Gut Boosters THE EVOLVING UNDERSTANDING OF THE ROLE OF PROBIOTICS





bout 40,000 species of bacteria, 5 million species of fungi, and 300,000 species of parasites work together in our body's microbiome, exerting influence over things like our metabolism, weight, digestion, immune function, hormones, mood, and behaviour. As we begin to learn more about our microbiome's importance, we have also begun the search for products and supplements to best support it. Probiotics have moved to the forefront as a defender, healer, and booster of the microbiome, and while it can be tempting to view supplementation as a panacea, the research on the efficacy and safety of probiotic supplements as a tool to support health continues to evolve. While, overall, probiotics have been deemed safe, whether or not they work for certain conditions and to what extent is still not fully understood. Here are the highlights:

ALLERGIES AND ASTHMA

Several studies in both allergy reduction and asthma relief have demonstrated that giving probiotic supplements to babies can reduce the risk of allergies later in life and may improve symptoms in asthma. However, a review on allergy benefits in 2015 revealed that a significant body of work also exists showing little effect; likewise, some asthma studies have also shown similarly negative results.

ORAL HEALTH

Lactobacillus, Bifidobacterium, and Streptococcus strains have been shown to help prevent cavities by reducing harmful bacteria in the mouth.

ADHD, AUTISM, AND MOOD DISORDERS

Many studies have linked ADHD, autism spectrum disorder (ASD), and mood disorders with the microbiome, and have suggested that probiotics may help improve symptoms. This includes a small 2015 study which theorized that *Lactobacillus rhamnosus* given in childhood might reduce the risk of ADHD and ASD.

IMPROVING ECZEMA

The strains *Lactobacillus GG, Bifidobacterium lactis, Lactobacillus rhamnosus*, and *L. reuteri* have shown to be effective for reducing the severity of eczema in children.

DIGESTIVE COMPLAINTS

According to the American College of Gastroenterology, probiotics can improve the pain and discomfort of IBS. *Bifidobacteria breve, infantis,* and *longum* have also been found to help resolve constipation in children, symptoms of diarrhea have been shown to improve using

S. Boulardii, and a 2015 review of 23 studies concluded that probiotics can safely be used to help prevent C. difficile infection post-antibiotic.

ANTIBIOTIC RECOVERY

As mentioned above, post-infection complications like diarrhea can be reduced with probiotic therapy. Interestingly, a 2018 study countered this, noting in their findings that the post-antibiotic subjects who were slowest to recover were those given a probiotic supplement. This new study demonstrates the need for deeper understanding of the body's natural healing ability and how probiotics can best serve it.

To Probiotic or Not to Probiotic

Our understanding of how microbes work synergistically with each other and with their host is deepening, and the complexity of these interactions is likely why study results have been inconsistent. Current research is still generally supporting probiotic bacteria as a safe way to support the microbiome in pregnant women, babies, and young children. You might consider a probiotic when your child is exposed to stress, sugar, chemicals, is travelling, or if immune or digestive functions seem out of balance, but keep in mind a probiotic is not a cure-all. And before giving any supplements to your child talk with your health care team.

SIMPLE STEPS FOR MICROBIOME SUPPORT

Reduce exposure to negative influencers of the microflora like chemicals, sugar, artificial sweeteners, and stress.

Encourage more microbes and introduce new ones by increasing intake of fermented foods and by spending time outdoors in nature.

Improve digestive efficiency by mindful eating, slower chewing, and taking adequate time to digest.

Nourish the gut mucosa and microbes by including foods like bone broth, onion, garlic, and asparagus.

When it comes to research on the microbiome, one thing stands out – when we focus on improving digestive health, our kids' resilience increases. Probiotic supplements can be a tool to help support the microbiome, but they are only part of a bigger picture of digestive health. •