## Feeding your Brain Part 1 - Looking at Omega-3's

What do you want from your brain? Loaded question isn't it...but with so many options to choose from why wouldn't you be setting yourself up to be able to achieve them all? You can do it too; it just takes some small changes to what you're eating and adding in a bit more physical activity for extra benefits.

So where to start? Let's start with Omega-3s as there is so much research and evidence to support the use of these amazing little fatty acids in the health of your brain, heart, skin, eyes and overall growth and development. They also support the reduction of depressive symptom and mild cognitive decline when consumed regularly, either in supplement form or through various foods.

Omega-3s are polyunsaturated fatty acids (PUFA's) that are typically derived from fatty fish such as; salmon, mackerel, anchovies, sardines, and herring, think SMASH as an easy acronym. They can be obtained from the fish itself or if you don't enjoy eating fish, you can get them in supplement form but note quality of these is important, more details near the end.

## There are 3 types of Omega's as the name indicates:



First we have **EPA** (eicosapentaenoic acid), which your body uses to produce cell signalling molecules called eicosanoids that play numerous roles in the body, including reducing inflammation. EPA is highest in *herring*, *salmon*, *shrimp*, *and sturgeon*. Some grass-fed dairy and meats also contain EPA but at lower levels than in seafood. If possible *choose organic meats and dairy* as they contain 50% more Omega-3s than nonorganic (1, 2).

Second, you have **DHA** (docosahexaenoic acid) which is an important structural component of your skin as well as the retinas of your eyes.

DHA is vital for human growth and development beginning in the womb and remains essential with regards to the development and function of our brains, continuing throughout adulthood. Found in *SMASH*.



Third is **ALA** (alpha-linolenic acid), the most common of the 3 omega's. It is found in plant foods and needs to be converted into DHA & EPA before the body can utilize it. However, this process only allows for an approximate 10% conversion rate which does not provide us with sufficient amounts of DHA & EPA. Regardless, they are very beneficial and should be included in your daily diet if possible. ALA can be found in: *flaxseeds, chia seeds, walnuts, avocado, soybeans and soybean oil, as well as canola oil.* 

If you are looking to support your brain in relation to mood disorders, like mild depression, you will want to look for an *Omega-3 supplement with a 2:1 or even 3:1 EPA/DHA ratio* or include more of the fish listed higher in EPA. Since EPA can cross the BBB (blood brain barrier) more easily it has been shown more effective in reducing inflammation which is a driver in many conditions including mood related disorders (3).

If you prefer to use supplements as opposed to consuming 140g of fatty fish 2-3x weekly, which would be the minimum requirement to obtain beneficial amounts of EPA or DHA consider this:

- Look for supplements that have the GMP (good manufacturing practice) stamp.
- Check reviews
- Spend a bit more money, you are paying for quality in most cases
- Look for GMO free as well as free of artificial colours and chemicals

I personally use Nordic Naturals EPA Xtra Lemon 1000mg (4) and purchase it on iHerb for €30.

Supporting your brain is essential to bettering your health overall. Stay tuned for ways to support and feed your brain in next week's wellness update.

If you have further questions regarding Omega-3s or any supplementation you may be taking please feel free to get in touch, I am happy to answer any questions you may have.