What You Should Know About Omega-3 Essential Fatty Acids

By Ryan N. Harrison, MA, BCIH

Ryan N. Harrison, MA, BCIH is a board certified Holistic and Integrative Health Consultant and Educator. He has taught nutrition and holistic health for many years in both online and traditional settings. He has his Masters Degree in Transpersonal Psychology and certifications in several areas of health and wellness.

In recent years, there's been quite a buzz about "omega-3s" and "EFAs," and for good reason: omega-3 fatty acids have been shown to provide an amazing array of health benefits literally from head to toe. Hundreds of studies have already investigated and confirmed a host of ways that omega-3s positively affect health. And more research is underway presently, as scientists seek to unlock additional ways that this amazing nutrient contributes to overall wellness.

But what *are* EFAs and omega-3s? "EFA" is short for *essential fatty acid*, a healthy kind of fat that is actually necessary for life; every living cell in the body needs EFAs to function. In nutrition, something is called "essential" if it's required for life but not produced within the body, necessitating some kind of intake, such as via the food you eat. So EFAs are a kind of "good fat" that your body actually requires to stay alive

There are several kinds of EFAs, and omega-3s fall under this umbrella. The omega-3 fatty acids include *alpha-linolenic acid* (ALA), *eicosapentaenoic acid* (EPA), and *docosahexaenoic acid* (DHA). Of these three, the most readily available and significant fatty acids are EPA and DHA, most easily obtained via fish oils. Typically found in plant sources, ALA is converted to EPA

and DHA in the body, but only at a very low ratio, and probably varying according to age, gender and other factors.^{2,3} In fact, it can take as many as 3-4 *grams* of ALA for your body to make a scant 300 *mg* of EPA out of it.⁴ As a result, most studies have focused on the ability of EPA and DHA to influence health, and while ALA is available in supplement form, the vast majority of omega-3 supplements feature EPA and DHA to begin with, saving your body one metabolic step toward the use of these vital nutrients.

Having enough omega-3 fatty acids in your body is an important step in achieving and maintaining optimal health. Studies have confirmed that people who maintain high enough levels of omega-3s have markedly reduced rates of heart attack and stroke, and may reap additional benefits such as the prevention or management of depression, cancer, osteoporosis, bowel disorders, arthritis, diabetes, age-related macular degeneration, candidiasis, eczema, psoriasis, poor memory, and other debilitating health issues. ^{5,6,7,8,9,10}

Omega-6 Foods

Most fried foods
Bread
Most processed foods
Grain-fed beef
Chicken
Eggs
Most vegetables oils
Cereals

Grain-fed dairy products

Omega-3 Foods

Fish/fish oils
Soybeans
Walnuts
Flaxseed
Chia seed
Kiwis

Grass-fed beef and dairy products
Olive oil

Leafy green vegetables

Along with the omega-3s, there are also omega-6s, which are required for human life, as well. It's much easier to get omega-6s than it is omega-3s, and some diets – such as the standard American diet – are quite rich in omega-6s and poor in omega-3s. Unfortunately, an imbalance

of omega-6s and -3s can result in a host of health problems and chronic diseases such as heart disease, hypertension, diabetes, obesity, premature aging, and even some forms of cancer. 11,12

Experts suggest that the human body evolved to thrive on a diet that had a roughly balanced intake of omega-3 and -6 fatty acids. ¹³ It is proposed that a 1:1 or perhaps 2:1 ratio of omega-6s to -3s is actually ideal for human health. ^{14,15} The typical American, however, has a diet that significantly favors omega-6s, with a ratio somewhere between 10:1 and 40:1! ¹⁶ And when omega-6s out-number the omega-3s, they can have damaging results. Omega-6s that are not kept in proper balance by their omega-3 counterparts translate into huge increases in the risk for inflammatory and autoimmune diseases. ¹⁷

You can approach this issue a few different ways. For starters, you can minimize your omega-6 intake by eating a healthier diet with less processed and fried foods, less grain-based carbohydrates, and less reliance on traditionally-raised meat for protein. Alternately, you can increase your intake of omega-3 foods, such as cold water fatty fish (i.e., salmon, tuna, catfish, etc.), certain nuts and seeds, and leafy green vegetables.

Unfortunately, trying to meet your EFA needs through changes in dietary choices alone can be difficult. Many people find it hard to steer clear of omega-6 foods. And getting your omega-3s from food sources can be tricky: on the one hand, as described above, you have less

Some Health Benefits of Omega-3 Supplementation:

- Healthy eye, brain, & nervous system development in utero
- Improved outlook & mood stabilization
- Increased concentration & memory
- Healthy circulation & blood pressure
- Lowing of triglycerides & LDL
- Proper immune function
- Reduction of symptoms associated with asthma, arthritis, & inflammatory bowel disease
- Healthy weight loss
- Bone density support
- Healthy skin & hair
- Prevention & management of numerous serious diseases & health concerns

bioavailability when you try to get them from plant sources (though if you do, you should be sure your sources are organic); and on the other hand, most seafood available for purchase today – whether at the market or in a restaurant – is tainted with any number of contaminants, including unsafe levels of mercury, arsenic, lead, and PCBs (chemicals that can have serious long-term health implications). 18,19 In fact, even the U.S. Environmental Protection Agency and Food and Drug Administration suggest that some populations should only eat fish once or twice a week, to minimize risk of ingesting toxins. 20,21,22 An additional concern, when trying to obtain omega-3s via food, is that you never know exactly how much EPA and DHA you're actually taking in. Omega-3s fatty acids are fragile and can be easily lost in cooking or processing, and there aren't any labels on seafood to tell you how many omega-3 EFAs you're getting and in what measure.

Clearly, there should be a better way to balance out our omega-6 intake and obtain the wellness-promoting properties of omega-3 fatty acids without compromising your health! And there is: supplementation. The various health effects of omega-3

supplementation are profoundly pertinent to some of today's most serious and endemic health issues, and research continues to support the role that omega-3s can play in prevention and treatment; even the American Heart Association, which has a longstanding bias against supplements, recommends that people take fish oil.²³ But not all omega-3 supplements are equally good for you.

As noted above, most omega-3 supplements will be made with fish oil, which is naturally high in EPA and DHA omega-3 fatty acids. Unfortunately, not all fish oil supplements are actually good for your health. One study that tested 10 different varieties of fish oil capsules for purity found that each and every one of them contained dangerous chemical compounds.²⁴ Add to this very real concern the "fishy aftertaste" that many people dislike where omega-3 fish oil supplements are concerned. As trifling as it may sound, it is often enough to keep some people from reaping the rewards of omega-3 supplementation.

Fortunately, there are omega-3 fish oil supplements available today that meet these problems head on. The best fish oil supplements will have gone through some kind of toxin-

Q: Should I take an Omega-3-6-9 Supplement?

A: No. Considering most people's diets are relatively high in omega-6s, there's no need to add more to your body via supplementation. And omega-9s are a fatty acid that your body makes out of unsaturated fats that you consume every day, so you don't need to supplement with them, either. Sticking with a high-quality, pure omega-3 supplement is your best bet.

removing filtration, ensuring purity. Look for an indication on the supplement label that the fish oil has been "filtered," "distilled," or otherwise cleaned; if it isn't on the label, chances are it isn't a toxin-free omega-3 supplement. And if the aftertaste of fish oil supplements is a particular aversion for you, find one that is labeled "enteric coated," which ensures that the capsules don't dissolve and release the fish oil until they are past your stomach and in your intestines.

Finally, be sure that your omega-3 supplement delivers significant amounts of both EPA and DHA fatty acids. There is no official RDA for omega-3 EFAs, though the FDA has stated that intakes up to 3,000 mg per day are generally recognized as safe,²⁵ and many studies confirm positive health effects within a wide range of 1,000 mg – 10,000 mg per day.^{26,27} Consult a qualified health practitioner to determine what range of supplementation will best suit your particular needs, and be sure that whatever supplement you use, it clearly states how much EPA and DHA is in each dose, so you know how many capsules to take.

¹ Balch, Phyllis. *Prescription for Nutritional Health*, 4th ed., Avery Publishing, ©2006.

² http://articles.mercola.com/sites/articles/archive/2007/10/20/beware-of-misleading-omega-3-claims.aspx

³ http://www.lef.org/magazine/mag2003/dec2003 report omega 01.htm

⁴ http://articles.mercola.com/sites/articles/archive/2002/04/03/evolution.aspx

⁵ http://www.lef.org/magazine/mag2007/jun2007_awsi_01.htm

⁶ http://www.lef.org/magazine/mag2006/sep2006_report_omega_01.htm

⁷ Omega-3 Fatty Acids, Vibrant Life Publishing, Inc., ©2008.

⁸ http://www.lef.org/magazine/mag2003/dec2003_report_omega_03.htm

⁹ Balch, Phyllis. *Prescription for Nutritional Health*, 4th ed., Avery Publishing, ©2006.

¹⁰ http://www.whfoods.com/genpage.php?tname=nutrient&dbid=84

¹¹ http://articles.mercola.com/sites/articles/archive/2002/03/20/omega3-oils.aspx

¹² http://www.whfoods.com/genpage.php?tname=nutrient&dbid=84

¹³ Omega-3 Fatty Acids, Vibrant Life Publishing, Inc., ©2008.

¹⁴ Omega-3 Fatty Acids, Vibrant Life Publishing, Inc. ©2008.

¹⁵ http://www.lef.org/magazine/mag2003/dec2003_report_omega_01.htm

¹⁶ http://www.lef.org/magazine/mag2003/dec2003_report_omega_01.htm

¹⁷ http://www.lef.org/magazine/mag2003/dec2003_report_omega_01.htm

¹⁸ Omega-3 Fatty Acids, Vibrant Life Publishing, Inc., ©2008.

http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/fish/index.html

²¹ http://www.ewg.org/node/21527

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²⁷ http://articles.mercola.com/sites/articles/archive/2002/03/20/omega3-oils.aspx