## **Beneficial Bugs (Probiotics)- What Are They?**

Good Bugs for your body?!

It may be hard to swallow (no pun intended) that intentionally ingesting bacteria is a good idea.

Bacteria (good and bad) is in absolutely everything you eat and drink! It is no wonder that the gastrointestinal or GI tract is considered the body's largest immune organ. The GI system uses "good" bacteria to fight "bad" food borne bacteria such as E. Coli and Salmonella. These good bacteria are called probiotics.

At Pfeiffer our physicians recommend Probiotics for many of our patients. Probiotics serve the body in many important ways. Probiotics are needed for production of digestive enzymes and B vitamins. Probiotics help to enhance the immune system and mineral metabolism. They also help reduce heart disease, increase lactose tolerance, prevent travelers diarrhea, and prevent yeast infections. These good bacteria also play an important role in breaking down foods containing fiber.

Some good bacteria grow (colonize) in the GI tract but most are transient (they stay about 2 weeks). The more healthy bacteria in the gut the less room for harmful bacteria. The bacteria cling to the GI wall at docking sites and the number of sites are limited, thus the more helpful bacteria you have the greater balance your system will have. Because the GI tract has a varied environment several strains of good bacteria that colonize in all areas of the GI are necessary.

Lactobacillus and Bifidobacterium are the two predominant types of good bacteria. You will find these good bacteria in probiotic capsules, some yogurts and some fermented milk products.

These are some of the probiotics prescribed:

<u>Lactobacillus acidophillus</u> is probably the most commonly seen probiotic. L. acidophillus helps control diarrhea, reduces bad cholesterol and lactose intolerance. It also helps to control Candida (fungus) overgrowth, protects the GI tract and strengthens the immune system.

<u>Lactobacillus bulgaricus</u> performs the same functions as L. acidophillus.

Lactobacillus rhamnosus prevents infections and including fungal and bacterial vaginal infections.

<u>Streptococcus thermophilus</u> inhibits harmful bacteria, enhances digestion of milk and some strains produce antibiotic like substances.

<u>Bifidobacterium bifidum</u> prevents risk of Candida overgrowth and pathogenic bacteria. It exhibits anticarcinogenic activity, decreases serum cholesterol, and contributes to vitamin B production. B. bifidum assists with bile detoxification which aids estrogen metabolism.

<u>Bifidobacterium longum</u> also has many positive functions in the GI tract, it is present in every healthy infant. B. longum helps prevent dietary nitrate toxicity.

Scientists feel most of us lack enough good bacteria. The cause may be from antibiotics in the food supply which reduces the balance of healthy bacteria or from eating too much sugar and refined starch which encourage growth of harmful bacteria.

To increase your healthy bacteria you may choose probiotic capsules or eat foods containing probiotics. Foods which use beneficial bacteria for fermentation such as some cheeses and yogurts contain probiotics. Some dairy products are given supplement doses of good bacteria. Read food labels when you shop.

The probiotics available from HRI pharmacy are Pro-5 (Vital Life), 8 Billion Acidophillus and Bifudus (Now), 4x6 Acidophillus (Now), Primal Defense, Proflora, and Ultradophilus Plus.

- Kim Gould, R.Ph., M.S.., HRI Pharmacy