The Omega Fats: Omega-3, Omega-6, Omega-9

Think all omegas are alike? Think again. There are different types of omegas, some healthy and some not so healthy.

**Omega-3**

*Omega-3* is the flagship of healthy fats. It can have a profound effect on your waistline, muscles, and brain, and can help you move quickly toward optimal health. The effect on brain health is significant. A daily consumption of omega-3 fatty acids can decrease anxiety levels by 20% and promote a significant reduction in inflammation. As you can imagine, we'll want to make sure to provide you with the right amount. Fish is a great source of omega-3, especially salmon, which you'll learn more about in part 2.15 in Dr A's Habits of Health, 2nd edition. Liquid flax-seed oil is another prime source. It can't be used as cooking oil, but it's great to use on salads or breads or added to soups. And of course – there are walnuts!

**Omega-6**

*Omega-6* is a healthy fat if it's consumed in a 1:1 ratio with omega-3s. Unfortunately, for the most part, our consumption of omega-6 far outweighs our intake of omega-3.

The ability to make seed and vegetable oils was another result of the industrialization of the food industry. They are easy to produce, cheap, and most vegetable oils, including soybean, corn, sunflower, and safflower oil, contain heavy concentration of omega-6. Increasing your use of olive and canola oil, and adding flaxseed oil to your diet, will help restore a healthy ratio and provide a better balance to support health.

**Omega-9**

*Omega-9*, another very healthy omega, is found in olives, avocados, and nuts. Olive oil, particularly extra virgin olive oil, is an ideal way to get enough omega-9. Use it for sautéing or to add a marvelous flavor to cooked foods and salads—just make sure you don't cook at very high temperatures, and, as with all oils, keep track of the amount so you don't consume too much!
Proven Benefits of Omega-3 Fatty Acids
Omega-3 fatty acids have all sorts of powerful health benefits for your body and brain and few nutrients have been studied as thoroughly as omega-3 fatty acids. Here are the incredible health benefits of omega-3 fatty acids that are supported by science.

Omega-3s in Heart Health
The benefits against risk factors include:
• Triglycerides: Omega-3s can cause a major reduction in triglycerides, usually in the range of 15–30%.
• Blood pressure: Omega-3s can reduce blood pressure levels in people with high blood pressure.
• HDL-cholesterol: Omega-3s can raise HDL (the "good") cholesterol levels.
• Blood clots: Omega-3s can keep blood platelets from clumping together. This helps prevent the formation of harmful blood clots.
• Plaque: By keeping the arteries smooth and free from damage, omega-3s help prevent the plaque that can restrict and harden the arteries.
• Inflammation: Omega-3s reduce the production of some substances released during the inflammatory response factors.

Interestingly, despite all these beneficial effects on heart disease risk factors, there is no convincing evidence that omega-3 supplements can prevent heart attacks or strokes. Indeed many studies find no benefit.

Omega-3s Reduce Inflammation
Inflammation is a silent killer. Omega-3 fatty acids can reduce the production of molecules and substances linked to inflammation, such as inflammatory eicosanoids and cytokines. Studies have consistently shown a link between higher omega-3 intake and reduced inflammation. You can read more about inflammation in part 2.14 in Dr. A's Habits of Health 2nd Edition, and in Your LifeBook Element 20.

Omega-3 fatty acids can help fight several autoimmune diseases, including type 1 diabetes, rheumatoid arthritis, ulcerative colitis, Crohn's disease and psoriasis.

Conclusion
Omega-3s reduce chronic inflammation, and can lower risk of heart disease, cancer, arthritis, cognitive decline, autoimmune diseases and various other diseases.
Omega-3 Fatty Acids May Improve Sleep
As one of the MacroHabits of Health, sleep is a foundation of optimal health.
• Low levels of omega-3 fatty acids are associated with sleep problems in children and obstructive sleep apnea in adults.
• Low levels of DHA have also been linked to lower levels of the hormone melatonin, which helps you fall asleep.
• Studies in both children and adults have shown that supplementing with omega-3 increases the length and quality of sleep.

Conclusion
Omega-3 fatty acids, especially DHA, may improve the length and quality of sleep in children and adults.

Omega-3s Helpful in Depression and Anxiety
Depression, whose symptoms include sadness, lethargy and a general loss of interest in life, has become one of the most common mental disorders in the world and its incidence is increasing along with anxiety (also a very common disorder characterized by constant worry and nervousness).
• Studies have found that people who consume omega-3s regularly are less likely to be depressed.
• People who have depression or anxiety who start taking omega-3 supplements, their symptoms get better. A study shows that of the three types of Omega 3 Fatty Acids EPA is the most effective for reducing depression even as effective as prozac.

Conclusion
Omega-3 supplements may help prevent and treat depression and anxiety. EPA is the most effective at fighting depression.

Omega-3s May Help Prevent Cancer
Cancer is one of the leading causes of death in the Western world, and omega-3 fatty acids may reduce the risk of certain cancers.
• Studies have shown that people who consume the most omega-3s have up to a 55% lower risk of colon cancer.
• Omega-3 consumption has been linked to a reduced risk of prostate cancer in men and breast cancer in women. However, not all studies agree on this.

Conclusion
Omega-3 intake may decrease the risk of colon, prostate and breast cancer.
Omega-3s Maybe Beneficial in:
• Brain development in pregnancy and infancy
• Eye health
• ADHD and reduce asthma in children
• Metabolic syndrome
• Age-related mental decline, Alzheimer's disease, improve mental disorders
• Improve bone and joint health
• Help with menstrual pain
• Health of your skin

Where Should You Get Your Omega-3?
Getting Omega-3 from whole foods, such as eating fatty fish twice a week, is the best way to ensure optimal omega-3 intake. However, if you don't eat a lot of fatty fish, then you may want to consider taking an omega-3 supplement. For people who are lacking in omega-3, this is a cheap and highly effective way to improve health. However, there are hundreds of different omega-3 supplements available. Not all of them have the same health benefits. Fish oil comes in both natural and processed forms. The processing can affect the form of the fatty acids. This is important, because some forms are absorbed more effectively than others. Omega-3s come in several forms, most commonly as triglycerides. Some fish oils that are more processed may contain omega-3 ethyl esters, which aren't absorbed well.

Summary on Fish Oils
For most people, a regular fish oil supplement is probably sufficient. However, make sure the supplement actually contains what it says it does, and check out the EPA and DHA content. EPA and DHA (important for brain health) are best found in animal based omega-3 products. Vegetarian options are available, but they usually only contain ALA. I recommend algal oil, which is an excellent source of quality omega-3s and suitable for everyone, including vegans. It is best to take these supplements with a meal that contains fat, as fat increases the absorption of omega-3s.

Finally, keep in mind that omega-3s are perishable, just like fish, so do not buy a lot. If you by the enteric coated type which have been processed, occasionally open one to make sure the oil has not turned rancid. Omega-3s may be one of the most beneficial supplements you can take. Just make sure you buy it from a reputable source.

Note: While eating fish regularly is a good way to gain these benefits, there's a growing shortage of safe fish on the world market. That's why I've become a big advocate of supplementing your diet with one–three grams of pharmaceutical-grade fish oil daily. Be sure to choose oil that's been tested and from which all heavy metals have been removed, such as the enteric-coated oil.