

ABOUT YOUR PROBIOTICS

There are *consequences* on human physiology when good gastrointestinal (GI) bacteria are challenged by pathogenic bacteria, and other organisms such as Giardia, Candida, and parasites. Microbial imbalance is part of many chronic complaints including but not limited to irritable bowel syndrome (IBS), Irritable Bowel Diseases (IBD), autoimmune diseases, fatigue, headaches, and food allergies etc.

Probiotics release substances such as *lactocidin*, *lactobacillin* & *acidolin* that are antagonistic to pathogenic (bad) gut microorganisms. They help break down gluten; help maintain the integrity of the gut lining; compete for adhesion to hormone receptors. They produce vitamins, lactase (digest milk), and good short-chain fatty acids such as butyrate, propionate & acetate. Healthy bacteria balance is disrupted by daily exposure to chemicals, antibiotics, processed foods (low in fiber, high in sugar), and stress (emotional or physical) etc. Dysbiosis (the imbalance of gut microbiota) occurs within minutes of feeling stressed:

- Depletion of vitamin B12 and some amino acids
- Short-circuits digestive enzymes
- Conversion of essential fatty acids into damaging fats
- Increases the potential of GI infection
- Encourages GI inflammation and leaky gut toxicities
- Interferes with the breakdown of bile acids and estrogens

Rules-of-Thumb

The beneficial effects are brand, dose and/or species dependent. Use a minimum of 15 to 30 billion colony-forming units (CFU) daily for maintenance. Increase slowly to 200-400 billion CFU x 3 to 4 months as tolerated or as instructed *to repopulate the gut after a course of antibiotics*. High dose 900 CFU probiotics are by prescription only because probiotic translocation has caused problems in immune deficiency individuals (e.g. HIV). Always consider the quality & quantity of the probiotic being used, and if they have been exposed to heat. Highest quality products are refrigerated, and should be kept refrigerated. Some say to take them with food, others say on an empty stomach. Use “Probiotic & Gut Health Product Finder” at www.NOWfoods.com.

By Brand

- VSL3 400 billion CFU** for IBD. Contains lyophilized *B. breve*, *B. longum*, *B. infantis*, *L. acidophilus*, *L. plantarum*, *L. paracasei*, *L. bulgaricus*, *S. thermophilus*.
- Biotic Defense** 400 billion CFU is designed for leaky gut syndrome (LGS). See glutenfreesociety.com.
- TheraBiotics** and **BioDoph-7 Plus** are all-purpose blend of probiotics & prebiotics.
- Go Live** is a maintenance blend of probiotics (healthfood stores, and Amazon)
- Immuno Synbiotics** (Nutrispec www.nutri-spec.net)
- Bubbies Raw Sauerkraut**, *the juice alone is an economical alternative to a probiotic supplement*. Cabbage is naturally populated with probiotics, and there are more CFU in 1 Tsp of sauerkraut juice than there is in a dose of an average supplement. It must be “RAW” cultured, homemade; or a gently cooked ripe garden-fresh cabbage.

By Species

- Lactobacillus**, **Acidophilus NCFM** & **Bifidobacter** are in most common products. They produce folic acid, niacin, thiamin, riboflavin, pyridoxine, biotin, and vitamin K.
- L. casei**, **L. plantarum**, **Streptococcus faecalis**, **B. brevis**. 82% clinical improvement in SIBO (Bioflora).
- L. rhamnosus** for Celiac disease.

- L. johnsonii** is in probiotic yogurt. In 4 weeks it normalized cytokine response to reduce the low-grade chronic inflammation of SIBO*.
- B lactis/ infantalis** (Bi-o7, HN019 strain) makes prolyndopeptidase that chews up gliadin so grains are less likely to be recognized as an allergen.
- Saccharomyces boullardi** is a yeast that reduces accumulation of histamines for those with DAO insufficiency causing systemic histamine reactions (Jarrow and NOW brands).
- Bacillus clausii** as a sole treatment normalized the breath test in 47% of people with SIBO*.
- Faecalibacterium & Butyricococcus pullicaecorum**. These are high butyric-acid producing strains of clostridium IV & XIVa that are found to be highly successful in decreasing GI inflammation & necrosis. Butyricococcus pullicaecorum was superior in decreasing lesions in those with colitis and Chron's.
- Soluble Fiber & Fructo-polysaccharides** (starch, pectin, rutin etc.). These are food for good bacteria that release acetate, proprionate & butyrate which are essential for repairing gut lining. **CAUTION:** in those with SIBO* this addition to a probiotic may cause one to feel worse with gas and bloat etc.

* **SIBO**- small intestines bacterial overgrowth. Key symptoms: GERD, bloat, diarrhea or constipation.

For Candida

Probiotics benefit Candida overgrowth only if it is limited to the vagina or intestines. An extensive & aggressive approach (even Nystatin) is required if Candida is systemic (D-Arabinitol elevation on an Organic Acid Test /OAT). *Candida is highly immunogenic and die-off symptoms can be severe.*

- ThreeLac** is a blend of *Bacillus coagulans*, *Bacillus subtilis*, and *Enterococcus faecalis*. A unique micro-encapsulation process allows the bacteria to pass through the stomach into the small intestine. After 30 days on ThreeLac, 3 packets daily, 8 of 9 subjects showed reduction of Candida antibody levels. A higher-dose product may be needed to effectively treat severe Candida:
 - **Healthy Origins**
 - **Prescript-Assist**
 - **Formula SF722:** 50 mgs (2 capsules 3 x daily). Contains caprylic & undecenoic acids.
- Neem, Allicin, Intestinal Fungus Formula** (Golden Flower Herbs) alternating at least every 3 months for GI and vaginal yeast
- Yin Care** (Amazon) for vaginal yeast
- Cilantro/Chlorella Mercury Detox**. A mercury load makes it near impossible to eliminate Candida because yeast binds with mercury. Mercury load is associated with low vitamin C level (on an Organic Acid urine test/ OAT) secondarily to copper toxicity (which is associated with zinc deficiency). A **Zinc Tally Test** (grade 4 = no taste at all) diagnoses **zinc deficiency** that may lead to poor immune response and persistent yeast infection (other signs are acne, white spots on nails, severe dandruff). An *alkaline phosphate* level below 70 on an OAT is a functional marker of zinc deficiency. See Heavy Metal Detox instructions.

Sources

Editorial. (2010). Butyric acid-producing anaerobic bacteria as a novel probiotic treatment approach for inflammatory bowel disease. *Journal of Medical Microbiology* 59, 141-143. DOI 10.1099/jmm.0.017541-0 G 2010 SG.

<http://www.functionalmedicineuniversity.com/candidaguide.pdf>