Probiotics Protect Immune & GI Health

I would like to devote this week's newsletter to the topic of probiotics. Probiotics, also known as "friendly bacteria," have increasingly been in the news. Due to frequent antibiotic use, stress, poor diet, aging and other factors, many people have become depleted of these friendly bacteria in their gastrointestinal tract. This is unfortunate because they are so critically important to good health. A lack of friendly bacteria may impair the absorption of some nutrients and can be associated with overall poor digestion. Believe it or not, 70% of the immune system in our bodies resides in the intestinal system.

A few weeks ago, a small study[1] was published in *Nutrition Journal* regarding the use of probiotics in individuals suffering from fatigue. In this study out of Sweden, researchers recruited ten females and five males who experienced this issue. Over the first two weeks of the study, researchers observed each of the fifteen participants. For the next four weeks, the individuals were given yogurt twice daily with large amounts (billions) of probiotics. The participants were then followed for an additional four weeks. Four of the women reported improvement in their physical well being and two said they experienced improvement in their mental well being by the end of the ten-week study. One man similarly reported improvement in physical health while another reported improvement in mental health. Dr. Birgitta Evengard, co-author of the study, indicated that "for some patients there was a dramatic difference."

In the February 2009 edition of the journal *BMC Gastroenterology*, a systemic and meta-analysis[2] was published regarding the use of probiotics on people suffering with poor GI tract health. The authors identified fourteen randomized, placebo-controlled trials that had taken place over the last fifty years. The combined data suggested that there was a modest improvement in overall health after several weeks of probiotic supplementation. They concluded, that overall, probiotics may have a role in promoting healthy GI tract function.

There is a study[3] on a serious health concern involving the large intestine, ulceration and bleeding that was published in the February 2009 edition of the journal *Nutrition*. In this study, 120 individuals suffering from this difficulty were randomized into three groups. Forty individuals received a probiotic, forty received a prebiotic and a third group received symbiotic therapy with a combination of a pro- and prebiotic. Out of the 120 individuals who started the study, 94 finished. It was found that those who received the combination probiotic and prebiotic experienced greater quality of life than those on either the probiotic or prebiotic alone. The authors indicate that the data suggested symbiotic therapy may have a synergistic effect on this condition. Prebiotics such as Fructooligosaccharides (FOS) feed the probiotics, allowing them to colonize and survive within the GI tract.

The topic of children and probiotics has been the subject of both a recent study and a recent article. In the February 2009 edition of the *American Journal of Gastroenterology*, researchers conducted a prospective one-year placebo-controlled, double-blinded study[4] to assess the benefits of probiotic supplementation for children with poor GI tract health. A total of 29 children with poor GI tract health participated in this study. The results indicated that all 29 children responded to the probiotic supplementation. Improved GI tract health was achieved in almost 93% of children supplemented with probiotics as compared with only 36% who were given placebo. The authors indicated that this was the first randomized, placebo-controlled trial demonstrating the efficacy and safety of a highly concentrated mixture of probiotic bacterial strains demonstrating its role in promoting good GI tract health.

The article[5], entitled "Clinical Evidence of Immunomodulatory Effects of Probiotic Bacteria" was published in the February 2009 edition of the *Journal of Pediatric Gastroenterology and Nutrition*. The authors explained that there is a close interaction between the intestinal lining and the immune system. They also noted that there is a beneficial and symbiotic relationship between the individual and the micro-bacteria in the gut. They further explained that there was clinical evidence of the beneficial effects of probiotics for promoting good GI tract health, immune system health and antibiotic associated diarrhea.

I must admit that for the first few years I was involved with this company, going back now almost 15 years, I was not a big believer in probiotics. However, as I continue to read more and more studies, I have become increasingly convinced of the importance of this nutrient class. Also, reading the customer reviews on NSI® probiotics is truly impressive and further convinces me of the wide range of health benefits they provide.

Nutraceutical Sciences Institute® (NSI®) offers an incredible selection of probiotics. Just go the home page of Vitacost.com and do a search on probiotics and you will come up a 185 products. Our flagship NSI product is called NSI Probiotic 15-35. It provides fifteen different strains of friendly/healthy bacteria, with a total of 35 billion colony forming units. We also include in this product a prebiotic called NutraFlora® FOS, a highly concentrated complex of naturally-occurring carbohydrates that serve as a food/energy source for friendly bacteria which helps them grow within the intestines. Additionally, NSI Probiotic 15-35 utilizes what is known as Viablend™. Viablend helps deliver the active friendly bacteria into the gastrointestinal tract. We also offer the probiotics NSI 10-20, NSI 8-5 and others. We also provide an excellent selection of probiotics from other companies as well.

Dr. Allen S. Josephs