Microbiome Information for: Autoimmune Disease

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 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

Our Facebook Discussion Page

Bacteria being reported because of atypical values.

These bacteria were reported atypical in studies of Autoimmune Disease

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	
Porphyromonas gingivalis species High 837			Rothia mucilaginosa	species High	43675
			Stutzerimonas xanthomarina species High		271420

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.

Nicotine, Nicotine Patch

PreforPro

Retail Probiotics

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

Jetson / Gut Prep

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.

barley	Human milk oligosaccharides (prebiotic, Holigos, Stachyose)
bean	lactobacillus rhamnosus (probiotics)
Bromelain	micromeria fruticosa, White-leaved Savory
Citicoline	Perilla frutescens(shiso)
Hawthorn [Crataegus monogyna Jacq.,Crataegus oxyacantha L]	Umeboshi (Japanese Apricot or Prunus mume)
helichrysum italicum,Immortelle	zinc

Sample of Literature Used

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

GMrepo v2: a curated human gut microbiome database with special focus on disease markers and cross-dataset comparison. Nucleic acids research, Volume: 50 Issue: D1 2022 Jan 7 Authors Dai D,Zhu J,Sun C,Li M,Liu J,Wu S,Ning K,He LJ,Zhao XM,Chen WH Microbiota and Metabolomic Patterns in the Breast Milk of Subjects with Celiac Disease on a Gluten-Free Diet. Nutrients . Volume: 13 Issue: 7 2021 Jun 29 Authors Olshan KL, Zomorrodi AR, Pujolassos M, Troisi J, Khan N, Fanelli B, Kenyon V, Fasano A, Leonard MM Pep19 drives epitope spreading in periodontitis and periodontitis-associated autoimmune diseases. Journal of periodontal research, Volume: 51 Issue: 3 2016 Jun Authors Kwon EY, Cha GS, Jeong E, Lee JY, Kim SJ, Surh CD, Choi J Comparative Evaluation of the Inhibitory Effect of Lactobacillus rhamnosus on Halitosis-Causing Bacteria: An Invitro Microbiological Study. Cureus , Volume: 15 Issue: 5 2023 May Authors Patil AV, Shetty SS, Padhye AM Ursolic acid regulates gut microbiota and corrects the imbalance of Th17/Treg cells in T1DM rats. PloS one . Volume: 17 Issue: 11 2022 Authors Chen W,Yu Y,Liu Y,Song C,Chen H,Tang C,Song Y,Zhang X ZnO nanoparticles inhibit the activity of Porphyromonas gingivalis and Actinomyces naeslundii and promote the mineralization of the cementum. BMC oral health, Volume: 19 Issue: 1 2019 May 14 Authors Wang J, Du L, Fu Y, Jiang P, Wang X PHAGE Study: Effects of Supplemental Bacteriophage Intake on Inflammation and Gut Microbiota in Healthy Adults. Nutrients , Volume: 11 Issue: 3 2019 Mar 20 Authors Febvre HP,Rao S,Gindin M,Goodwin NDM,Finer E,Vivanco JS,Lu S,Manter DK,Wallace TC,Weir TL Prunus mume extract exhibits antimicrobial activity against pathogenic oral bacteria. International journal of paediatric dentistry, Volume: 21 Issue: 4 2011 Jul Authors Seneviratne CJ,Wong RW,Hägg U,Chen Y,Herath TD,Samaranayake PL,Kao R Optimization of antibacterial activity of Perilla frutescens var. acuta leaf against Pseudomonas aeruginosa using the evolutionary operation-factorial design technique. International journal of molecular sciences, Volume: 11 Issue: 10 2010 Oct 14 Authors Choi UK,Lee OH,Lim SI,Kim YC

Additional APriori Analysis Available

Available at: https://microbiomeprescription.com/Library/PubMed

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 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 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**