August 2017: Two Seminal Journal Articles Confirm the Extraordinary Power of PEOs in Expediting Healing, Combatting Diabetes, Cardiovascular Disease, and Cancer

The fats you consume are critical. I thank physician Dr. Jeff Matheson, HBSc(Biochem), MDCM (Canada) for bringing these articles to my attention — adding to the existing understanding of why physicians and their patients experience such significant successes with PEOs (Parent omega-6 and Parent omega-3). Because of the highly technical research / biochemical nature of these discoveries, many medical professionals may not be familiar with them.

Since the birth of modern medicine, most of the energy and research in biochemistry has been directed towards nucleic acids and proteins—a sort of "cart before the horse" approach. This landmark research confirms what the visionary physiologist / biochemist David Horrobin, MD, PhD, hypothesized decades ago that "proteins are literally afloat in a lipid sea, and their functioning is dependent on the behavior of the configuration of that lipid sea."

As the following two recent articles confirm, repairing your cell membranes with PEOs is fundamental to healing.

The first article, "Activation of the Unfolded Protein Response by Lipid Bilayer Stress,"[1] discusses a newly discovered active role of lipid membranes in health and disease. It was previously known that if defective proteins are allowed to "run wild," they can form clumps that clog cellular function.

This new discovery details the cell membrane's response to aberrant (adulterated) lipid compositions. We already knew how critical PEOs (Parent omega-6 and Parent omega-3) are to proper functioning of the cellular membrane. Now we know that their deficiency triggers chronic, long-term cellular stress.

It was just recently discovered that this inflammatory mechanism also *senses adulterated critical lipids*. The damage these defective lipids cause is at least equally bad, if not much worse. *PEO Solution* thoroughly discusses these lipids in detail so you can protect yourself. This article makes clear that if the source of these adulterated lipids isn't eliminated / minimized **from the diet**, the cell will undergo long-term stress and inflammation. This is horrific because it is now known that chronic inflammation directly leads to diseases such as diabetes, cardiovascular disease, and cancer.

[1] Halbleib, K., et al., "Activation of the Unfolded Protein Response by Lipid Bilayer Stress," *Molecular Cell*, Vol. 67, Issue,4, pp 673-684.e8, August 17, 2017.[1]

"**Biological membranes may be a game changer for the understanding of a great variety of diseases**….**We now have the conceptual framework to understand why secretory cells are hypersensitive to changes of their membrane lipids induced by the diet**." [2]

The second highly technical article details a **new discovery** into a fat-based mechanism that **minimizes the negative effects** of **eating carbohydrate (sugar)**. "Ketone Body Acetoacetate Buffers Methylglyoxal via a Non-enzymatic Conversion during Diabetic and Dietary Ketosis,"[3] details a highly toxic aldehyde (to be discussed later) byproduct of sugar (carbohydrate) metabolism that certain **fats detoxify**. Everyone —especially the diabetic patient—needs to know that these highly *toxic aldehydes destroy DNA* and cause harmful advanced glycation end products (AGEs), leading to many health-related complications and impairment of the circulatory system.

We have a worldwide diabetes epidemic with no end in sight. The substance, ∝-oxoaldehyde methylglyoxal (MG), formed from carbohydrate metabolism, is known to be involved in aging- and diabetes-related diseases and their complications. Diabetics are known to have elevated levels. However, the researchers recently showed **that the damaging effect of MG is neutralized by a metabolite of burning fat** for energy (PEOs are special fats). They found the reaction to be "non-enzymatic."

This simply means that the "neutralizing" substance (from PEOs) can simply surround and detoxify the problematic "poisonous" ∝-oxoaldehyde methylglyoxal to a much less toxic substance in the bloodstream. From our work with physicians and their diabetic patients, we can now better explain how **simply taking the PEOs minimizes the damage caused by higher than normal blood glucose levels**.

The article refers exclusively to a product from the breakdown of fats (ketone bodies). I always knew the proper PEOs would minimize the damage from higher than normal blood glucose levels, but I didn't have the (newly discovered) metabolic pathway; now I do. I thank the researchers for their excellent elucidation on the topic.[3]

Obtaining sufficient fully functional / unadulterated PEOs in the diet is critical to your health. **PEOs *naturally* fulfill your appetite, too**. As time proceeds, the medical research community continues to add more confirmation of the power of PEOs. By reading this book, you will quickly discover the remarkable health improvements from simply adding PEOs to your diet.

Brian Scott Peskin

---

[2] "Molecular biologists discover an active role of membrane lipids in health and disease," https://phys.org/news/2017-08-molecular-biologists-role-membrane-lipids.html (accessed September 23, 2017.)

[3] Salomón, T., et al., "Ketone Body Acetoacetate Buffers Methylglyoxal via a Non-enzymatic Conversion during Diabetic and Dietary Ketosis," *Cell Chemical Biology*, Vol. 24, pp 935-943, August 17, 2017.