# **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 *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

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# 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 Nam	Bacteria Name Rank Shift Taxonomy ID		
Oscillospiraceae family Low	216572	Alloprevotella	genus <b>High</b>	1283313	
Turicibacteraceae family Low	2810281	Bacteroides	genus <b>Low</b>	816	
Akkermansia genus High	239934	Lactobacillus	genus Low	1578	

# 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)S[CFS] bifidobacterium animalis lactis (probiotics) 1 BCFU/day cannabinoids chloramphenicol (antibiotic)s cranberry bean flour grapes imipenem (antibiotic)s metformin (prescription) METRONIDAZOLE (ANTIBIOTIC)S[CFS] Tudca

# **Retail Probiotics**

Over 260 retail probiotics were evaluted with the following deem beneficial with no known adverse risks.

SuperSmart / Akkermansia Muciniphila Postbiotic (pasturized) spain (es) / ns defenbiotic kids Pendulum / akkermansia muciniphila Pendulum / Pendulum Glucose Control Optibac Probiotics / Bifidobacterium lactis HN019 klaire labs / ther-biotic factor 4 PoolPharma (IT) / ProbioTK/NIO HLH BIOPHARWA(DE) / LACTOBACT ® FORTE optibac / bifidobacteria & fibre Maple Life Science™ / Bifidobacterium Animalis Activia® UltraFlora® Control FloraVantage® Control

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 arabinogalactan (prebiotic) bacillus subtilis (probiotics) fat Human milk oligosaccharides (prebiotic, Holigos, Stachyose) inulin (prebiotic) lactobacillus acidophilus (probiotics) Lactobacillus Johnsonii (probiotic) lactobacillus plantarum (probiotics) Moringa Oleifera pectin resistant starch resveratrol (grape seed/polyphenols/red wine) soy wheat bran xylan (prebiotic)

# Sample of Literature Used

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

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Targeted modification of gut microbiota and related metabolites via dietary fiber.

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Abdominal Aortic Aneurysm Acne ADHD Age-Related Macular Degeneration and Glaucoma Allergic Rhinitis (Hay Fever) Allergies Allergy to milk products Alopecia (Hair Loss) Alzheimer's disease Amyotrophic lateral sclerosis (ALS) Motor Neuron Ankylosing spondylitis Anorexia Nervosa Antiphospholipid syndrome (APS) Asthma Atherosclerosis Atrial fibrillation Autism Autoimmune Disease Barrett esophagus cancer benign prostatic hyperplasia **Bipolar Disorder** Brain Trauma **Breast Cancer** Cancer (General) Carcinoma cdkl5 deficiency disorder **Celiac Disease** 

**Cerebral Palsv 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 erectile dysfunction Fibromyalgia Functional constipation / chronic idiopathic constipation gallstone disease (gsd) Gastroesophageal reflux disease (Gerd) including Barrett's esophagus Generalized anxiety disorder giant cell arteritis Glioblastoma Gout Graves' disease Halitosis Hashimoto's thyroiditis Heart Failure Hemorrhoidal disease, Hemorrhoids, Piles **Hidradenitis Suppurativa** Histamine Issues hypercholesterolemia (High Cholesterol) hyperglycemia Hyperlipidemia (High Blood Fats) hypersomnia hypertension (High Blood Pressure Hypothyroidism Hypoxia IgA nephropathy (IgAN) Inflammatory Bowel Disease Insomnia Intelligence Intracranial aneurysms Irritable Bowel Syndrome Juvenile idiopathic arthritis Liver Cirrhosis Long COVID Low bone mineral density Lung Cancer Mast Cell Issues / mastitis ME/CFS with IBS **ME/CFS** without IBS membranous nephropathy

Menopause Metabolic Syndrome Mood Disorders multiple chemical sensitivity [MCS] Multiple Sclerosis Multiple system atrophy (MSA) myasthenia gravis neuropathic pain Neuropathy (all types) neuropsychiatric disorders (PANDAS, PANS) Nonalcoholic Fatty Liver Disease (nafld) Nonalcoholic NonCeliac Gluten Sensitivity Obesity obsessive-compulsive disorder Osteoarthritis Osteoporosis pancreatic cancer Parkinson's Disease Polycystic ovary syndrome Postural orthostatic tachycardia syndrome Premenstrual dysphoric disorder primary biliary cholangitis **Psoriasis** rheumatoid arthritis (RA), Spondyloarthritis (SpA) Rosacea Schizophrenia scoliosis sensorineural hearing loss 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**