

Microbiome Information for: Chronic Lyme

For prescribing Medical professionals Review

The suggestions below are based on an Expert System (Artificial Intelligence) modelled after the MYCIN Expert System produced at Stanford University School of Medicine in 1972. The system uses over 1,800,000 facts with backward chaining to sources of information. The typical sources are studies published on the US National Library of Medicine.

Many recent studies has found that symptoms and symptom severity has strong associations to the microbiome for many conditions. Correcting the microbiome dysfunction is beleived to reduce the severity of symptoms. In some cases, this correction may cause symptoms to disappear.

These are a *a priori suggestions* that are predicted to independently reduce microbiome dysfunction. Suggestions should *only be done after a review* by a medical professional factoring in patient's conditions, allergies and other issues.

This report may be freely shared by a patient to their medical professionals

Best practise for making microbiome adjustments is to obtain the individuals microbiome. The following are the best microbiome to use with this expert system model. The suggestions below are intended as temporary suggestions until a test result in received.

In the USA

Ombre (<https://www.ombrelab.com/>)

Thome (<https://www.thome.com/products/dp/gut-health-test>)

Worldwide: BiomeSight (<https://biomesight.com>) - Discount Code 'MICRO'

Analysis Provided by Microbiome Prescription

A Microbiome Analysis Company

892 Lake Samish Rd, Bellingham WA 98229

Email: Research@MicrobiomePrescription.com

Bacteria being reported because of atypical values.

These bacteria were reported atypical in studies of Chronic Lyme

Nota Bena: Many studies are done with a small sample size or mixtures of condition subsets which can greatly diminish the ability to detect bacteria shifts.

Bacteria Name	Rank Shift	Taxonomy ID
Enterobacteriaceae <i>family</i>	High	543

Bacteria Name	Rank Shift	Taxonomy ID
Bacteroides <i>genus</i>	Low	816
Roseburia <i>genus</i>	Low	841

Substance to Consider Adding or Taking

These are the most significant substances that are likely to improve the microbiome dysfunction. Dosages are based on the dosages used in clinical studies. For more information see: <https://microbiomeprescription.com/library/dosages>. These are provided as examples only

Colors indicates the type of substance: i.e. probiotics and prebiotics, herbs and spices, etc. There is no further meaning to them.

Antibiotics annotated with [CFS] have been used with various degree of success with Myalgic Encephalomyelitis, Chronic Fatigue Syndrome, Chronic Lyme, Chronic Q-Fever and Long COVID conditions. Rotation of antibiotics with 3 weeks off between courses is recommended.

(r) -naproxen sodium salt,(prescription)
 acarbose,(prescription)
 a-glucosidase inhibitors
 aspartame (sweetner)
 bifidobacterium longum bb536 (probiotics)
 Cacao 20 gram/day
 Caffeine
 cannabinoids
 cefoxitin (antibiotic)s
 cinoxacin (antibiotic)
 fleroxacin (antibiotic)
 gluten-free diet
 grape polyphenols
 Grapefruit seed extract
 ibuprofen
 kanamycin (antibiotic)s
 lauric acid(fatty acid in coconut oil,in palm kernel oil,)
 loperamide hydrochloride,(prescription)
 low carbohydrate diet
 melatonin supplement 10 mg/day
 metformin (prescription)
METRONIDAZOLE (ANTIBIOTIC)S[CFS]
 N-Acetyl Cysteine (NAC), 2400 mg/day

nalidixic acid sodium salt (antibiotic)
 norfloxacin (antibiotic)
 oxolinic acid (antibiotic)
 paromomycin (antibiotic)s
 penicillin-moxalactam (antibiotic)s
 pipemidic acid (antibiotic)
 pivmecillinam hydrochloride (antibiotic)
 ribostamycin sulfate salt (antibiotic)
 rifaximin (antibiotic)s 1600 mg/day
 risperidone,(prescription)
 Shen Ling Bai Zhu San
 sisomicin sulfate (antibiotic)
 spectinomycin dihydrochloride (antibiotic)
 streptomycin (antibiotic)s
 sucralose 340 mg/day
 symbioflor 2 e.coli probiotics
 thioguanosine,(prescription)
 Toothpaste fluoride
 triclosan
 Tudca
VANCOMYCIN (ANTIBIOTIC)[CFS]
 Vitamin B9,folic acid 5 mg/day
 zidovudine; azt,(prescription)

Retail Probiotics

Over 260 retail probiotics were evaluated with the following deemed beneficial with no known adverse risks.

symbiopharm / symbioflo 2

PrecisionBiotics / Zenflo

Microbiome Labs / ZENBIOME Dual

SuperSmart / Bifidobacterium longum (BB536)

Note: Some of these are only available regionally – search the web for sources.

Substance to Consider Reducing or Eliminating

These are the most significant substances have been identified as probably contributing to the microbiome dysfunction.

In some cases blood work may show low levels of some vitamins, etc. listed below. This may be due to *greedy* bacteria reported at a high level above. Viewing bacteria data on the Kyoto Encyclopedia of Genes and Genomes (<https://www.kegg.jp/>) may provide better insight on the course of action to take.

amikacin (antibiotic)s	lactobacillus plantarum (probiotics)
ampicillin (antibiotic)s[CFS]	lactobacillus reuteri (probiotics)
apple	lactobacillus rhamnosus gg (probiotics)
arabinogalactan (prebiotic)	oregano (organum vulgare, oil)
barley	pectin
berberine	piperacillin-tazobactam (antibiotic)s
cinnamon (oil. spice)	Psyllium (Plantago Ovata Husk)
ciprofloxacin (antibiotic)s[CFS]	Pulses
clostridium butyricum (probiotics),Miya,Miyarisan	resistant starch
Human milk oligosaccharides (prebiotic, Holigos, Stachyose)	trimethoprim (antibiotic)s
imipenem (antibiotic)s	triphala
inulin (prebiotic)	vitamin d
lactobacillus acidophilus (probiotics)	wheat
lactobacillus paracasei (probiotics)	wheat bran
	xylan (prebiotic)

Sample of Literature Used

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Ankylosing spondylitis
Anorexia Nervosa
Antiphospholipid syndrome (APS)
Asthma
Atherosclerosis
Autism
Autoimmune Disease
Barrett esophagus cancer
Bipolar Disorder
Brain Trauma
Carcinoma
Celiac Disease
Cerebral Palsy
Chronic Fatigue Syndrome
Chronic Kidney Disease
Chronic Lyme
Chronic Obstructive Pulmonary Disease (COPD)
Chronic Urticaria (Hives)
Coagulation / Micro clot triggering bacteria
Colorectal Cancer
Constipation
Coronary artery disease
COVID-19
Crohn's Disease
cystic fibrosis
deep vein thrombosis
Depression
Dermatomyositis
Eczema
Endometriosis

Eosinophilic Esophagitis
Epilepsy
Fibromyalgia
Functional constipation / chronic idiopathic constipation
gallstone disease (gsd)
Gastroesophageal reflux disease (Gerd) including Barrett's esophagus
Generalized anxiety disorder
Gout
Graves' disease
Hashimoto's thyroiditis
Hidradenitis Suppurativa
Histamine Issues From Ubiome
Histamine Issues, Mast Cell Issue, DAO Insufficiency
hypercholesterolemia (High Cholesterol)
hyperglycemia
Hyperlipidemia (High Blood Fats)
hypersomnia
hypertension (High Blood Pressure)
Hypoxia
IgA nephropathy (IgAN)
Inflammatory Bowel Disease
Insomnia
Intelligence
Irritable Bowel Syndrome
Juvenile idiopathic arthritis
Liver Cirrhosis
Long COVID
Lung Cancer
ME/CFS with IBS
ME/CFS without IBS
Menopause
Metabolic Syndrome
Mood Disorders
Multiple Sclerosis
Multiple system atrophy (MSA)
Neuropathy (all types)
neuropsychiatric disorders (PANDAS, PANS)
Nonalcoholic Fatty Liver Disease (nafld) Nonalcoholic
NonCeliac Gluten Sensitivity
Obesity
obsessive-compulsive disorder
Osteoarthritis
Osteoporosis
Parkinson's Disease
Postural orthostatic tachycardia syndrome
Premenstrual dysphoric disorder
Psoriasis
rheumatoid arthritis (RA), Spondyloarthritis (SpA)
Rosacea
Schizophrenia
Sjögren syndrome
Sleep Apnea
Small Intestinal Bacterial Overgrowth (SIBO)
Stress / posttraumatic stress disorder
Systemic Lupus Erythematosus
Tic Disorder
Tourette syndrome
Type 1 Diabetes

Type 2 Diabetes
Ulcerative colitis
Unhealthy Ageing