Clinical Applications

- Maintains Healthy Intestinal Microecology, Neutralizes Certain Bacterial Toxins
- Supports Balance of Healthy Flora During/Post-Antibiotic Therapy
- Supports the Natural Immune Response
- Supports Bowel Regularity
- Enhances integrity of mucosa and enzymatic activity of the intestinal cells
- Supports anti-inflammatory response

The multitude of healthful benefits attained by the individual supplementation of safe probiotic strains of bacteria, the non-pathogenic yeast, Saccharomyces boulardii, immunoglobulins, and the prebiotic, arabinogalactan, in enhanced by the unique proprietary combination of these ingredients. The free-flowing powdered blend is conveniently packaged into single dose sachets. Core ECOLOGY is the ideal solution for individuals with a variety of gut-related issues that cause inflammation and discomfort.

All Health Tools® Formulas Meet or Exceed cGMP Quality Standards

Discussion

Probiotic Strains: (Note: Each strain was selected because of proven safety, tolerance, resistance to bile and acidity, survival in the GI tract, and no contribution to antibiotic resistance.)

HOWARU® Biff (Bifidobacterium lactis HN019): Researchers have identified Bifidobacterium lactis HN019 as having the best probiotic potential among more than 2,000 strains. Its adherence in high numbers to cultured intestinal epithelial cells, contributes to its ability to modulate immunity. Preservation or restoration of healthy intestinal microbiota by this strain have been demonstrated. In middle-aged to elderly people Bifidobacterium lactis HN019 increased cytotoxic activity of NK cells and phagocytic activity of peripheral blood mononuclear cells and was anti-inflammatory. In a year-long, double-blind, placebo-controlled trial (n=600), children (aged 1-3) receiving this strain along with galacto-oligosaccharides showed improved immunity, iron status, and growth. In a 14 day study (n=100), B. lactis HN019 proved to dose-dependently increase colon transit time and reduce frequency of digestive complaints.

Lactobacillus acidophilus (Lactobacillus acidophilus La-14): This common inhabitant of the human mouth, intestinal tract, and vagina has diverse health benefits. In vitro studies indicate that L. acidophilus La-14 has excellent adhesion to human epithelial cell lines (HT-29), limiting the ability of enteric pathogens to colonize. This vancomycin-sensitive strain has shown inhibition of common bacterial strains in vitro, and re-establishment of the population of lactobacillus and bifidobacterium in the intestinal tracts of mice after antibiotic therapy. L. acidophilus La-14 has been demonstrated to support specific immunity in humans, shifting the immune system to the Th1 response (induced IL-12 and moderately induced TNF-a in vitro). It degrades oxalate 100%.

Lactobacillus plantarum (Lactobacillus plantarum Lp-115): Isolated from plant material, this strain is abundantly present in lactic acid-fermented foods such as olives and sauerkraut. In vitro studies have shown that L. plantarum Lp-115 has excellent adhesion to epithelial cell lines. In vitro, this strain degraded oxalates 40% and either inhibited adhesion or displaced a variety of common pathogens. These studies support the notion that the strain shifts the immune response to the Th1 type. In animal models, L. plantarum Lp-115 reduced gut inflammation.

Bifidobacterium longum (Bifidobacterium longum B1-05): B. longum B1-05 is well suited to the intestinal environment. It is sensitive to vancomycin.

Saccharomyces boulardii (Sb) is a natural, non-pathogenic yeast that has been shown to maintain and restore the healthy ecology of the small and large intestines. In a 2010 systematic review and meta-analysis of 31 randomized, placebo-controlled treatment arms in 27 trials (encompassing 5029 adult study patients), S. Boulardii was found to be significantly efficacious and safe in 84% of those treatments arms. Extensively researched and published in European and American peer-reviewed journals, Saccharomyces boulardii has demonstrated multiple mechanisms of action. These can be found by referring to the DRS-109 which details Health Tools™’s C-DIFFense. The Sb used in this formula is processed by drying at a controlled temperature and low vacuum for improved stability.

Beyond Probiotics...

IgG EndoDefense DF is a purified, highly concentrated (45%), very low saturated fat, dairy-free, consistent source of bovine serum-derived immunoglobulin antibodies, immunoprotein, beneficial growth factors, and immune-regulating cytokines. IgG EndoDefense DF functions in the intestinal tract to eliminate or inhibit the proliferation of disease-causing organisms and toxins. This reduces the stimulation of the immune response in the gut so that the body’s resources can be redirected toward challenges elsewhere. Studies with oral supplementation of immunoglobulins have demonstrated the anti-inflammatory effect as well as its ability to preserve gut wall integrity and provide intestinal humoral immunity.

Arabinogalactan, present in many plants, is a non-digestible, soluble dietary fiber containing mainly the monosaccharides, galactose, arabinose. The GRAS-designated source of arabinogalactan in Core ECOLOGY is the Larch tree. In addition to involvement in cellular communication and possession of immune-stimulatory properties, arabinogalactan minimizes ammonia synthesis and absorption, enhances production of short-chain fatty acids, and favorably alters the gut microflora. Arabinogalactan is considered a prebiotic.
**DIRECTIONS**

One to three times a day, with meals, consume the contents of one sachet dissolved in 1-2 oz pure water, or as directed by your healthcare practitioner.

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**References**


**Cautions**

Consult your healthcare practitioner before use. Keep out of reach of children. Avoid if allergic to any ingredient.

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.*