

Microbiome Information for: Type 1 Diabetes

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 Type 1 Diabetes

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	Lachnospira	genus	Low	28050
Deferribacteres	class	High	68337	Lactobacillus	genus	Low	1578
Deltaproteobacteria	class	Low	28221	Megamonas	genus	Low	158846
Lachnospiraceae	family	High	186803	Parasutterella	genus	Low	577310
Paenibacillaceae	family	Low	186822	Phascolarctobacterium	genus	Low	33024
Pasteurellaceae	family	Low	712	Prevotella	genus	Low	838
Porphyromonadaceae	family	High	171551	Romboutsia	genus	Low	1501226
Prevotellaceae	family	High	171552	Roseburia	genus	Low	841
Ruminococcaceae	family	Low	541000	Ruminococcus	genus	High	1263
Veillonellaceae	family	Low	31977	Staphylococcus	genus	Low	1279
Acidaminococcus	genus	Low	904	Streptococcus	genus	Low	1301
Bacteroides	genus	High	816	Turicibacter	genus	Low	191303
Bilophila	genus	High	35832	Caulobacteriales	order	Low	204458
Blautia	genus	High	572511	Acetanaerobacterium elongatum	species	Low	258515
Clostridium	genus	Low	1485	Agathobaculum desmolans	species	Low	39484
Dialister	genus	Low	39948	Anaerobutyricum hallii	species	Low	39488
Escherichia	genus	High	561	Bacteroides fragilis	species	High	817
Eubacterium	genus	Low	1730	Bacteroides ovatus	species	High	28116
Faecalibacterium	genus	Low	216851	Bifidobacterium adolescentis	species	Low	1680
Haemophilus	genus	Low	724	Bifidobacterium pseudocatenulatum	species	Low	28026
Intestinimonas	genus	Low	1392389	Peptoniphilus gorbachii	species	Low	411567
				Roseburia faecis	species	Low	301302

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.

acetylsalicylic acid, aspirin
 Aloe
AMPICILLIN (ANTIBIOTIC)S[CFS]
 animal-based diet
 bacillus licheniformis, (probiotics) 1000 mg/day
 banana
 benzylpenicillin sodium (antibiotic)
 berberine 1.5 gram/day
 bile (acid/salts)
 Bile Acid Sequestrant
 Bofutsushosan
 broccoli
 ceftriaxone (antibiotic)s
 chemotherapy (prescription)
 cinnamon (oil, spice) 6 gram/day
CIPROFLOXACIN (ANTIBIOTIC)S[CFS]
 coptis chinensis, Chinese goldthread
 cranberry bean flour
 Curcumin 3 gram/day
 dienestrol, (prescription)
DOXYCYCLINE (ANTIBIOTIC)S[CFS]
 gallate (food additive)
 gluten-free diet
 glycerol monolaurate (Monolaurin)
 glycyrrhizic acid (licorice) 32 gram/day
 hexestrol, (prescription)
 high-fat diets
 Human milk oligosaccharides (prebiotic, Holigos, Stachyose) 2 gram/day
 iron 400 mg/day
 kombucha
 lemongrass oil
 low-fat diets
 Manuka Honey 40 ml/day
 meropenem (antibiotic)s
MINOCYCLINE (ANTIBIOTIC)S[CFS]
 Moringa Oleifera
 non-starch polysaccharides
 piperacillin-tazobactam (antibiotic)s
 propionate
 red alga Laurencia tristicha
 Reishi Mushroom 3.4 gram/day
 resistant maltodextrin 50 gram/day
 resistant starch
 rifampicin (antibiotic)s
 saccharin 450 mg/day
 Sauerkraut
 Silver
 smoking
 stevia 800 mg/day
 syzygium aromaticum (clove)
 tetracycline (antibiotic)s
 thyme (thymol, thyme oil)
 tigecycline (antibiotic)s
 tobramycin (antibiotic)s
 trachyspermum ammi, Ajwain
 Umcka
 Umeboshi (Japanese Apricot or Prunus mume)
VANCOMYCIN (ANTIBIOTIC)[CFS]
 vitamin d 50000 UI/day
 xylitol

Retail Probiotics

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

optibac / for daily immunity

Bromatech (IT) / Lautoselle

Bromatech (IT) / Serobiome

blackmore (au) / probiotics+ bowel support

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.

acarbose,(prescription)	lactobacillus reuteri (probiotics)
almonds/ almond skins	lactulose
arabinogalactan (prebiotic)	metformin (prescription)
bacillus subtilis (probiotics)	metronidazole (antibiotic)s[CFS]
barley	Nicotine, Nicotine Patch
Burdock Root	noni
Cacao	pediococcus acidilactic (probiotic)
clostridium butyricum (probiotics),Miya,Miyarisan	Pistachio
Conjugated Linoleic Acid	pomegranate
fructo-oligosaccharides (prebiotic)	proton-pump inhibitors (prescription)
garlic (allium sativum)	raffinose(sugar beet)
grape polyphenols	resveratrol (grape seed/polyphenols/red wine)
high fiber diet	Shen Ling Bai Zhu San
inulin (prebiotic)	soy
jerusalem artichoke (prebiotic)	β-glucan
lactobacillus casei (probiotics)	walnuts
Lactobacillus Johnsonii (probiotic)	whey
lactobacillus plantarum (probiotics)	whole-grain barley

Sample of Literature Used

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 Chronic Urticaria (Hives)
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 Coronary artery disease
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 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
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Histamine Issues From Ubiome
Histamine Issues,Mast Cell Issue, DAO Insufficiency
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hypersomnia
hypertension (High Blood Pressure)
Hypoxia
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Inflammatory Bowel Disease
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Intelligence
Irritable Bowel Syndrome
Juvenile idiopathic arthritis
Liver Cirrhosis
Long COVID
Lung Cancer
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ME/CFS without IBS
Menopause
Metabolic Syndrome
Mood Disorders
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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