IAACN Conference

This newsletter is the conclusion of my review of the annual meeting of the International and American Association of Clinical Nutritionists. The following are not word for word summaries of what the speakers said, but rather some of their thoughts and my own observations on these topics, personal experiences, and application to GNLD supplementation.

Nigel Plummer, Ph.D.

The Gut Microflora

Dr. Plummer holds a Ph.D. in Microbiology. He lectures at the University of Westminster and the Institute of Optimal Nutrition in London. He is considered a world expert on the influence of human gastro-intestinal and genito-urinary tract microflora on disease and health, including antibiotic-associated effects, IBS, IBD, allergy and autoimmune disease.

Dr. Plummer observed that transit time is a critical factor in maintaining health. The transit time is the period of time from the ingestion of a food until it is excreted from the body. To maintain health the transit time must be faster than the period of time it takes the bacteria in the gut to double in number. A sluggish bowel sets an individual up for a decline in health.

The most important factor determining transit time is the quantity of fiber in the diet. Fiber provides the primary stimulus for intestinal motility.

The inner lining of the intestinal tract is coated with a protective layer of acidophilus bacteria. Acidophilus prevents other more harmful bacteria from taking up residence in the intestinal lining. Use of antibiotics strips the gut of this protective lining. One of the consequences of this can be deterioration of the competence of the immune system.

Unfortunately, many health professionals are unaware of the damage they do to this intestinal lining when they prescribe antibiotics. They are also unaware of the importance or re-establishing a healthy acidophilus population as rapidly as possible after use of antibiotics.

This subject is very current in my mind as I recently had a wisdom tooth extracted. I was instructed to take antibiotics for five days. No mention was made of what this would do to the bacterial population in the digestive tract, nor were any instructions given to take measures to assure that a healthy bacterial population was restored as soon as possible after the use of the antibiotics. I took four capsules of Acidophilus Complex a day along with Multi-Fiber Blend to prevent problems.

A number of years ago a young man named Jim forced his way with great effort through the front door of our office. He was doubled over and in obvious pain. He explained that he felt like a knife was being turned slowly in his stomach creating agonizing pain. The symptoms had lasted for 8 months.

I asked Jim what had happened 8 months before. He explained that he had suffered with a severe case of pneumonia and had recovered thanks to a heavy regimen of antibiotics. He had been tortured with digestive problems continually since his bout with the pneumonia.

I sold Jim a bottle of GNLD Acidophilus Complex and instructed him to take a couple of capsules a day. He called the next day to inform me that the pain began to disappear within a few hours of the time he took the first tablets and by the sec-
Dr. Flechas focused his remarks on lupus as an example of autoimmune disorders. He said that in order to cope with autoimmune and inflammatory disorders we must learn to silence genes so they do not function when they are doing harm. This, he feels, is the future of medicine.

Nutritionally, the silencing of genes is accomplished by a process called methylation. A number of nutrients support healthy methylation including betaine (tri-methyl-glycine), folic acid, vitamin B12 (methylcobalamin), and vitamin B6. These are the ingredients in GNLD Lipotropic Adjunct.

Dr. Joaquin Gonzales Aragon, one of the world’s leading anti-aging experts, became interested in GNLD when he saw the Lipotropic Adjunct. This was the product he was searching for to promote healthy aging in his patient population.

Other nutrients which promote healthy methylation include lecithin (phosphatidal choline is loaded with methyl groups), selenium and zinc. Hormones play an important role in methylation as well, suggesting that tre-en-en oils might play a supportive role, in the methylation process. Tre-en-en oils are strongest in their ability to support adrenal and male sex hormone function. These are the hormones most important for methylation.

The adrenal hormone DHEA is important in the methylation process. Dr. Flechas pointed out that some pain medications cause the excretion of sulfur. DHEA is not water soluble and can not carry out its health contributing functions without sulfur. Dr. Flechas observed that 40% of lupus patients appear to have sulfur problems which may have been contributed to by medications such as acetaminophen and tylenol which deplete sulfur. Supplements rich in sulfur include protein, Cruciferous Plus, and Allium Complex. Eggs, cruciferous vegetables, garlic and onion are foods rich in sulfur.

Dr. Flechas observed that arsenic poisoning is a particular concern because arsenic strips methyl groups right off of DNA. Iodine deficiencies are common and iodine enables the body to rid itself of arsenic as well as lead and aluminum.

The methylation defect in autoimmune disease is on the X chromosome. Women have 2 X chromosomes while men have one X and one Y chromosome. This explains why autoimmune diseases occur much more frequently in women than they do in men when deficiencies of the nutrients required for healthy methylation develop.

DAVID BRADY

AUTOIMMUNE DISEASE AND GUT FLORA

Dr. Brady is Director of the Human Nutrition Institute at the University of Bridgeport.

The majority of the immune cells of the body (about 75%) are located in close proximity to the digestive tract where they prevent the bacteria and bacterial toxins in the gut from entering into the tissues. Healthy intestinal flora are important to prevent the development of autoimmune disease.

Harmful microbes in the gut have recently been associated with the development of autoimmune diseases through the mechanism of molecular mimicry. Klebsiella has been linked to ankylosing spondylitis. Citrobacter has been associated with rheumatoid arthritis. Yersinia has been linked to Grave’s disease.

The presence of these organisms can often be picked up by stool testing. Healthy intestinal flora, particularly acidophilus, tend to suppress most of the bacteria associated with molecular mimicry.

The concept of molecular mimicry was first published in 1985. Since that time it has become a favored mechanism to explain autoimmune
diseases. The concept suggests that strings of amino acids in foods or on bacteria mimic strings of amino acids in our own tissues. When the immune system targets bacterial protein it also attacks proteins in our own tissue which bear the same structure as the infectious organism or food protein the body interprets as a threat.

Mimicry reactions can become quite complex. For example, the gliadin molecule in wheat has a protein strand closely resembling adenovirus 12 and a protein strand in the gut lining. Exposure to the virus or to gluten can result in autoimmune attack against the gut.

Milk proteins and viral particles can trigger autoimmune attack against the beta cells of the pancreas resulting in Type 1 diabetes. A similarity of proteins in Epstein Barr virus, grains and legumes, and joint collagen may contribute to rheumatoid arthritis.

Molecular mimicry is really a case of mistaken identity. Susceptibility to this phenomena depends upon genetic makeup and poor dietary habits.

Autoimmune attack is carried out by T-Helper cells. There is a balance of TH1 (T-Helper cells type 1) and TH2 (T-Helper cells type 2). TH1 cells promote immune activity while TH2 cells inhibit immune activity. Autoimmunity is associated with an imbalance in the ratio of these two components of the immune system. Lactic acid producing bacteria (acidophilus) promote the proper balance between TH1 and TH2.

Acidophilus Complex can be an important supplement when all is not well in the gut. The GNLD product has several features that make it unique including a nutrient source to keep the organisms alive, a gel-gard technology to protect the organisms from the hydrochloric acid in the stomach, and viable or living organisms.

**DR. ALEX VASQUEZ**

**USE OF SUPPLEMENTS TO SUPPORT DIGESTIVE FUNCTION**

People often have autoimmune responses to more than one tissue. Thirty percent of those with autoimmune hypothyroidism (Hashimoto’s disease) also produce antibodies to their own parietal cells where the hydrochloric acid is produced. Half of those with autoimmune hyperthyroidism (Grave’s disease) have antibodies to their own parietal cells.

Low hydrochloric acid production is associated with many autoimmune conditions. It may promote the conditions by weakening immune competence against bacterial invaders and inhibiting proper digestion of foods making them more allergy provoking and more susceptible to molecular mimicry.

A wide spectrum of disorders are associated with low hydrochloric acid production including vitiligo, gallstones, GERD, heartburn, eczema, acne rosacea, chronic hives, asthma, multiple food allergies, osteoporosis, alcoholism, candida overgrowth, thinning of the hair in women, and weak fingernails.
immune system. Plant based enzymes as used in the GNLD Enzyme Digestive Aid have a much broader spectrum of pH activity than animal enzymes. Intestinal pH is often compromised when individuals are ill.

Healthy bile flow is essential to remove toxic chemicals, heavy metals, and antigen/antibody complexes from the body.

Americans are drenched with toxic chemicals. The brains of those with Parkinson’s are often contaminated with dieldrin. A study of 1300 people found pesticides and herbicides in everyone’s tissues. Levels were highest in children and women of childbearing age. Four of 22 samples of organic baby greens had over 30 parts per billion of perchlorate. The safety limit is one part per billion. Dioxins cause insulin resistance and diabetes.

Healthy gallbladder function is not optional, it is mandatory for good health and detoxification. Healthy gallbladder function is promoted by eating beets and ginger. Adequate fiber intake is essential for normal gallbladder emptying. Vitamin C and adequate water intake keep the bile acids fluid.

**James LaValle**

**Sjogren’s Syndrome**

Dry eyes and mouth afflict 1.4 million people. Contributing causes include nutritional deficiencies, environmental toxins, inflammation, and intestinal problems including dysbiosis and allergy.

Those with Sjogren’s disease, an autoimmune condition that causes dry eyes, usually have antibodies to wheat protein. One of the eye proteins is so similar to wheat in structure that it has been called a mammalian form of wheat. Wheat protein antibodies cross react with eye protein destroying the tear glands and drying out the eyes. Clues that this is taking place include dry eyes, itching and burning eyes, a sensation of a foreign body under the eye, tooth decay, and allergy to wheat.

Nutrients which may benefit dry eyes include vitamins A, C, and B6, zinc and selenium, essential fatty acids (especially omega-3 oils), digestive aids, and cruciferous compounds to help clear immune complexes from the body. Avoidance of gluten found in wheat, rye, barley, and oats can be quite helpful.