use fish oil, be sure it is from a reputable company that does third party testing for contamination by mercury, lead, PCBs and other contaminants.

Include Omega 3 fat foods daily:

Essential Fatty Acid Rich Foods: *Each day, be sure to choose at least one of the essential acid rich foods 1-2 Tbs oil or 5-6 Tbs seeds, 1-2 Tbs algae and ½ cup of purslane.*

- flax seeds or flax seed oil
- pumpkin seeds or pumpkin seed oil
- hemp seeds or hemp seed oil
- chia seeds
- brown varieties of blue green algae
- purslane
- deep ocean fish or fish oils
- borage, evening primrose , black currant seed oil