

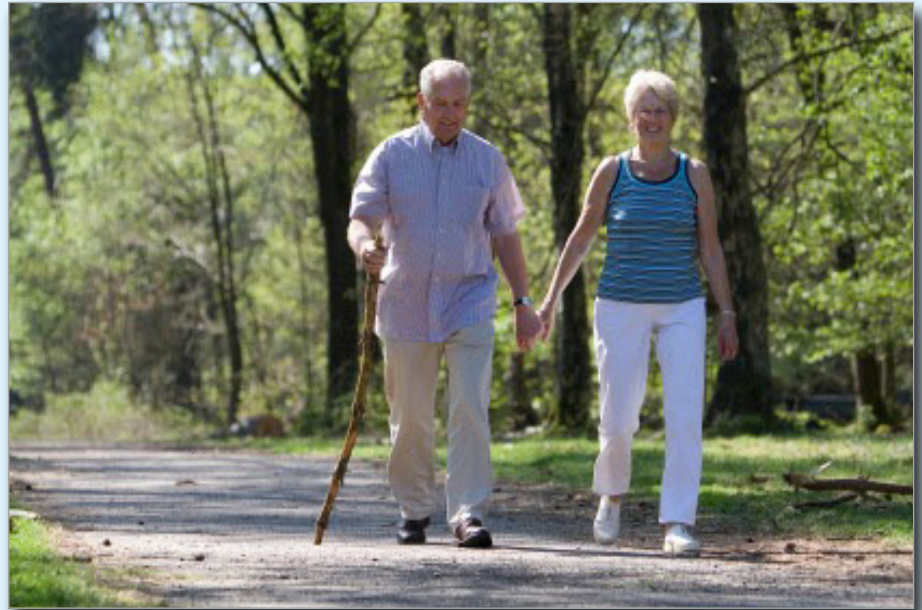
# Autoimmune Updates: Two Eye Opening Pearls

*"Two points from Dr. Vasquez's webinar on the autoimmune diseases were particularly eye opening for me."*

I must confess that, when I hear an exciting webinar, I not only follow the lecture, I pour over the notes and trace references until I have satisfied my intellectual or clinical lust for information. Such was the case upon hearing Dr. Alex Vasquez's introductory webinar on "Autoimmune Disease." This webinar series addresses one of the most rapidly growing conditions of our time.

As we age, there is a natural progression of our immune system. It changes and moves toward degrees of autoimmunity. Some researchers believe that many of the degenerative diseases we acquire like Type II Diabetes and some types of cancer are the result of a skewed or dysfunctional immune system.

Selfishly we want to be aware of the factors which modulate or encourage a balance between our innate or natural immune system and the adaptive or acquired aspect of our



immune system. Starting with the basics, Dr. Vasquez discusses, of all things, probiotics, prebiotics and synbiotics. Probiotics are the healthy bacteria in our bowel, prebiotics are foods that feed the bacteria and synbiotics are combinations of probiotics and prebiotics.

Two points from Dr. Vasquez's webinar were particularly eye opening for me. The first point reveals how our diet profoundly affects probiotic flora in the gut. I

have always known that sugar and refined starches can create an environment that limit healthy flora. But according to Dr. Vasquez, food can be an accelerator for healthy bacteria.

Most people think of food in terms of taste. Some consider the types of calories they are ingesting. A rare individual may consider its vitamin/mineral content. But to think that food can enhance probiotic growth is a new idea for me. Let me remind

you that although the human body consists of about 100 trillion cells, there are as many as ten times more microorganisms in our intestines. Over 95% of the bacteria in the gut are anaerobes.

We can only directly supplement aerobic bacteria, but with plant based food and supplementation we can create an environment to let bacteria "inter-create." Let me give you an example. The foods that support healthy probiotics are plant based. I wasn't aware that there is also a "cross feeding" that takes place. For example Inulin/FOS supplements feed the bifidobacteria which in turn make acetate and lactate while metabolizing the Inulin/FOS. The lactobacillus take the acetate and lactate made by the bifidobacteria to make butyrate, a short chain fatty acid, which has anti-inflammatory and a barrier strengthening effect on the gut. Just to give you an idea of the interdependence, approximately 80% of the butyrate produced by lactobacilli comes from the acetate and lactate produced by bifidobacteria from the inulin/FOS.

The second point is the concept that healthy bacterial flora can "modify" the food we eat into a more viable or bioavailable form. I was familiar with research that discussed how probiotic flora can protect us. For example, our flora can modify or change methyl mercury, a highly absorbable toxin found in fish, and demethylate it into an inorganic form that is far less bioavailable. But I was not aware that bacteria in the gut can modify many of the phytochemical agents in plants to make them more bio-available. You see, some phytonutrients are either nonabsorbable in their natural state or they are not in their active forms. Once they are acted upon by the enzymatic activities of healthy bacteria, they can be utilized by the body.

Dr. Vasquez comments that this conversion of the "inactive" phytonutrients into those with anti-cancer properties also creates a kind of "healthy milieu" promoting endocrine balance. As we know, excess estrogens promote autoimmunity. Considering the estrogens we get from meat and xenoestrogens from our environment; it's nice to have some natural protection from bacterial flora. Flora modified phytochemicals or FMPs have anti-inflammatory and immunomodulatory effects as well.

I hope this gives you greater confidence as you counsel your patients to get off the refined foods and consume a higher percentage of plant based foods. You may also consider the addition of a probiotic. You can use either BiDoph-7 Plus or BioDophilus-FOS.

BioDoph-7 Plus contains inulin, arabinogalactans and marshmallow root as the prebiotics and a blend of 7 different forms of probiotics. Each capsule contains more than 20 billion organisms.

BioDophilus-FOS has the primary lactobacillus acidophilus (DDS-1 strain) and bifidobacterium bifidum organisms as well as a healthy dose of FOS from a beet source. BioDophilus-FOS is available in both powdered and capsule form.

We are truly living in exciting times that we can see the interconnectedness and interdependence of the human body. Let me recommend Dr. Vasquez's series on autoimmunity. Below you'll find more details on his webinar. Autoimmunity is a subject that will be on the forefront in the next decade. I think you'll find this resource helpful and inspiring.

Thanks for reading this week's edition, and I'll see you next Tuesday.