

Microbiome Information for: Metabolic 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

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 Metabolic 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
Actinomycetia	class	High	1760	Methanosphaera	genus	High	2316
Bacteroidia	class	Low	200643	Morganella	genus	High	581
Clostridia	class	Low	186801	Olsenella	genus	Low	133925
Deltaproteobacteria	class	Low	28221	Oribacterium	genus	Low	265975
Gammaproteobacteria	class	High	1236	Oscillibacter	genus	Low	459786
Atopobiaceae	family	High	1643824	Oscillospira	genus	High	119852
Bacillaceae	family	High	186817	Oxalobacter	genus	High	846
Bifidobacteriaceae	family	High	31953	Paenibacillus	genus	Low	44249
Clostridiaceae	family	Low	31979	Pantoea	genus	High	53335
Comamonadaceae	family	High	80864	Parabacteroides	genus	High	375288
Coriobacteriaceae	family	High	84107	Paraprevotella	genus	Low	577309
Desulfovibrionaceae	family	Low	194924	Parasutterella	genus	Low	577310
Enterobacteriaceae	family	High	543	Parvimonas	genus	Low	543311
Lachnospiraceae	family	Low	186803	Peptococcus	genus	High	2740
Leptospiraceae	family	Low	170	Phoceae	genus	High	1926663
Odoribacteraceae	family	Low	1853231	Porphyromonas	genus	High	836
Oscillospiraceae	family	Low	216572	Prevotella	genus	High	838
Peptococcaceae	family	High	186807	Propionibacterium	genus	Low	1743
Peptostreptococcaceae	family	Low	186804	Proteiniborus	genus	High	415014
Prevotellaceae	family	High	171552	Pseudoflavonifractor	genus	High	1017280
Syntrophomonadaceae	family	Low	68298	Pyramidobacter	genus	High	638847
Thermotogaceae	family	Low	188709	Rhodococcus	genus	High	1827
Veillonellaceae	family	High	31977	Rhodococcus	genus	High	1661425
Verrucomicrobiaceae	family	Low	203557	Romboutsia	genus	Low	1501226
Acetobacteroides	genus	High	1647173	Roseburia	genus	Low	841
Acidaminococcus	genus	High	904	Rothia	genus	High	32207
Acinetobacter	genus	High	469	Rothia	genus	High	508215
Adlercreutzia	genus	High	447020	Ruminiclostridium	genus	Low	1508657
Aeriscardovia	genus	Low	240233	Ruminococcus	genus	High	1263
Aestuariuspira	genus	High	1647175	Selenomonas	genus	Low	970
Akkermansia	genus	Low	239934	Serratia	genus	High	613
Allobaculum	genus	High	174708	Shigella	genus	High	620
Alloprevotella	genus	High	1283313	Staphylococcus	genus	High	1279
Anaeroplasmia	genus	Low	2086	Streptococcus	genus	High	1301
Anaerostipes	genus	High	207244	Subdoligranulum	genus	High	292632
Anaerotruncus	genus	High	244127	Succinivibrio	genus	High	83770
Bacteroides	genus	Low	816	Sutterella	genus	High	40544
Barnesiella	genus	High	397864	Treponema	genus	Low	157
Bifidobacterium	genus	Low	1678	Turicibacter	genus	Low	191303
Bilophila	genus	High	35832	Vampirovibrio	genus	High	213484
Blautia	genus	Low	572511	Vibrio	genus	High	662

Bacteria Name	Rank	Shift	Taxonomy ID	Bacteria Name	Rank	Shift	Taxonomy ID
Butyricoccus	genus	Low	580596	Victivallis	genus	Low	172900
Butyrivibrio	genus	Low	830	Weissella	genus	High	46255
Campylobacter	genus	High	194	Chromatiales	order	High	135613
Catabacter	genus	High	270497	Eubacteriales	order	High	186802
Cellulosibacter	genus	High	1246649	Akkermansia muciniphila	species	Low	239935
Cellulosilyticum	genus	Low	698776	Bacteroides caccae	species	High	47678
Christensenella	genus	High	990721	Bacteroides fragilis	species	Low	817
Collinsella	genus	High	102106	Bacteroides intestinalis	species	High	329854
Coprobacillus	genus	High	100883	Bacteroides stercoris	species	High	46506
Coprococcus	genus	Low	33042	Bacteroides uniformis	species	Low	820
Desulfovibrio	genus	High	872	Bifidobacterium adolescentis	species	Low	1680
Dorea	genus	High	189330	Bifidobacterium animalis	species	Low	28025
Eggerthella	genus	High	84111	Bifidobacterium longum	species	Low	216816
Eisenbergiella	genus	Low	1432051	Bifidobacterium pseudolongum	species	Low	1694
Elusimicrobium	genus	Low	423604	Clostridium butyricum	species	Low	1492
Escherichia	genus	High	561	Collinsella aerofaciens	species	High	74426
Eubacterium	genus	Low	1730	Corynebacterium ammoniagenes	species	High	1697
Faecalibacterium	genus	Low	216851	Enterococcus faecalis	species	High	1351
Faecalibaculum	genus	High	1729679	Enterococcus faecium	species	Low	1352
Faecalitalea	genus	High	1573534	Escherichia coli	species	High	562
Finegoldia	genus	Low	150022	Faecalibacterium prausnitzii	species	Low	853
Flavonifractor	genus	High	946234	Klebsiella pneumoniae	species	High	573
Fusobacterium	genus	High	848	Lactiplantibacillus plantarum	species	Low	1590
Geosporobacter	genus	High	390805	Lactobacillus intestinalis	species	High	151781
Gordonibacter	genus	High	644652	Ligilactobacillus ruminis	species	High	1623
Haemophilus	genus	Low	724	Limosilactobacillus reuteri	species	Low	1598
Holdemania	genus	High	61170	Micrococcus luteus	species	High	1270
Intestinimonas	genus	High	1392389	Phascolarctobacterium faecium	species	Low	33025
Klebsiella	genus	High	570	Phocaeicola vulgatus	species	Low	821
Lactobacillus	genus	Low	1578	Roseburia hominis	species	Low	301301
Lactococcus	genus	High	1357	Ruminococcus flavefaciens	species	High	1265
Leptotrichia	genus	High	32067	Ruminococcus gnavus	species	High	33038
Leuconostoc	genus	Low	1243	Anaerobutyricum hallii DSM 3353	strain	Low	411469
Megasphaera	genus	High	906	Clostridium beijerinckii NCIMB 8052	strain	Low	290402
				Clostridium beijerinckii NRRL B-598	strain	Low	1428454
				Bifidobacterium longum subsp. infantis	subspecies	Low	1682

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.

alcoholic beverages	Lactobacillus salivarius UCC118
aspartame (sweetner)	lactulose
Baking Soda, Sodium Bicarbonate	linseed(flaxseed) 30 mg/day
beef	navy bean
cadium	oligosaccharides (prebiotic)
colinfant e.coli probiotics	red alga <i>Laurencia tristicha</i>
dairy	Slippery Elm
ethanol	smoking
fat	sodium stearoyl lactylate
fluorine	sucralose 340 mg/day
green-lipped mussel	sybioflor 2 e.coli probiotics
lactobacillus gasseri (probiotics) 10 BCFU/day	Vitamin B9,folic acid 5 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
philips / colon health
wakamoto (jp) / wakamoto pharmaceutical intestinal drug
CustomProbiotics.com / L. Gasseri Probiotic Powder
SuperSmart / Lactobacillus Gasseri

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.

arabinogalactan (prebiotic)

bacillus subtilis (probiotics)

barley

berberine

clostridium butyricum (probiotics),Miya,Miyarisan

fasting

inulin (prebiotic)

lactobacillus plantarum (probiotics)

oregano (origanum vulgare, oil) |

resveratrol (grape seed/polyphenols/red wine)

soy

wheat

Sample of Literature Used

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Additional APriori Analysis Available

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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
HKE