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Functional Medicine

TWEET GM #42

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Title | Created

OXIDATIVE STRESS AS A MAJOR CAUSE OF AGE-RELATED

We have just posted QUOTE GM #42 today, which you will hopefully read.

Age-related diseases go hand in hand with chronic inflammation: they feed our daily practice, especially when you work from the Functional Medicine and prevention perspective. The interest of mentioned article, which was published already 10 years ago, comes from linking chronic inflammation to **oxidative stress** that stresses (will I dare saying) importance of diet and supplementation to ensure we build sufficient antioxidant protection.

You will notice that I have prioritized diet in first, before supplementation that should only compensate for dietary failure to bring enough protective antioxidant phytonutrients. I focus on plant-based molecules, most often polyphenols, rather than on isolated vitamins, minerals or trace-elements.

The way we deal with oxidative stress partially depends on the efficacy of two enzymes, respectively OGG1 and NQO1, resulting from homonymous genes unfortunately affected by respective polymorphisms. Any "*variant*" genomic setting reduces the antioxidant capacity, already if heterozygous variant (one weak gene copy) and even worse if homozygous variant (two weak copies may lead to thorough inactivity in the NQO1 genotype case).

Boosting these two critical enzymes makes even more sense for patients affected by such variant genotypes, which can be easily identified through cheap genomic testing. My way to deal with such cases largely relies on providing respective "super foods" lists, which are constantly updated and can be downloaded for free from my website www.gmouton.com. The list corresponding to OGG1 is called "SIRTUIN ACTIVATORS" and the list for NQO1 is called "NRF2 ACTIVATORS". Please download them and indulge…

A number of such polyphenols can be provided through supplementation. Here are my favourites: *resveratrol, quercetin, apigenin, honokiol* (from magnolia bark), *sulforaphane, lycopene, allicin,* and of course *curcumin*.