

RETINOL AND COPPER

We must acknowledge the legendary research of Weston A. Price, DDS & his wife, Florence, that meticulously codified the diets of 14 indigenous Communities around the Globe, during the 1920's, that had "perfect" teeth. And the cornerstone of their diets was fat, especially vital sources of retinol! At the time, Dr. Price noted that, on average, these individuals ate as much as 10X more fat-soluble vitamins, especially retinol, than the average American at that time. It was a priority in their nutrient-dense diets, and to suggest its complete removal flies in the face of the pioneering research that represents the bedrock of what foods ensure optimal health for humans.

- The reductionist model of nutrition isolates one nutrient – at the expense of its agonists and antagonists – is very risky and misleading.
- The era of thinking that Mother Nature designed and test tube-crafted nutrients are equal has to stop! Synthetic retinol (Retinyl) palmitate is not an advisable or needed part of our diet. We emphasize the importance and essentiality of natural, non-synthetic (wherever possible) nutrients, especially with regard to the real vitamin-A, retinol sources (such as Cod Liver Oil) in our recommendations on foods and supplements to use regularly.
- "Dipstick dietetics," based on "highs" and "lows," has got to stop! Our bodies and our metabolic pathways clearly work on a bell-shaped curve. Optimal functionality and performance is always in between those extremes. Eliminating a nutrient that has the depth and breadth of metabolic and genetic impact in our bodies seems a bit irrational and irresponsible.
- Real, naturally occurring vitamin-A (Retinol) has a well-documented relationship with iron metabolism. There is a critical interplay of these two key nutrients, much of which is poorly understood in the modern era of dietary dogma. Of utmost importance, is retinol and its retinoid derivatives that play such an instrumental role in the constant Iron RE-cycling System (RES, Reticulo-endothelial System), that delivers 24 mgs of iron, 95% of the Total Daily Iron Quotient of 25 mgs. Only 1 mg/day of Iron is needed daily via our diet and our mouth.
- It is retinol, working with its metabolic partner, copper, that guarantees the necessary handoffs and transitions that enable proper and effective iron circulation of this essential, but highly reactive, metal around our body. There are three key "buckets" where iron resides and where the principal movements are to and from. These interactions are clearly dependent on the interplay of retinol and bioavailable copper and are profiled extensively in the literature. To completely eliminate this fat-soluble vitamin from our diet is troubling, particularly as it relates to this vital role that retinol plays in iron dynamics that is so critical to our optimal health and has become so confused in the modern era.
- Real vitamin-A (retinol) also has a well-documented relationship with hormone-D metabolism, although much of this pioneering research from the 1910's-1950's has been cast aside for the much-promoted emphasis on this demonic (IMHO) synthetic hormone that is potentially a key contributor to the many ills that folks suffer from these days. Suffice it to say, Mother Nature understands the importance of their interplay, and provides many foods (Cod Liver Oil, for example) that deliver both, but at levels and ratios that would shock most earthlings who think unopposed hormone-D supplements are the "gateway to good health!"
- Real vitamin-A, retinol, has a vital and well-chronicled relationship with another transition metal, copper. Retinol loads the coppers into the many Multi-Copper Oxidase enzymes that enable us to activate oxygen so we can create energy successfully. It is no small role that copper plays to transform these oxygen (O₂) molecules into water (2H₂O) molecules to release the energy molecules

(Mg-ADP) and a myriad of other essential functions. There is an interdependence of retinol and copper. These nutrients are vital to ensures our vitality.

- The world struggles with the myth-led perception that “Anemia of Iron Deficiency” is real. It is among the greatest myths on this planet. Real vitamin-A, retinol, has a vital impact on the process of building new blood, known as *erythropoiesis*. Retinol plays an essential role in healthy blood metabolism. Your healthcare provider most likely does not know this.