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Children's Multi-Probiotic – 7-Strain Formula 3 Billion Active Cells

About Children's Multi-Probiotic

- Probiotic supplementation has been associated with a broad range of benefits in the pediatric population, promoting a protective environment for healthy gut bacteria and potentially reducing the incidence of gut-related health concerns.[1]
- Children's Multi-Probiotic provides seven probiotic *Lactobacillus and Bifidobacterium* species. These probiotic species are found in healthy children and have the greatest evidence base in clinical trials.[1,2]
- Intestinal microbiota (gut bacteria) has an extremely broad influence on both local gut health and systemic health. This includes supporting immune activity as well as immune tolerance, in addition to increasing the response to vaccination.[3]
- *Bifidobacterium longum* subspecies *infantis*, for example, has been shown to efficiently colonize the infant's gastrointestinal tract, reduce inflammation, and improve the immune response to vaccination.[4,5]
- Microbiota plays a crucial role in promoting the health of the cells that line the GI tract. They support a well-functioning intestinal barrier and provide resistance to more harmful bacterial species.[3]
- Gut bacteria may provide some protection against inflammation and allergies.[2] *Lactobacillus fermentum*, for example, is among the most effective species for reducing the severity of atopic dermatitis in children.[6]
- Many different species of *Lactobacillus* and *Bifidobacterium*, especially *Lactobacillus casei*, have been shown to reduce the risk of developing *C. difficile*-associated diarrhea following antibiotic use.[7,8]
- Children supplemented with probiotics have been shown to be less likely to develop upper respiratory tract infections and to have fewer absences from school/daycare.[9,10]

How to Use Children's Multi-Probiotic

- **Children 1–5 Years Old:** Take ½ teaspoon (approx. 1 g), 1–3 times per day. **Children 6–12 Years Old:** Take ½ –1 teaspoon, 3 times per day. Can be mixed with water, juice, or your favourite smoothie, or sprinkled onto foods like cereal, fruit, or yogurt, or use as directed by a health care practitioner. Take at least 2–3 hours before or after antibiotics.

Cautions and Contraindications

- Stop use and consult a health care practitioner if symptoms of digestive upset (e.g., diarrhea) occur, worsen, or persist beyond 3 days. Do not use this product if you have an immunocompromised condition (e.g., AIDS, lymphoma, patients undergoing long-term corticosteroid treatment). Consult a health care practitioner prior to use if you have fever, vomiting, bloody diarrhea, or severe abdominal pain. Keep out of reach of children. Consult a health care practitioner for use with cardiac valvular disease and short-gut syndrome.[1]

Drug Interactions

- No known drug interactions; should be separated from antibiotic use by at least 2 hours.

Quick Tips for Optimal Health

☐ Dietary choices have the greatest impact on the composition of gut bacteria. While a western diet generally shifts the bacterial population to one associated with more inflammation, a diet that emphasizes plant-based and high-fibre foods has been linked to a more favourable microbiome.[11,12]

☐ Dietary fibre is an important influence on gut bacteria, with higher fibre levels associated with a greater abundance of both *Lactobacillus* and *Bifidobacterium* species.[13]

☐ A high intake of sugar, such as from sugar-sweetened beverages, has been linked to unfavourable changes in the composition of gut bacteria. These changes are thought to be partly responsible for the increased risk of metabolic disease and obesity.[14,15]

PATIENT NAME: _____

PRACTITIONER NOTES:

PRACTITIONER CONTACT INFORMATION:

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- ☐ Increased stress levels in older children have been associated with an increase in the production of stress hormones that disrupt the gut barrier and the gut bacterial composition. Several studies suggest supplementation with *Lactobacillus* species may prevent some of the adverse consequences of stress, such as preventing spikes in cortisol production.[16]

- ☐ While sometimes necessary, frequent or early antibiotic use during childhood has been identified as a risk factor for the later development of overweight/obesity, as well as asthma and allergic rhinitis. This is likely because of a disruption of the microbiome.[17] Probiotic supplementation may help prevent some of the adverse effects of antibiotic use.[18]

- ☐ Environmental toxins may also disrupt the microbiome. For example, both passive and active tobacco smoke has been shown to increase the risk for allergic diseases among children, in part through its effects on the microbiome.[19,20]

- ☐ Supplementation with probiotics just before or during a meal is more effective than taking them following a meal. This is likely because of the bactericidal effects of stomach acid, as the pH is nearly neutral during a meal but drops approximately 30 minutes following a meal.[21]

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