

OMEGAS

What are they?

When we start tracking our health and fitness, we have a large emphasis on macro nutrient targets and what we should be eating as an 'overall.' But sometimes, we forget to look at the micro nutrients. Part of our "micronutrient" requirements include the Omega group. I am sure you have all heard of Omega 3, 6 and 9. But what do they all mean, what are they for, and what do they do?

Omega 9s are non-essential fatty acids. They are produced by the body and are found within our cells. However, Both Omega 3 and Omega 6 are essential fatty acids, meaning that we cannot produce them on our own and must obtain them through our diet. Both are polyunsaturated fatty acids but differ in chemical structure.

Omega 3s play a vital role in our heart, eye and brain function. They come in, funnily enough, 3 forms. These are:

- Alpha Linoic Acid (ALA)
- Docosahexaenoic (DHA)
- Eicosapentaenoic acid (EPA)

ALA is an essential nutrient to the body, because it can not be produced by the body itself. It needs to be consumed or ingested. ALA is converted into DHA and EPA, which are unsaturated omegas required to assist with brain function. DHA and EPA are critical omega 3 fatty acids that the body requires because they aid in 'building' hormones that control our immune system, blood clotting and cell growth.

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DHA and EPA are found in seafood like salmon, sardines and black cod. ALA is found in plant products and algae, like spirulina, greens and a lot of nuts and seeds, like walnuts and hemp. EPA and DHA can also be consumed and are found in large amounts in things like chia seeds and flaxseeds.

Omega 3s play an essential role in supporting brain function and have scientifically proven to reduce symptoms of anxiety and depression. Apart from aiding in heart, eye and brain health, omega 3s also reduce inflammatory markers. Omega 3 reduces production of molecules and substances linked to inflammatory cells (cytokines). This is why they are incredibly beneficial for those with arthritis and joint pain.



Omega 6s are considered essential and are branched as linoleic acid. These are found in things like olive oil, coconut oils and seeds and nuts. By contrast, they are found in numerous modern diets. They are in abundance in processed and frozen foods. The body constructs hormones from omega 6 fatty acids. However, by contrast to the 3's, Omega 6 attend to increase inflammation as an important component of immune response, and increase blood clotting and cell proliferation. As you can see, Omega 3's "build" and Omega 6's "increase" - which means we need to ensure we get an even balance between the two.

We now find that with diets being more processed, and reliant on convenient foods, our Omega 6 intake is far too high. This imbalance can cause and contribute to depression, cancer and autoimmune diseases. All which stem from inflammation in the body. The lack of Omega 3s mean we can't repair or rebuild new hormones and cells, and we are over run with inflammatory cells through out our bodies. We should be aiming for a 2:1 ration of Omega 6s to Omega 3s - but our current modern diet have this ration closer to 3:1. In order to reduce our Omega 6 intake, we need to choose natural products and reduce our intake of processed foods.

We can increase our Omega 3s by taking supplements like spirulina and fish oils and, increasing our intake of fish, leafy greens, walnuts and chia seeds