

Sources

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<https://pubmed.ncbi.nlm.nih.gov/18702653/>

A growing number of studies show correlations between PPIs—and lower stomach acid—and lower nutrients status for many vitamins and minerals:

- Vitamin B12 ([39](#), [40](#), [41](#), [42](#))
- Iron ([43](#), [44](#), [45](#), [46](#))
- Magnesium ([47](#), [48](#), [49](#), [50](#))
- Calcium ([51](#), [52](#), [53](#))
- Folate ([54](#), [55](#))
- Vitamin C ([56](#))
- Zinc ([57](#))

<https://chriskresser.com/get-rid-of-heartburn-and-gerd-forever-in-three-simple-steps/>

<https://chriskresser.com/how-to-cure-gerd-without-medication/>

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<https://www.ibgard.com/ibgardr-difference>

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<https://practicalgastro.com/2020/07/01/three-year-safety-data-analysis-indicates-no-pattern-of-heartburn-with-ibgard-an-advanced-technology-peppermint-oil-in-contrast-to-the-heartburn-issues-with-older-technologies/>

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https://scholar.google.com/scholar?hl=en&as_sdt=0%2C44&q=Cash+BD%2C+Epstein+MS%2C+Shah+SM.+IBgard%2C+a+novel+targeted+delivery+system+of+peppermint+oil%2C+results+in+significant+improvement+in+the+Total+IBS+Symptom+Score+and+individual+IBS+symptoms.+Results+from+the+U.S.-based%2C+4-week%2C+randomized%2C+placebo-controlled%2C+multi-centered+IBSREST+trial.+Presented+at+Digestive+Disease+Week%3B+May+16-19%2C+2015%3B+Washington%2C+DC.+Abstract+Mo129&btnG=#d=gs_qabs&u=%23p%3DrU8LBSH1OmAJ

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https://scholar.google.com/scholar?hl=en&as_sdt=0%2C44&q=In+vitro+evaluation+of+the+synbiotic+effect+of+probiotic+Lactobacillus+strains+and+garlic+extract+against+Salmonella+species&btnG=#d=gs_qabs&u=%23p%3D6PJJoVeqwIJ

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- [2] [Micronutrients, Agriculture and Nutrition: Linkages for Improved Health and Well Being](#)
- [3] [How Modern Life Depletes Our Gut Microbes](#)
- [4] [The Gut Microbiota of Rural Papua New Guineans: Composition, Diversity Patterns, and Ecological Processes](#)
- [5] [NIH Human Microbiome Project defines normal bacterial makeup of the body](#)
- [6] [Human microbiome project: Diversity of human microbes greater than previously predicted](#)
- [7] [Germs Are Us](#)
- [8] [Ecological and Evolutionary Forces Shaping Microbial Diversity in the Human Intestine](#)
- [9] [Cesarean versus Vaginal Delivery: Long term infant outcomes and the Hygiene Hypothesis](#)
- [10] [Reduced anxiety-like behavior and central neurochemical change in germ-free mice](#)
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- [13] [Getting To Know “Friendly Bacteria”](#)
- [14] [The microbiome: A key regulator of stress and neuroinflammation](#)
- [15] [The impact of a consortium of fermented milk strains on the gut microbiome of gnotobiotic mice and monozygotic twins](#)
- [16] [Spore-forming bacteria and their utilisation as probiotics](#)
- [17] [Anti-candida effect of bacillomycin D-like lipopeptides from Bacillus subtilis B38](#)
- [18] [Probiotic Bifidobacterium longum NCC3001 Reduces Depression Scores and Alters Brain Activity: A Pilot Study in Patients With Irritable Bowel Syndrome](#)
- [19] [The Intestinal Life Cycle of *Bacillus subtilis* and Close Relatives](#)
- [20] [The use of bacterial spore formers as probiotics](#)
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<https://www.amymyersmd.com/article/soil-based-probiotics-sibo/>

1. Blastomyces gilchristii

Sources

Verdict: blastomyces gilchristii is a fungi which is mold spores are converted into a pathogenic yeast once the spores are inhaled.

Eradication: GI Synergy (contains 3 products in 1 - one of which is called Paristonal which is a product that fight fungal overgrowth)

Probiotics to fight fungal infections:

Lactobacillus acidophilus, Lactobacillus casei, Saccharomyces boulardii, Lactobacillus rhamnosus

Products:

Vital-Immune Biotic

<https://klaire.com/v171-10-vital-immune-biotic-tm>

GI Distress Relief Probiotic: (1 bottle)

<https://bit.ly/3u4f709>

Lactoprime Plus: (1 bottle)

Klaire Labs: Register as patient. Use Code: 78G) <https://bit.ly/3ymwYSO>

Research:

<https://www.frontiersin.org/articles/10.3389/fmicb.2022.814831/full>

<https://journals.asm.org/doi/10.1128/JCM.02078-20> Campylobacter (C. jejuni, C. coli and C. lari only)

L. salivarius and L. reuteri

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8150830/>

2. Campylobacter (C. jejuni, C. coli and C. lari only)

L. salivarius and L. reuteri

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8150830/>

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3. Candidiasis Albicans

Lactobacillus acidophilus, Lactobacillus casei, Saccharomyces boulardii

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4603435/>

<https://pubmed.ncbi.nlm.nih.gov/6762128/>

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<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0012050>

<https://pubmed.ncbi.nlm.nih.gov/17885943/>

4. Overgrowth of Citrobacter

L. plantarum, L. salivarius, L. casei, L. acidophilus, B. animalis subsp. lactis and B. bifidum, Lactobacillus helveticus, Lactobacillus rhamnosus

<https://pubmed.ncbi.nlm.nih.gov/22430833/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5609747/>

5. Clostridiodes difficile (C. Diff):

Saccharomyces boulardii, Lactobacillus rhamnosus

Na, Xi, and Ciaran Kelly. "Probiotics in Clostridium difficile infection." *Journal of clinical gastroenterology* 45.Suppl (2011): S154.

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[hl=en&as_sdt=0%2C44&q=Probiotics+in+Clostridium+difficile+Infection&btnG=#d=gs_qabs&u=%23p%3DyL1_mJJXCK4J](https://scholar.google.com/scholar?hl=en&as_sdt=0%2C44&q=Probiotics+in+Clostridium+difficile+Infection&btnG=#d=gs_qabs&u=%23p%3DyL1_mJJXCK4J)

Na, Xi, and Ciaran Kelly. "Probiotics in Clostridium difficile infection." *Journal of clinical gastroenterology* 45.Suppl (2011): S154.

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6. Enterotoxigenic E. coli (ETEC) LT/ST

Lactobacillus Plantarum, Saccharomyces: *Pediococcus acidilactici* and *S. cerevisiae boulardii*, Lactobacillus rhamnosus, L. reuteri, *Lactobacillus johnsonii*, bacillus licheniformis

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5510153/#!po=69.9219>

7. Escherichia coli (E. coli) O157:H7

L. rhamnosus, L. acidophilus, bifidobacterium breve, Saccharomyces boulardii, Bifidobacterium animalis, Lactobacillus reuteri, Lactobacillus acidophilus, Lactobacillus plantarum, Lactobacillus rhamnosus, Bifidobacterium longum Bifidobacterium infantis

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6069398/>

<https://pubmed.ncbi.nlm.nih.gov/10424093/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1201237/>

8. Enterobacter hormaechei

Here's the verdict: enterobacter hormaechei is a bacterial pathogen related to Enterobacter cloacae.

Eradication: GI Synergy (antibacterial herbs)

Probiotic Strain Needed: Lactobacillus Plantarum

Products:

Lactoprime Plus

Sources

<https://klaire.com/k-lpp-lactoprime-plus>

Research:

<https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/enterobacter-hormaechei>

<https://www.liebertpub.com/doi/abs/10.1089/jmf.2018.4329>

<https://bmcvetres.biomedcentral.com/articles/10.1186/s12917-019-2207-z>

9. Enterococcus (faecium ...)

L. rhamnosus

<https://journals.asm.org/doi/10.1128/AEM.01243-16>

10. Klebsiella pneumoniae, Klebsiella

Bifidobacterium longum, L. plantarum, L. salivarius, L. casei, L. acidophilus, B. animalis subsp. lactis and B. bifidum

<https://www.sciencedirect.com/science/article/pii/S1286457915002312>

<https://pubmed.ncbi.nlm.nih.gov/19462517/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5609747/>

11. Methanobrevibacter Smithii (M Smithii)

L. plantarum, Lactobacillus reuteri, L. salivarius, L. casei, L. acidophilus, B. animalis subsp. lactis and B. bifidum

Sources

<https://pubmed.ncbi.nlm.nih.gov/28429333/>

<https://www.scientificwellness.com/blog-view/probiotic-for-methane-dependant-constipation--635>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5609747/>

<https://www.nature.com/articles/s41598-021-84641-8>

12. Overgrowth of *Prevotella Copri*

Lactobacillus acidophilus, *Lactobacillus casei*, *Bifidobacterium bifidum*

Guerreiro, Catarina Sousa, et al. "Diet, microbiota, and gut permeability—the unknown triad in rheumatoid arthritis." *Frontiers in Medicine* (2018): 349.

<https://www.frontiersin.org/articles/10.3389/fmed.2018.00349/ful>

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13. Overgrowth of *Proteus spp*

Lactobacillus casei, *Lactobacillus reuteri*, *Lactobacillus Plantarum*

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7355612/>

<https://jmb.tums.ac.ir/index.php/jmb/article/view/335>

Sources

14. Streptococcus spp.

Lactobacillus rhamnosus GG,[10] Lactobacillus reuteri, Bifidobacterium

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6519182/#!po=9.57447>

15. Salmonella:

Saccaromyces Boulardii, Bacillus Subtilis, Lactobacillus Plantarum

<https://pubmed.ncbi.nlm.nih.gov/10424093/>

<https://www.sciencedirect.com/science/article/abs/pii/S0034528811003419>

<https://www.sciencedirect.com/science/article/pii/S0023643821015929>

16. Overgrowth of Shigella (S. boydii, S. sonnei, S. flexneri, and S. dysenteriae)

Lactobacillus reuteri, Lactobacillus Rhamnosus

<https://www.spandidos-publications.com/10.3892/etm.2020.8469>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5644304/>

17. Overgrowth of Shiga-like Toxin producing E. coli (STEC) stx1/

Bifidobacterium, Pediococcus, and Lactobacillus

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4364364/#!po=11.6162>

18. Overgrowth of Parasites

Probiotics strains to fight overgrowth:

Sources

L. reuteri, *Lactobacillus casei* ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3182331/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6799552/>

19. Trypanosoma Cruzi

Here is the verdict: It's a Parasite. Trypanosoma cruzi is a flagellate protozoan.

Eradication Plan: Do the Parasite protocol and recipe plan. Weeks 1-4 you will follow the eradication supplements based on if you have SIBO or not. Then in weeks 5-8 you will swap out GI Synergy for the parasite supplement (either R.U.G. or SCRAM and follow the directions on the back of the bottle, slowly increasing pills as instructions on back of bottle)

Probiotic strains needed:

Lactobacillus casei

Research:

https://www.researchgate.net/publication/51687710_Probiotics_for_the_Control_of_Parasites_An_Overview

20. Pseudomonas Aeruginosa

Lactobacillus rhamnosus, *Bifidobacterium longum*

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7556188/>

21. Vibrio cholerae, cholera toxin gene (ctx)

Lactobacillus rhamnosus, *Bifidobacterium longum*

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3763660/>

Sources

22. *Serratia marcescens*

Lactobacillus acidophilus, *Lactobacillus plantarum*

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5825935/>

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