The Science NOT Opinion e-Newsletter

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PEOs — The Ultimate Natural H1N1 (Flu) Eliminator?

The following comes directly from EFA expert Paul Beatty of Canada who studied with the late Dr. David Horrobin — world renowned EFA scientist who pioneered and advanced our understanding of EFAs and their metabolic pathways.

I edited his material with respect to derivatives and fish oil because those of you familiar with my work already know that derivatives are made “as needed” by your body. Please view the startling video, ”What’s Wrong with Fish Oil;” at brianpeskin.com

Science has much more to offer people in protecting us from the "impending Swine Flu Pandemic crisis," than washing our hands and coughing in our sleeves.

The reason for this lack of shared knowledge and non-communication is simple---there is no money to be made in telling people what to eat to protect themselves and what not to eat to keep their immune systems functioning correctly. Furthermore, changes in lifestyle meet with poor compliance by consumers.

Enveloped viruses (most viruses we know of) are coated by lipids (fats) and enter our cells by tricking themselves into the lipid structure of our cell membranes. It is the **composition of our complex cell membranes as a barrier that determines resistance to the viruses** gaining access to our cells. Long Chained Polyunsaturated Fatty Acids and Medium Chained Saturated Fatty Acids prevent viruses from entering our cells by disassembling them. LCPUFA (Long Chained Polyunsaturated Fatty Acids) metabolites like GLA, Arachidonic Acid, EPA and DHA are the most powerful at inactivating viruses because they have been desaturated by the Delta 6, 5, or 4 enzymes.

A deficiency of both PEOs — parent Omega 6 (Cis-linoleic) and parent Omega 3 (Alpha Linolenic) in their BIOLOGICALLY ACTIVE FORMS has made the general population more and more susceptible to viral infections.

The reason for this has been the large amounts of processed oils and transfats (biologically inactive) consumed in today’s processed food. **Most of these processed oils have been Parent Omega 6 (Linoleic Acid) but these oils are biologically dead for the most part and will not desaturate and give rise to critical eicosanoids that regulate cellular activity including the immune**

response (i.e. PGE1). Since over 90% of the North American food consumed is now processed--it is easy to see why almost everyone is deficient not only in biologically active Omega 3's but more so deficient in biologically active Omega 6's.

Furthermore, the ability to convert parent EFAs to metabolites has been impaired by diet and lifestyle factors such as--too much sugar, too much stress, deficiencies of key co-factors like zinc, magnesium, B12 etc. and disease states like diabetes and cancer that all impair Delta 6 desaturization. (Contact the author for a list of further impairment factors.) Deficiencies of EFA parent biologically active lipids (PEOs) and the subsequent deficiency of metabolites along with lack of sunshine (vit. D3) has made us more vulnerable to viral infections than ever before.

To protect yourself against contracting enveloped viruses like the H1N1 the following recommendations should be followed:

1) Eliminate as much processed sugar from your diet as possible (impairs Delta 6 desaturase).
2) Reduce stress (cortisol and other stress hormones impair Delta 6).
3) Avoid toxic chemicals (smoking, alcohol, household cleaners and detergents, toxic drugs etc) toxins that impair Delta 6 desaturase.
4) **Eliminate transfats and processed oils in processed food (block incorporation of biologically active PEOs into our cell membranes.**

There is a long spotted history relating the effect of viral infections and essential fatty acid metabolism. In 1935, soon after the discovery of EFAs, it was published that viral infections were associated with an abrupt fall in the iodine value of the blood, which *indicated a fall in the plasma concentration of EFAs*.

It wasn't until some 40 years later that Stoesser and his group found that infection of human cell lines with certain viruses could interfere with the ability of those cells to desaturate linoleic acid. More recently, it was found that Epstein-Barr virus infection in young adults (mono) is associated with **prolonged falls in the plasma levels of both Linoleic Acid** and its metabolites (GLA, DGLA, AA).

Finally, the now deceased eminent scientist Dr. David Horrobin (my mentor) brought these research results to clinical practice with Dr. Peter Behan in a randomized double blind placebo-controlled study of "Essential Fatty Acids in the Treatment of Postviral Fatigue Syndrome" published in 1990. What does this have to do with the H1N1 Flu---well just about everything if you understand EFA metabolism, flu symptoms, and the actions of viral replication at the cellular level. **Observations by Dr. Horrobin raised 2 important effects of EFA's on viruses**.

1) **EFAs themselves can disrupt and inactivate those viruses that have a lipid envelope**---the effect is greater the greater the degree of desaturation.

2) The action of interferon against viruses requires the presence of the cyclo-oxygenase enzyme, which suggests that prostaglandin metabolites of EFAs might be required for the full expression of interferon action against viruses.

If the above is true (research supports these facts) then this science would also explain why atopic people are abnormally susceptible to many viral infections and patients with certain viral infections like EB and AIDS viruses develop full-blown atopic syndromes. **Viruses attempt upon entering the cell due to an EFA deficiency in the membrane, to inhibit Delta 6 desaturase so the cell cannot make enough EFA metabolites to deactivate the virus**. In this way our cell becomes the host of the virus.

Current research (U.S. Patent # 4,841,023) applies to the inactivation of viruses in blood plasma. According to the patent--unsaturated fatty acids with at least one double bond in the cis configuration (biologically active) and containing 16-20 carbon atoms are effective in deactivating viruses that are enveloped. (i.e. FLU viruses). **The patent includes a list of fatty acids, but the most important for the purpose of this paper are: linoleic**, linolenic gamma-linolenic, arachidonic and palmetic fatty acids. Small concentrations of these fatty acids will deactivate enveloped viruses like Herpes, influenza etc. within minutes. (see patent for details)

Research has shown that long chain saturated fatty acids and short chain saturated fatty acids have NO anti-viral effect. But, Medium chain saturated and long chain unsaturated fatty acids deactivate enveloped viruses. The loss of the ability of the virus to spread and infect is attributed to the disruption of the lipoprotein envelope of the virus and has been observed many times under electron microscopes.

With this information in mind, it is the individual's choice as to whether they wish to be vaccinated with the new H1N1 vaccine or not. In my opinion, it is one big experiment that my family will not participate in especially knowing that mercury, formaldehyde, and aluminum derivatives are in most vaccines. In my family; the proof is in the pudding and it has now been 16-19 years since anyone had a full-blown cold or flu in our household.

In closing; if you really want to avoid catching the H1N1 flu and don't want to experiment with your families health with the "safe" vaccine, then do this; eat like your great grandfather; get rid of the BAD fats and processed food and get some Evening Primrose oil, Coconut oil, vit D3 and a good multi-min/vit into you. This is

even more critical for people with compromised immune systems (impaired Delta 6); my advice to "sick" people is to avoid being vaccinated.

Paul, thanks so very much for your understanding and recommendations!

Brian Peskin