

Combination Fatty Acids

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Even though most of us are very familiar with a general understanding of essential fatty acids and their ability to reduce inflammation, new data gives us greater clarity of the role they play in genetic expression, longevity, pain reduction, and immune modulation. Understanding new data allows us to articulate to our patients why every one of them should be on a combination fatty acid program. The bottom line, according to Dr. Alex Vasquez, is that patients live longer and have a greater quality of life when they are on essential fatty acid supplementation.

I will be brutally summarizing a webinar that Dr. Vasquez presented on this subject. You can see the link below, but suffice it to say that he has renewed my passion for using combination fatty acids for myself and every patient.

Here are three new reasons to be on essential fatty acid therapy: resolvins, docosa-trienes, and protectins. The suppression and resolution of inflammation, but especially pain, is an active process in the body. And this ongoing



active process is supported by the presence of two relatively new protectins. They are both dependent upon the dietary sources of omega-3 fatty acids. Resolvins come from EPA, and new data shows that they are important to manage the perception of pain. Docosa-trienes come from DHA and shed new light on managing inflammation. Protectins also originate from DHA and are another category of EFA that have neuro-protective as well as anti-inflammatory effects.

Interestingly, Dr. Vasquez points out that EPA converts to DHA, and DHA can convert to EPA depending upon the requirements of the body. We

need both forms; however, the body will convert them as needed unless genetic problems exist.

Tregs are short for T-regulatory cells. Tregs are important in reducing or modulating autoimmune conditions. New data shows EFAs are important activators of Tregs. Data also shows EFAs are important to reduce hypothalamic or brain inflammation.

Fatty acid receptor sites called PPAR-gamma (peroxisome proliferator-activated receptor gamma) and PPAR-alpha (peroxisome proliferator-activated receptor alpha) are activated by GLA and EPA

and stimulate a host of anti-inflammatory, anti-cancer, effects by inhibiting NF-kappa B. In effect, the use of GLA and EPA feed the pathways necessary to modulate genetic expression.

Mitochondrial repair has become a major part of many chronic disease therapeutic protocols. The fatty acid DHA is essential for the health of the inner membrane of the mitochondria called cardiolipin. Remember the headlines stating that statins reduced mortality? When you look closely at the data, you can see that essential fatty acids reduced mortality to a greater extent. For cardiac mortality statins reduced death at an impressive rate of 0.69 compared to controls. However, Omega-3 fatty acids reduced death to a rate of 0.44. And for overall mortality statins reduced death to 0.79; however, essential fatty acids brought the death rate even lower to 0.68. These are profound numbers, yet they still do not reflect all the benefits of combination fatty acid therapy.

It was interesting to learn that ALA from flax seed oil significantly blocks prostaglandin metabolites including PGE2. ALA decreased the excretion of urinary PGE2 -52% to -85% over controls, showing its anti-inflammatory effect beyond the conversion to EPA or DHA. In humans with dyslipidemia, ALA blocks C-reactive protein, serum amyloid A, and interleukin-6. The cytokine interleukin-6 is another major marker for inflammation, which is one more incentive for using ALA on a regular basis.

Remember, when we use one fatty acid exclusively, we reduce other essential fatty acids. For example, an excess of EPA/DHA will reduce GLA and oleic acid which have anti-inflammatory and anti-cancer benefits. If we supplement GLA, we reduce EPA which has anti-cancer and anti-inflammatory benefits. If we add ALA, we reduce oleic acid which has cardio-protective benefits. If we add GLA exclusively it converts to DGLA, which unless we provide EPA can convert to arachidonic acid.

Let's face it, the standard American diet promotes the wrong oils, and as a result, chances are very strong that our patients are deficient in all the EFAs. Dr. Vasquez designed a product for Biotics Research Corporation called Optimal EFAs. 2 capsules contain 530 mg of ALA, 205 mg of EPA, 154 mg of DHA, 152 mg of GLA, and 200 mg of oleic acid from fish oil, organic flax seed oil, and organic black current seed oil. Dr. Vasquez suggests 12 capsules of Optimal EFAs a day as a therapeutic dose.

In summary, the benefits of combination fatty acid therapy include anti-cancer, cardio-protective, neuro-protective, and anti-diabetic effects. People feel better and can live longer. Please take the time to review this foundational webinar. Because it is recorded, you can stop and review the slides to gain a firm grasp of the subject, and when you do, I think you will join me in my excitement as we renew our understanding of combination fatty acid therapy.

Thanks for reading this week's edition, and I'll see you next Tuesday.