

The Probiotic Popularity Contest-May The “Good Guys” Win **Dr. Shawna Eischens**

Isn't it incredible that as humans we possess more bacterial cells than human cells? Hearing the word "bacteria" generally produces a negative connotation in people's mind, but there are trillions of bacteria in our system that are essential for proper digestion and protection against less desirable or harmful pathogens. The word "probiotics" is more familiar in recent years, yet there is still some confusion and debate over specifics about these living bacteria. As a naturopathic physician who focuses on gastroenterology (think of the tunnel from your mouth to your anus although this complex 'tube' has a profound effect on overall physical and emotional health), I find it essential to discuss the most popular product in our entire body-bacteria.

Perhaps some of these questions from patients may reflect what many others may be wondering as well.

What is a probiotic?

"A" probiotic is a supplement composed of beneficial bacteria. The term *probiotics* can be broken down to equate to favoring living microorganisms. This is contrary to the term *anti-biotics* which are designed to kill or inhibit overall bacterial growth.

Do I need (to take) probiotics?

Although probiotics tend to be a more benign self prescribed product than most, it is never recommended to assume that you need anything simply because "you heard they are good for you." With that said, it is safe to say we can all benefit from a healthy balance of beneficial bacteria in our gastrointestinal system. Doing a thorough intake with a naturopathic physician is the best way to find out if, what type, quantity, and duration of probiotics may be ideal for you.

Who can benefit from probiotics?

Probiotics can be incredibly beneficial for people who have been on recent or frequent anti-biotic medications, people with inconsistent bowel patterns (constipation/diarrhea), allergies, or even anxiety or frequent illness. The importance of replenishing beneficial bacteria can be compared on a simplistic level to a popularity contest. If your system is lacking supportive flora such as lactobacilli or bifidobacterium, potentially harmful microorganisms such as helicobacter pylori, escherichia coli, clostridium difficile, or yeast are able to have a competitive advantage. When the latter "claim their territory", undesirable symptoms ranging from abdominal pain and diarrhea to systemic illness may occur as a result.

Another population who may benefit from supplemental probiotics are infants who are delivered via caesarian section, formula fed, or those with a family history of allergies. During the vaginal birthing process, babies encounter normal beneficial flora (predominantly lactobacillus acidophilus) which has been found to decrease future allergies compared to those born via caesarian. According to

research by Dr. Nigel Plummer, babies given a probiotic had a 50% decrease in developing neonatal allergies by the age of 2 compared to the placebo group. Allergies are correlated with an over sensitive and “hyperactive” immune system. Probiotics are able to build up suppressive T cells and reduce responses known to react to allergens contributing to a more balanced immune system.

Breast-feeding has been shown to have a noticeable effect on fecal flora. After only 7 days of breast feeding, 95% of infant’s fecal flora is bifidobacterium which can help promote passive immunity, decrease allergies, and decrease colitis.

Compare this to babies who are formula fed-only, 22% of the fecal flora is beneficial bifidobacterium, whereas 70% is less desirable enterococci. Breast milk also has oligosaccharides (food for intestinal microflora) which can stimulate even more beneficial bacteria for infants such as lactobacilli in the upper GI tract and bifidobacterium in the lower GI tract.

When should I take a probiotic?

The pH of an empty stomach is about 100 times more acidic than a fed stomach, so for ideal absorption it is important to **take probiotics with food**. Which meal specifically you take a probiotic supplement with is not as important as simply taking it with or shortly after eating.

Do I have to refrigerate probiotic supplements?

Although many products may not necessitate cooling, keeping probiotics in a cool, dry place helps to ensure the highest potency with the longest lasting shelf life. Refrigeration or freezing is great, but I find that many patients forget to take them when they are out of sight. If this applies to you, keeping a month supply on the counter of your average temperature home is acceptable to ensure daily compliance. If a probiotic supplement is used more occasionally, keeping it in a cold, dark place would be wise.

I have been taking this (store bought) probiotic for months and I still have GI issues, do probiotics really make a difference?

Although probiotics can help balance the GI tract and overall health, there are many reasons why someone may have bloating, indigestion, pain, or inconsistent bowel patterns. People with conditions like SIBO (small intestinal bacterial overgrowth) may notice an increase in undesirable gas and bloating if they are misinformed or randomly take certain strains of probiotics.

Addressing the cause of dysfunction is always imperative, therefore if the cause of GI distress is a hiatal hernia, food sensitivities, lack of digestive enzymes, parasites, or even emotional correlations, probiotics may mildly help, but definitely won’t cure the main concern.

Many patients come to the office already taking store brought products that is not necessarily a bad thing, but all products are not created equal as a 2015 investigation of specific store bought herbal products found. Not only must buyers be aware that they may not be getting what they think they are, but “it” may be in minimal quantities or forms not readily absorbed by the body. A consideration when I prescribe products including probiotics is that they are professional grade,

quality controlled, usable forms in therapeutic dosages, and lack fillers, contaminants, dyes, and common allergens.

If I eat yogurt every day, isn't that good enough?

Yogurt with live, active cultures may be a source of lactobacillus, but it may also be a source of large amounts of sugar or artificial sweeteners. Many people with gastrointestinal concerns respond poorly to dairy products, while others may do fine with yogurt. Since yogurt may come with more harm than benefit for people, fermented foods like unpasteurized sauerkraut, kombucha, kimchi, or miso soup may be better sources of beneficial bacteria. Whether people choose to eat or supplement probiotics, it is important to promote balance by rotating probiotic sources and types since our system has various strains of bacteria that have been found to be beneficial for a variety of concerns.

All bacteria are not to be feared, but rather appreciated as a necessary foundation for digestive, immune, and overall health. Dr. Eischens may be contacted when you're ready to begin improving your digestive health with an appointment or free 10 min. consultation at 480-767-7119. May your "good guys" win the popularity contest within!

Resources:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC207122/>

<http://www.consumeraffairs.com/news/gnc-target-walmart-walgreens-selling-bogus-herbal-supplements-ny-charges-020315.html>

<http://blog.econugenics.com/2015/06/are-probiotics-our-greatest-allies/>

<http://www.sciencedaily.com/releases/2015/06/150609092803.htm>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC207122/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2886445/>

http://www.nature.com/nature/journal/v521/n7551_supp/full/521S10a.html