

Microbiome Information for: neuropsychiatric disorders (PANDAS, PANS)

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 neuropsychiatric disorders (PANDAS, PANS)

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
Bacteroidaceae	family	High	815	Ruminococcaceae	family	Low	541000
Carnobacteriaceae	family	Low	186828	Tissierellaceae	family	Low	1737406
Corynebacteriaceae	family	Low	1653	Faecalibacterium	genus	Low	216851
Erysipelotrichaceae	family	Low	128827	Gemella	genus	Low	1378
Lachnospiraceae	family	Low	186803	Odoribacter	genus	High	283168
Rikenellaceae	family	High	171550	Turidibacter	genus	Low	191303
				Escherichia coli	species	High	562

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.

acetic acid		L-glutamine 5 gram/day
banana		linseed(flaxseed) 30 mg/day
bifidobacterium longum bb536 (probiotics)		lomefloxacin hydrochloride (antibiotic)
broccoli		low carbohydrate diet
camelina seed		low fiber diet
cannabinoids		low fodmap diet
carboxymethyl cellulose (prebiotic)		low-fat diets
d-ribose 10 gram/day		mannooligosaccharide (prebiotic) 8 gram/day
enoxacin (antibiotic)		Methionine 5 gram/day
floxuridine,(prescription)		nadifloxacin (antibiotic)
flumequine (antibiotic)		navy bean
galacto-oligosaccharides (prebiotic) 10 gram/day		oligofructose-enriched inulin (prebiotic)
gluten-free diet		omega-3 fatty acids 4 gram/day
glycyrrhizic acid (licorice) 32 gram/day		pefloxacin (antibiotic)
high animal protein diet		propionate
high processed foods diet		rare meat
high red meat		red alga <i>Laurencia tristicha</i>
high sugar diet		risperidone,(prescription)
high-protein diet		sarafloxacin (antibiotic)
Human milk oligosaccharides (prebiotic, Holigos, Stachyose) 2 gram/day		Slippery Elm
iron 400 mg/day		smoking
isobutyric acid		sodium stearyl lactylate
isovaleric acid(fatty acid)		stevia 800 mg/day
ketogenic diet		sugar
ku ding cha tea		sybioflor 2 e.coli probiotics
lactobacillus rhamnosus (probiotics) 48 BCFU/day		Tributylin
Lactobacillus salivarius UCC118		vegetable/fruit juice-based diets
Lentilactobacillus buchneri		vitamin a 25000 IU/day
		zinc 300 mg/day

Retail Probiotics

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

symbiopharm / symbioflo 2
spain (es) / muvagyn probiotico
PharmExtracta (IT) / FG5 Forte In Sachets
Metabolics / Lactobacillus Rhamnosus Powder
optibac / for those on antibiotics
spain (es) / ns defenbiotic kids
CustomProbiotics.com / L. Rhamnosus Probiotic Powder
bravo europe / freeze-dried bravo
Nu U (uk) / Bio-Cultures Complex
ISCON Elegance/ Ochek Capsule 10
Ombre / Harmony
Bromatech (IT) / Ramnoselle
Biorela® Daily
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 casei (probiotics)
amoxicillin (antibiotic)s[CFS]	Lactobacillus Johnsonii (probiotic)
arabinogalactan (prebiotic)	lactobacillus plantarum (probiotics)
bacillus subtilis (probiotics)	lactobacillus reuteri (probiotics)
barley	lactobacillus rhamnosus gg (probiotics)
benzylpenicillin sodium (antibiotic)	oligosaccharides (prebiotic)
berberine	oregano (origanum vulgare, oil)
bifidobacterium longum (probiotics)	penicillin-moxalactam (antibiotic)s
bifidobacterium pseudocatenulatum,(probiotics)	piperacillin-tazobactam (antibiotic)s
black raspberries	raw potato starch
Cacao	resistant starch
ciprofloxacin (antibiotic)s[CFS]	saccharomyces boulardii (probiotics)
fasting	salt (sodium chloride)
fluoroquinolone (antibiotic)s	soy
garlic (allium sativum)	tetracycline (antibiotic)s
gentamicin (antibiotic)s	thyme (thymol, thyme oil)
glycine	trimethoprim (antibiotic)s
high fiber diet	vancomycin (antibiotic)[CFS]
high resistant starch	walnuts
imipenem (antibiotic)s	wheat
inulin (prebiotic)	whole-grain barley

Sample of Literature Used

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Acne
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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