

Microbiome Information for: Tourette syndrome

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 Tourette 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
Oscillospiraceae	family Low	216572	Allisonella histaminiformans species	Low	209880
Turicibacteraceae Verbarq et al. 2014	family Low	2810281	Catenibacterium mitsuokai species	Low	100886
Akkermansia	genus High	239934	Dialister succinatiphilus species	Low	487173
Alloprevotella	genus High	1283313	Holdemanella biformis species	Low	1735
Bacteroides	genus Low	816	Phocaeicola coprocola species	Low	310298
Lactobacillus	genus Low	1578	Phocaeicola vulgatus species	High	821
			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.

Akkermansia muciniphila (probiotic) 10 BCFU/day

AMOXICILLIN (ANTIBIOTIC)[CFS]

benzylpenicillin sodium (antibiotic)

bifidobacterium animalis lactis (probiotics) 1.BCFU/day

bifidobacterium longum bb536 (probiotics)

cannabinoids

chloramphenicol (antibiotic)s

chlorprothixene hydrochloride,(prescription)

clonixin lysinate,(prescription)

Cranberry

cranberry bean flour

didazuril,(prescription)

dicumarol,(prescription)

diethylstilbestrol,(prescription)

diflunisal,(prescription)

efavirenz,(prescription)

estradiol valerate,(prescription)

grapes

Hesperidin (polyphenol) 1.5 gram/day

imipenem (antibiotic)s

iopanoic acid,(prescription)

ketogenic diet

lactobacillus kefir (NOT KEFIR)

meclufenamic acid sodium salt monohydrate,(prescription)

melatonin supplement 10 mg/day

metformin (prescription)

METRONIDAZOLE (ANTIBIOTIC)[CFS]

piperacillin sodium salt (antibiotic)

tazobactam (antibiotic)

tofenamic acid,(prescription)

Tudca

VANCOMYCIN (ANTIBIOTIC)[CFS]

vitamin a 25000 IU/day

Vitamin B9,folic acid 5 mg/day

zotepine,(prescription)

zuclopenthixol dihydrochloride,(prescription)

Retail Probiotics

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

SuperSmart / Akkermansia Muciniphila Postbiotic (pasturized)

PrecisionBiotics / Zenflore

Spain (es) / ns defenbiotic kids

Pendulum / akkermansia muciniphila

Pendulum / Pendulum Glucose Control

Optibac Probiotics / Bifidobacterium lactis HN019

Microbiome Labs / ZENBIOME Dual

klair labs / ther-biotic factor 4

PoolPharma (IT) / ProbioTKMIO

HLH BIOPHARMA(DE) / LACTOBACT ® FORTE

optibac / bifidobacteria & fibre

activia drink

PIANETA FARMA/KefiBios

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.

apple	lactobacillus reuteri (probiotics)
arabinogalactan (prebiotic)	Moringa Oleifera
bacillus subtilis (probiotics)	pectin
barley	Pulses
Burdock Root	raffinose(sugar beet)
fat	resistant starch
galacto-oligosaccharides (prebiotic)	resveratrol (grape seed/polyphenols/red wine)
Human milk oligosaccharides (prebiotic, Holigos, Stachyose)	Slippery Elm
inulin (prebiotic)	soy
lactobacillus acidophilus (probiotics)	walnuts
Lactobacillus Johnsonii (probiotic)	wheat bran
lactobacillus plantarum (probiotics)	xylan (prebiotic)
	zinc

Sample of Literature Used

The following are the most significant of the studies used to generate these suggestions.

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Acne
ADHD
Allergic Rhinitis (Hay Fever)
Allergies
Alopecia (Hair Loss)
Alzheimer's disease
Amyotrophic lateral sclerosis (ALS) Motor Neuron
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