

Microbiome Information for: Osteoarthritis

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 Osteoarthritis

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
Lachnospiraceae	family	High	186803	Subdoligranulum	genus	Low	292632
Bacteroides	genus	High	816	[Ruminococcus] lactaris	species	Low	46228
Clostridium	genus	High	1485	Alistipes onderdonkii	species	High	328813
Escherichia	genus	High	561	Bifidobacterium pseudocatenulatum	species	Low	28026
Faecalibacterium	genus	Low	216851	Erysipelatoclostridium ramosum	species	High	1547
Ruminococcus	genus	Low	1263	Faecalibacterium prausnitzii	species	Low	853
Streptococcus	genus	High	1301	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.

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.

berberine 1.5 gram/day

bile (acid/salts)

Bile Acid Sequestrant

Bofutsushosan

broccoli

chemotherapy (prescription)

dairy

high-fat diets

ku ding cha tea

lactobacillus rhamnosus (probiotics) 48 BCFU/day

low fodmap diet

macrolide ((antibiotic)s)

non-starch polysaccharides

omega-3 fatty acids 4 gram/day

pea (fiber, protein)

proton-pump inhibitors (prescription) 60 mg/day

rare meat

Slippery Elm

vitamin a 25000 IU/day

Vitamin B9,folic acid 5 mg/day

xylan (prebiotic)

Retail Probiotics

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

Swiss BioEnergetics / Full Spectrum Probiotic Defence
spain (es) / muvagyn probiotico
jarrow formulas / fem dophilus
JGL / Lactogyn
naturopathica (au) / gastrohealth probiotic adults 50+
Metabolics / Lactobacillus Rhamnosus Powder
Bromatech (IT) / Psicobrain
spain (es) / aquilea intimus
Ombre / Restore
optibac / for those on antibiotics
custom probiotics / d-lactate free probiotics powder
spain (es) / ns defenbiotic kids
CustomProbiotics.com / L. Rhamnosus Probiotic Powder
blackmore (au) / probiotics+ eczema relief
Ombre / Endless Energy
blackmore (au) / probiotics+ womens flora balance
CVSHealth / Daily Probiotic
Nu U (uk) / Bio-Cultures Complex
SuperSmart / Oral Health
RepHresh / Pro-B Probiotic Supplement for Women
Ombre / Harmony
naturopathica (au) / gastrohealth women's probiotic with cranberry
jarrow formulas / jarro-dophilus mood
Ombre / Metabolic Booster
spain (es) / ns florabiotic instant
optibac / for women
jarrow formulas / fem-dophilus®
naturopathica (au) / gastrohealth probiotic daily care
Bromatech (IT) / Ramnoselle
Biorela® Daily
cytoplankton(uk) / dentavital bifidophilus

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)
amikacin (antibiotic)s
amoxicillin (antibiotic)s[CFS]
bacillus subtilis (probiotics)
benzylpenicillin sodium (antibiotic)
Cacao
ciprofloxacin (antibiotic)s[CFS]
clindamycin (antibiotic)s[CFS]
fluoroquinolone (antibiotic)s
fructo-oligosaccharides (prebiotic)
gentamicin (antibiotic)s
high fiber diet

imipenem (antibiotic)s
lactobacillus casei (probiotics)
lactobacillus paracasei (probiotics)
lactobacillus plantarum (probiotics)
metronidazole (antibiotic)s[CFS]
piperacillin-tazobactam (antibiotic)s
quercetin, resveratrol
resistant starch
resveratrol (grape seed/polyphenols/red wine)
rifaximin (antibiotic)s
soy
thyme (thymol, thyme oil)
vancomycin (antibiotic)[CFS]

Sample of Literature Used

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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