



Why Fish Oil?

In just the same way that your muscles are made out of protein and your bones out of calcium, your brain and all your nerves are made out of Omega3 fats. In addition to this all of your cell membranes (the outer wall of the cell) contain fat too (for the biology geeks out there the cell membrane is called a phospholipid bi-layer and the lipid is Omega3 fat). The flexibility of this outer cell wall is extremely important for the cells to work properly and for our nerves and hormones to be able to tell the cells what they should be doing. When the cell wall is made out of Omega3 fats, this keeps the membrane fluidly flexible. When we eat too many trans-fats (the unhealthy fats found in fried and processed foods e.g. hydrogenated vegetable oil), then these fats are incorporated into our cell walls and the wall stiffens up as a result. This reduces the cell's ability to respond to signals in its environment. An example of such a signal might be the neuro-hormone called Serotonin, released by a near-by nerve ending. If the cell is less able to respond to the Serotonin, this results in a decrease in our ability to feel happy and relaxed!

Going back to the fact that our brains are built out of Omega3 fats, this explains why so many pregnant mums become so forgetful late in their pregnancies. If you are building a second brain in your tummy, but aren't getting enough of the raw materials needed to build that brain, your body will automatically take the required Omega3 oils from your own brain, therefore reducing its function and making you forgetful (where did I put that bottle of fish oil again?). This continues while you are breastfeeding.

The other important aspect to Omega3 fats is the fact that they form the building blocks for our bodies' anti-inflammatory chemicals. In other words, having plenty of Omega3 fats in your diet is like taking a natural, food source anti-inflammatory. On the other hand, Omega6 fats form the building blocks for our pro-inflammatory chemicals – eating too much Omega6 fats primes your body for inflammation and the perception of pain. The Western diet is extremely high in Omega6 fats (found in grains, like wheat, and in vegetable oils) and deficient in Omega3 fatty acids.

We all require about 1gram of long chain Omega3 fatty acids (EPA and DHA) per day to maintain the health of our brains and all the other cells of our bodies (remember, all cell membranes contain Omega3 fats).

So why can't we just get it from our normal diet?

Well, we used to get Omega3 fats from all of the animal products that we ate – that was when animals ate their natural diet of grass and shoots and leaves etc all of the time. However, these days almost all animals are farmed and are therefore fed varying amounts of grains (which are high in Omega6 fats). This means that the fat profile in their meat is very different.

It is possible to source (organically reared), grass fed beef, wild game is also a good option, but the majority of the animal products we eat today do not live up to this standard.

It is important to be able to talk to your farmer about the diet of the animals that you eat. The last few months of an animals life can be crucially important as even if they are grass fed up to this point they may be 'fattened up' on grain before they are slaughtered.

In addition, humans do not convert the shorter chain Omega3 fats found in vegetable sources (such as flax, hemp or walnut oil) into the necessary longer chains very efficiently (and some scientists say not at all!).

Why can't I just eat a lot of fish?

Today even the majority of fish we eat are also farmed – and therefore fed grain (as well as there being many other problems associated with fish farming; both for the health of the fish and the environment).

In addition to this, our oceans are now so polluted with heavy metals and other toxins (such as mercury, dioxins and PCB's) that if you ate enough fish to get all of your Omega3 requirements you would probably start to glow in the dark!

So what's the answer?

The answer to this dilemma is *purified* fish oil. Unfortunately, not all fish oils are created equally however; there are some brands out there that do purify their oils to the highest standards. Examples of these include Eskimo3 and Higher Nature. We feel that the best of these oils is "Omega 3 Deluxe" whose oil is 3rd party tested for purity. For this reason we stock Omega 3 Deluxe and it is available for you to purchase at the practice. Of course you are welcome to investigate other brands of fish oil for yourself. If you would like to do this, the things to bear in mind are the *dosage* and the *purity*. Remember that we each require 1gram of the long chain Omega3 fatty acids, EPA and DHA, every day (that's 1 gram of EPA and DHA combined). Due to the fact that all of us are deficient in Omega3 oils, the best recommendation is to take 2grams per day for 1 year, to replenish your stocks, and then maintain this with 1 gram per day from then on.

If a company purifies their oil well enough, they will be proud of that fact and advertise it obviously on their packaging. Please also note that 1 gram of fish oil does not necessarily equate to 1 gram of EPA / DHA. You must check the break down of the ingredients.

If you choose to take Omega Sufficiency, 1 teaspoon of the oil will give 1 gram of the long chain Omega3 fats (EPA & DHA). So, we recommend taking two teaspoons per day for 1 year and then dropping down to the maintenance dose of 1 teaspoon per day from then on. It is important that once you have opened the bottle it is kept in the fridge and you should shake the bottle regularly to ensure that the natural lemon flavouring (hmmm – delicious!) doesn't settle at the bottom of the bottle. If you have any questions about this information please don't hesitate to ask your chiropractor.

