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Functional Medicine

TWEET GM #40

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Title

Created

GUT-RETINA AXIS: HOW TO PREVENT MACULAR DEGENERATION!

We have just posted QUOTE GM #40 today, which you will hopefully read.

I have just discovered this article that has been published by *Proceedings of the National Academy of Sciences of the United States of America-PNAS* in 2017. In first place, I am impressed by the authors who originate from: Tufts University (Boston), Weizmann Institute of Science (Israel), Tokai University (Japan), MIT (Cambridge), and Harvard University (Cambridge).

In second, I am delighted to read about so-called "**gut-retina axis**" that represents a new paradigm for me, but so much in agreement with global philosophy. In fact, it shows very close to the "**gut-brain axis**" when we consider that "*the retina is actually an extension of the brain*" according the *Encyclopaedia Britannica*. No wonder that the exact same rules apply!

Coincidentally, I have been exchanging recently with ophthalmologists who belong to different schools of thought (i.e. France, UK, USA) about how to prevent age-related macular degeneration (AMD) in the context of AREDS or *Age-Related Eye Disease Study* (2001) and AREDS 2 (2013) protocols.

AREDS 2 recommends standard supplement formula designed to prevent AMD: vitamin C, vitamin E, zinc, copper, lutein, and zeaxanthin. Except for first one, I test all these nutrients in routine for all my patients and I include correcting amounts of them in my Functional Medicine programs.

I have been intrigued, for a while, by the fact that none of my long-term patients has ever developed AMD, and that is what I wanted to share with retina specialists. They didn't seem especially impressed: smiles, "*luck*"...

Virtually all my patients follow low-glycaemic index diet and are instructed to minimize their glycosylated haemoglobin (HbA1c) level, which I see as the most relevant biomarker for healthy aging. Given this research (on mice) exposed in the above-mentioned article, we should not separate efficacy of optimizing key nutrient levels from low glycaemic index diet.

My conclusion is that there is a huge prevention potential in what we do...