Hello Functional Medicine Discussion Group members:

Our next meeting will be Tuesday February 16 at 6:30 and since February is national heart month, the topic will be the Natural Management of Dyslipidemia. In other words, our goal is to reach a greater understanding of how to manage a patient with coronary artery disease or to prevent artery disease. Our group cardiologist, Dr. Howard Elkin, has graciously offered to start us off with a summary of the current state of the literature as it relates to this topic. **Please email whether you will be able to attend or not.** Once again, Metagenics will be providing some healthy food for us. I am asking Adam Banning of Metagenics to spend a few minutes telling us about their latest version of Ultrameal 360 for managing dyslipidemia.

There are many aspects to this topic including which dietary regimen might be most effective, which neutraceutical supplements are helpful, which testing results to consider, genetic factors such as relevant SNIPs, and the current drugs used to manage dyslipidemia, among other topics. My *go to* source for managing dyslipidemia is the work of Dr. Mark Houston, so I have included a few papers by him. I have invited Beth Cooper of Spectracell to join us to answer any questions about one of the most complete and reasonably priced advanced lipid panels available, the Cardiometabolic test.

Here is a summary of some macronutrient dietary factors that affect heart disease outcome from the paper in Exp Mol Med by Dandona et al, included in the attachments:

- Nuts: decrease 30%
- Vegetables: decrease 23%
- Fruits: decrease 20%
- Fiber: decrease 22%
- MUFA: decrease 20%
- Fish: decrease 19%
- Whole grains: decrease 19%
- Mediterranean diet: decrease 37%
- Alcohol: decrease 30%
- Trans fat: increase 32%
- High glycemic index/load foods: increase 32%
- Western diet: increase 55%

Dr. Houston does an outstanding job of summarizing the micronutrient/neutraceutical products that can help in managing and preventing dyslipidemia. These include niacin, red yeast rice, plant sterols, soy, green tea extract, omega 3 oils, tocotrienols, pantethine, garlic, resveratrol, curcumin, pomegranate, and lycopene, among others.

One of the more controversial supplements is niacin and many conventional MDs have now concluded that it is not effective, based mostly on two studies—the HPS2-THRIVE study and the AIM-HIGH trial, while ignoring a bunch of other studies that have demonstrated both the efficacy and safety of niacin. Niacin has been shown to be effective for reducing Lp(a), lowering triglycerides, lowering ApoB, reducing small dense LDL, and increasing large HDL type 2B, among other benefits. But the HPS@-THRIVE study was problematic because they tested not niacin but an investigational drug from Merck, Tredaptive, which combined niacin with a drug, Laropiprant, a selective prostaglandin D2 receptior subtype, which partially blocks the dermal flushing response to niacin. See the article attached by Dr. Houston and Dr.

Pizzorno discussing the HPA2-THRIVE study and why despite the results of this study that niacin is both a safe and effective neutraceutical for helping to manage dyslipidemia.