Use of Supplemental Omega-3 Fatty Acids in Clinical Practice - from Premier Research Labs

Many individuals have asked me for my opinion about healthy fats, especially omega-3 fatty acids. My general view is that most oils/omega-3 fatty acid supplements should not be consumed for the reasons I've described below. At the same time, there are omega-3 supplements that I do recommend and take myself, those are described below as well.

Differences in Polyunsaturated Fatty Acids. Different types of Polyunsaturated Fatty Acids ("PUFA") can differ greatly in their health effects, for example, safflower oil vs. DHA oil. It would be inaccurate to lump all polyunsaturated fats together and conclude that their effects are equal. For example, the effects of safflower oil and DHA are distinctly different even though both are polyunsaturated fats. In clinical studies, consumption of DHA has been shown to be highly beneficial whereas safflower oil has not (and in fact, has been shown to create oxidative stress). My recommendation for DHA is that it be derived from algae.

Damaged Oils. Unfortunately, PUFAs sold for human consumption have been typically pressed at 140 degrees (head press temperature) which damages the oil in various ways. Secondly, the oil is typically packaged in clear plastic bottles. Not only do plastic particulates from the bottle potentially leach into the oil over time, but exposure to light (through the clear plastic) turns the oil rancid even faster than exposure to air.

In addition, certain types of dark plastic (with a "greasy-like" feel due to plasticizers) can also leach plastic particulates into the oil (even though the dark bottle blocks light). My personal view is that the negative health effects of these rancid oil supplements are so potentially harmful that they should not be allowed to be sold. I believe that no responsible practitioner should recommend supplements with plastic-contaminated or light- or heat-damaged oils.

Finding Quality Oils. However, it is possible to find quality oils. For example, **flax oil** that has been **organically grown**, packaged in nontoxic, dark plastic and then nitrogen flushed (to eliminate increased peroxidation from oxygen) may test as quite beneficial. Although it is omega-3 oil, the body must convert flax oil to EPA and DHA.

Small amounts of fats naturally occurring in whole raw foods (that have not been heated) can also increase highly desirable essential fats in the diet. An outstanding source of omega-3 fatty acids is **algal-derived DHA**.

The Need for DHA. The brain matter of the average person is comprised of 60% fat (with 15-20% of total fat in the brain as DHA, docosahexaenoic acid). DHA comprises 30 – 60% of the human retina. DHA is also present in high amounts in nerve cells located throughout the body. If a person were to approach zero DHA levels in their body, they may be at greater risk for various

neurological compromises such as muscle stiffness, slow reaction times, difficulty in eye-hand-motor coordination and over time, increased neurological deficits.

In clinical practice, I have personally observed the beneficial effect from recommending algal-derived DHA to thousands of people, including improved blood lab tests as well as improved symptomology.

In addition, ground-breaking studies now demonstrate the pre-eminence of the body's biofield over the body's entire physiological/neurological hierarchy. Thus, through the use of "energy eyes" (the art of QRA^{SM} testing or **Quantum Reflex Analysis**^{SM}), I have been able to understand the effect of many types of oil supplements on the major organ/gland control points of the body.

In this research, I have found most omega-3 oil supplements generally available test poorly and act with a deleterious response to one or more major organ/gland control systems, with the exception of **algal-derived DHA**. This has led me to conclude that the processing and handling of most oil supplements (as well as their originating source) represent a serious health threat.

DHA Supplementation: A Restaurant Necessity. A recent study has shown that if the body consumes "good oils" at the same time as "bad oils" (i.e. trans fats, fried oils) during a meal, it will preferentially uptake the "good oils" (such as DHA) and not the "bad" ones. However, if only "bad oils" are available at a meal, the body will use them rather than no oils at all.

This makes a strong case for supplementing with a good quality DHA source, especially when eating out where poor quality oils are commonly used in foods. Each practitioner needs to face the brutal facts that the typical patient eats out on a regular basis and is consistently exposed to these harmful dietary fats.

Therefore, I encourage the responsible practitioner to recommend that their patients **take 400 to 1000 mg of a good quality DHA supplement at every restaurant meal** to supply the "good oils" in order to prevent the potentially negative neurological consequences of "bad oil" uptake into cellular membranes.

A recent study has also shown that DHA can easily be converted by the body to form EPA as needed, so it is not necessary to consume EPA.

Vitamin B6 Deficiency. Many patients, especially over the age of 40 and particularly women who have taken birth control pills, may present with impaired biliary flow. Bile is essential in fatty acid emulsification and absorption. Vitamin B6 is a critical player in keeping bile salts in suspension in the bile veins and gallbladder. For these individuals, supplementation with a quality DHA source may not be sufficient unless vitamin B6 is also administered. (Taking a few drops of a limonene oil in water at the same meal with DHA oil can help promote emulsification of the oil for better absorption.)

The Truth About Fish Oils. Cod liver currently available in the US is not USP grade and thus, may contain mercury and other contaminants. To eliminate these contaminants, some companies have resorted to the use of molecular distillation of fish oil.

The Questionable Molecular Distillation Process. In the molecular distillation process, fish oil is separated through factions of different molecular weights which alters the oil from its original state. The starting natural triglyceride form is lost as the natural oil is converted into ethyl esters, which are then recovered as distilled fatty acids in the final product.

Some types of molecular distillation processes repeatedly raise the temperature of the fish oil to 200^0 C (390^0 F) to concentrate EPA/DHA and remove toxins. A solvent, such as hexane or others, may be used which can damage fats. This distillation process also removes the naturally occurring vitamins A and D. This process can increase oxidation as well as heat-damaging the oil. QRA^{SM} testing has suggested that molecularly distilled oils are far from desirable and act to severely stress the organ/gland control points. In my opinion, molecularly distilled oils should not be recommended.

On the other hand, natural fish oils may contain undesirable levels of mercury and other contaminants and even though they have not been molecularly distilled, their high contaminant levels prevent me from recommending them in good conscience as well.

Conclusion. In light of the pitfalls in finding a good quality omega-3 supplement (such as fish oil or DHA), it is understandable how one might conclude (although erroneously) that no supplemental oil should be consumed at all. Failing to address the overall poor omega-3 status of patients would condemn them to the risk of reduced neurological function, including reduced brain volume, cognition and memory.

As the benefits of DHA have been confirmed in many studies as well as in my own personal clinical experience, I encourage practitioners to recommend **400 – 1,000 mg of algal-derived DHA to patients who may benefit from increased omega-3 consumption.**

The average U.S. diet is deficient in omega-3 fatty acids. The most beneficial effects of omega-3 oils are due to EPA and DHA. When sufficient DHA is present, the liver can easily convert DHA (via one step) to EPA. Due to its outstanding clinical benefits, I routinely recommend taking an **algal-based DHA** supplement on a regular basis.