

## Microbiome Information for: Chronic Fatigue Syndrome

### For non-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**

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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

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## Bacteria being reported because of atypical values.

These bacteria were reported atypical in studies of Chronic Fatigue Syndrome

*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	Bacteria Name	Rank	Shift	Taxonomy ID
Bacteroidia	class	High	200643	Bacteroidales	order	High	171549
Bacteroidaceae	family	High	815	Eubacteriales	order	Low	186802
Barnesiellaceae	family	High	2005519	Pseudomonadales	order	High	72274
Clostridiaceae	family	High	31979	[Clostridium] scindens	species	High	29347
Lachnospiraceae	family	Low	186803	[Clostridium] symbiosum	species	High	1512
Porphyromonadaceae	family	Low	171551	Anaerobutyricum hallii	species	Low	39488
Pseudomonadaceae	family	High	135621	Anaerostipes caccae	species	High	105841
Alistipes	genus	High	239759	Bacteroides ovatus	species	High	28116
Anaerostipes	genus	Low	207244	Bacteroides uniformis	species	High	820
Atopostipes	genus	High	292480	Blautia obeum	species	Low	40520
Bacteroides	genus	High	816	Campylobacter jejuni	species	High	197
Bifidobacterium	genus	Low	1678	Clostridiales bacterium 1_7_47FAA	species	High	457421
Clostridium	genus	High	1485	Clostridiales bacterium L2-14	species	High	620860
Coprobacillus	genus	High	100883	Clostridium butyricum	species	Low	1492
Coprococcus	genus	Low	33042	Coprococcus catus	species	Low	116085
Dorea	genus	Low	189330	Coprococcus comes	species	Low	410072
Eggerthella	genus	High	84111	Dorea formicigenerans	species	Low	39486
Enterobacter	genus	High	547	Dorea longicatena	species	Low	88431
Faecalibacterium	genus	Low	216851	Eggerthella lenta	species	High	84112
Haemophilus	genus	Low	724	Enterocloster bolteae	species	High	208479
Klebsiella	genus	High	570	Faecalibacterium prausnitzii	species	Low	853
Lactobacillus	genus	Low	1578	Haemophilus parainfluenzae	species	Low	729
Leptotrichia	genus	High	32067	Odoribacter splanchnicus	species	Low	28118
Phascolarctobacterium	genus	High	33024	Parabacteroides distasonis	species	Low	823
Porphyromonas	genus	Low	836	Parabacteroides merdae	species	Low	46503
Pseudomonas	genus	High	286	Phocaeicola vulgatus	species	Low	821
Ruminococcus	genus	High	1263	Prevotella histicola	species	Low	470565
Streptococcus	genus	High	1301	Pseudoflavonifractor capillosus	species	High	106588
Turicibacter	genus	High	191303	Roseburia inulinivorans	species	Low	360807
Veillonella	genus	Low	29465	Ruminococcus gnavus	species	High	33038

## 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.

Arbutin (polyphenol) 100 mg/day	luteolin (flavonoid) 400 mg/day
berberine 1.5 gram/day	melatonin supplement 10 mg/day
bifidobacterium pseudocatenulatum li09,bifidobacterium catenulatum li10 (probiotics)	Miso
bile (acid/salts)	N-Acetyl Cysteine (NAC), 2400 mg/day
Bile Acid Sequestrant	non-starch polysaccharides
bisphenol a (bpa)	nuts
Bofutsushosan	polydextrose
Caffeine	Prescript Assist (Original Formula)
carboxymethyl cellulose (prebiotic)	rare meat
Cinnamaldehyde	red alga Laurencia tristicha
dairy	red wine polyphenols 600 mg/day
Dextrin 40 gram/day	retinoic acid,(Vitamin A derivative)
diosmin,(polyphenol) 1500 mg/day	saccharin 450 mg/day
fluorine	smoking
General Biotics Equilibrium	stevia 800 mg/day
Guaiacol (polyphenol)	sugar
gynostemma pentaphyllum (Jiaogulan)	Tributylin
Hesperidin (polyphenol) 1.5 gram/day	vegetarians
high red meat	Vitamin B1,thiamine hydrochloride 1.8 gram/day
iron 400 mg/day	vitamin B3,niacin 3000 mg/day
Krill Oil 4 gram/day	Vitamin B6,pyridoxine hydrochloride 200 mg/day
L-glutamine 5 gram/day	vitamin B7, biotin 300 mg/day
linseed(flaxseed) 30 mg/day	Vitamin B9,folic acid 5 mg/day
	Vitamin C (ascorbic acid) 30 g/day

## 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.

apple	lactulose
arabinogalactan (prebiotic)	oregano (organum vulgare, oil)
bacillus subtilis (probiotics)	raffinose(sugar beet)
Cacao	resistant starch
fructo-oligosaccharides (prebiotic)	resveratrol (grape seed/polyphenols/red wine)
Human milk oligosaccharides (prebiotic, Holigos, Stachyose)	rosmarinus officinalis, rosemary
inulin (prebiotic)	soy
lactobacillus casei (probiotics)	wheat
lactobacillus paracasei (probiotics)	wheat bran
lactobacillus plantarum (probiotics)	whey

## Sample of Literature Used

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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)  
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Systemic Lupus Erythematosus  
Tic Disorder  
Tourette syndrome  
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Type 2 Diabetes  
Ulcerative colitis  
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