



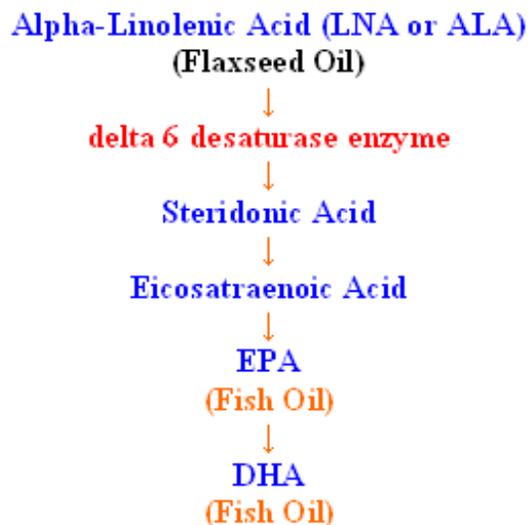
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## Can I get enough EPA/DHA from flax or other vegetable oils?

Alpha Linolenic acid (LNA or ALA) derived from flax has a shorter carbon chain and is much less biologically important than the longer chain fatty acids EPA and DHA. In fact, when LNA from flax is consumed it has to be converted to EPA and DHA inside the body by adding carbons and making the chain longer. This requires the action of enzymes, the most important of which is an enzyme called delta 6 desaturase. The action of this enzyme determines how much LNA will ultimately be converted to EPA and DHA.

### Omega 3 Fatty Acids



Research is clear that humans and other meat consuming animals are genetically designed to consume the longer chain omega 3 EFAs (EPA and DHA) directly from wild game meat or fish and not rely on converting LNA from flax. This makes complete sense. Our genetic ancestors had virtually no flax or other omega 3 rich vegetable sources in their diets!

Further supporting this are research studies that show that the delta 6 desaturase enzyme responsible for the rate of conversion of LNA from flax to EPA and DHA is incapable of doing so in sufficient amounts even if large amounts of flax oil are consumed. In a recent study, ALA converted to EPA was only 0.2%, concluding that flax seed oil was not a good source of EPA and DHA. In another study, the conversion rate of ALA to EPA and DHA was approximately 6% for EPA and 3.8% for DHA. With a diet rich in omega-6 fatty acids, conversion is further reduced by 40 to 50%. Other lifestyle factors including consumption of alcohol, high saturated fat intake, stress and vitamin/mineral deficiencies can reduce the rate of ALA conversion even further. Fish oil provides up to 200 times more EPA and DHA per gram than flax.

Again, this makes sense. Why would humans or other animals that did not eat flax but did consume large amounts of EPA and DHA directly from wild game meat and fish be genetically designed to have an efficient enzyme pathway to convert flax to EPA and DHA? Arguments trying to convince you that you can get enough EPA and DHA from flax are genetically unfounded, nutritionally unfounded (humans or our ancestors have NEVER eaten large amounts of flax) and scientifically unfounded because the research shows this is not the case. The fact is that flax oil is a healthy source of LNA but it is not a healthy alternative to fish oil as a source of EPA and DHA.

Furthermore, and perhaps most significantly, human breast milk is full of DHA. Scientific research clearly shows that children born to mothers who are deficient in EPA and DHA omega 3 fatty acids have neurological development impairments. Scientific research also demonstrates that children born to women who supplement with omega 3 fish oil like Omega Sufficiency® can avoid these problems. In addition, children who supplement with EPA and DHA from fish oil like Omega Sufficiency® have been shown to have less allergies, less eczema, learn better, and be less likely to have ADD or ADHD.

The data from scientific research and clinical trials is indisputably clear. Everyone needs to ensure that they have sufficient amounts of EPA and DHA from fish in their diets. Sadly, eating fish is not a viable option because of the documented dangerous levels of pollutants and toxins. Supplementing with Omega Sufficiency®, the world's premier purified, toxin and pollutant-free omega 3 EPA/DHA fish oil is not only scientific, it is common sense when it comes to maintaining and/or restoring your health and preventing disease.