Make friends with your microbiota

By Dr. Kim Hapke

Correspondent

Though our intestines are sterile in the womb, through the birth process and interaction with environment our GI system is quickly colonized by many species of microbes.

If the size of these entities is unimpressive, their numbers may make you think differently. The gut has 10 times as many bacterial cells as there are cells in the body. Recently, how these microbes can help or harm us has been the study of intense research.

Healthy microflora synthesize vitamins, produce short-chain fatty acids which support healthy intestinal lining cells, degrade toxins and provide strong protection against pathogens. They also stimulate the immune system in positive ways.

Healthy gut microflora means high numbers of beneficial bacteria in a wide array of species. Negative disruption of microflora can include lowered numbers of beneficial bacteria, decreased diversity of species and higher numbers of pathogenic bacteria.

The effects of less

desirable microbes include local gastrointestinal symptoms of gas, diarrhea, inflammation, and negative effects on the integrity of the gut wall. Research is just starting to link microflora disruption as described above with such diverse health complaints as obesity, metabolic syndrome, inflammatory bowel disease, allergies, and depression.

Many are the modern-day insults to our microbiota.

Dietary issues such as too much sugar, fat, alcohol or protein can negatively affect the makeup of bacteria. Pathogens can be introduced while traveling but also increasingly at home due to the globalization of the food industry. The farther food travels and the more steps of processing it goes through, the more opportunities there are for contamination. In addition to decreasing the ability of our immune system to ward off pathogens, stress can decrease the number of healthful gut bug species. Several types of medications can decrease healthful flora including antibiotics, and proton pump inhibitors (stomachacid-decreasing drugs).

How can we support our

beneficial gut bugs? One traditional way is by replenishing them with fermented foods. Yogurt, sauerkraut and fermented soy products like miso provide beneficial bacteria in high amounts. Watch your commercial sources though, products like yogurt may be pasteurized, killing the bacteria, or have so much sugar the health benefits can be greatly reduced. Probiotic supplementation is another way to support beneficial bacteria, look for products can that survive the acid of the stomach.

Microbes also need plenty of prebiotics — these are food for them. Foods such as whole grains, asparagus, banana, legumes, onion, garlic and artichokes have lots of prebiotic compounds that our gut bugs love.

Get creative to reduce your use of things that can deplete diversity. Choose whole grains, fruits and vegetables over high-fat foods or processed carbohydrates. Educate yourself on the judicious use of antibiotics. If you need to go on a proton pump inhibitor, talk with your doctor to make plans to get you off of that in the future if

possible.

Exercise appears to be another way to support healthful diversity. In a study comparing professional rugby players to the general healthy population of similar age, the athletes showed a greater diversity in their microbiota.

Kids who are exposed to dirt and animals have increased diversity of gut bugs and decreased incidence of allergies.

Play in the dirt — gardeners rejoice! Playing in the dirt exposes us to Mycobacterium vaccae, a gut bug that stimulates the production of serotonin. This little guy may help decrease anxiety, improve mood and improve the ability to learn. Kids who are exposed to dirt and animals have increased diversity of gut bugs and decreased incidence of allergies.

This is truly a symbiotic relationship. Take care of your microbiota and they will take care of you.

GRANT: Funds provide access to programs for children

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with their instructors and they have a positive way to channel their creative energy."

We appreciate and applaud
the Sisters community
for coming together to
provide the arts education
experiences that children
need as part of a wellrounded education.

— Kregg Arntson

APAOS is administered through Family Access Network to ensure assistance reaches children who need it the most. The correlation between learning to play a musical instrument and healthy brain development, improved academic performance and social skills has proven to be true for many of the recipients.

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Dr. Kim Hapke – Meaningful Medicine

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Perhaps you need to exercise but have pain or low energy levels that keep you from doing what you know you should. Dr. Hapke can help with all aspects of that equation — with the pain, the low energy and the psychological barriers that are keeping you in a rut. What is the underlying resistance that's getting in your way?



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