Microbiome Information for: Menopause

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

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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/)
Thorne (https://www.thorne.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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Our Facebook Discussion Page

Bacteria being reported because of atypical values.

These bacteria were reported atypical in studies of Menopause

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
Acinetobacter guillouiae	*species*	Low	*106649*
Aggregatibacter segnis	*species*	Low	*739*
Bacteroides ovatus	*species*	High	*28116*
Bifidobacterium adolescentis	*species*	High	*1680*
Bifidobacterium animalis	*species*	Low	*28025*
Bifidobacterium longum	*species*	High	*216816*
Clostridium celatum	*species*	Low	*36834*
Corynebacterium stationis	*species*	Low	*1705*
Helicobacter rodentium	*species*	Low	*59617*
Holdemanella biformis	*species*	High	*1735*
Ligilactobacillus ruminis	*species*	High	*1623*
Phocaeicola coprophilus	*species*	Low	*387090*
Ruminococcus albus	*species*	Low	*1264*
Veillonella dispar	*species*	High	*39778*

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.

apple
arabinogalactan (prebiotic) 21 gram/day
fructo-oligosaccharides (prebiotic) 15 gram/day
Human milk oligosaccharides (prebiotic, Holigos, Stachyose) 2 gram/day
inulin (prebiotic) 32 gram/day
resveratrol (grape seed/polyphenols/red wine) 2 gram/day
Slippery Elm

Retail Probiotics

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

- **jarrow formulas / bifidus balance® + fos**
- **nature's way (au) /restore probiotic bowel & colon health 30s**
- **naturopathica (au) / gastrohealth fibrepro**
- **blackmore (au) / probiotics+ eczema relief**
- **optibac / for every day**
- **Thryve Inside/ L.Reu,Rham,Casi; B.Lactis**
- **naturopathica (au) / gastrohealth probiotic dairy free 50 billion**
- **Physician Choice /60 Billion Probiotics**
- **naturopathica (au) / gastrohealth probiotic dairy free 20 bcfu**
- **blackmores (au) / probiotics+ immune defence**
- **ISCON Elegance/ Ochek Capsule 10**
- **Nutrition Essentials / Probiotic (900 BCFU)**
- **optibac / bifidobacteria & fibre**
- **Bio Schwartz / Advance Strength Probiotics (40 BCFU)**
- **nature's way (au) / restore probiotic 30 billion 30s**
- **blackmore (au) / probiotics+ daily health**
- **Swiss BioEnergetics / Full Spectrum Probiotic Defence**
- **theramedix / probiotic**
- **blackmores (au) / probiotics + adults daily (90 capsules)**
- **nature's way (au) / restore probiotic daily health 90s**

Note: Some of these are only available regionally – search the web for sources.

Substance to Consider Reducing or Eliminating

These are the most signigicant 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.

diosmin,(polyphenol)
disodium fumarate (food additive)
melatonin supplement
non-starch polysaccharides
rice
saccharomyces boulardii (probiotics)
vegetarians
Vitamin B1,thiamine hydrochloride
Vitamin B-12
vitamin B7, biotin

Sample of Literature Used

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

The relationship between menopausal syndrome and gut microbes.
BMC women`s health , Volume: 22 Issue: 1 2022 Nov 8
Authors Liu Y,Zhou Y,Mao T,Huang Y,Liang J,Zhu M,Yao P,Zong Y,Lang J,Zhang Y

Utilization of diverse oligosaccharides for growth by Bifidobacterium and Lactobacillus species and their in vitro co-cultivation characteristics.
International microbiology : the official journal of the Spanish Society for Microbiology , 2023 Nov 9
Authors Dong Y,Han M,Fei T,Liu H,Gai Z

Prebiotic fructans have greater impact on luminal microbiology and CD3+ T cells in healthy siblings than patients with Crohn`s disease: A pilot study investigating the potential for primary prevention of inflammatory bowel disease.
Clinical nutrition (Edinburgh, Scotland) , Volume: 40 Issue: 8 2021 Jun 23
Authors Hedin CR,McCarthy NE,Louis P,Farquharson FM,McCartney S,Stagg AJ,Lindsay JO,Whelan K

Concentrated Raw Fibers Enhance the Fiber-Degrading Capacity of a Synthetic Human Gut Microbiome.
International journal of molecular sciences , Volume: 22 Issue: 13 2021 Jun 25
Authors Steimle A,Neumann M,Grant ET,Turner JD,Desai MS

Immunomodulatory and Prebiotic Effects of 2`-Fucosyllactose in Suckling Rats.
Frontiers in immunology , Volume: 10 2019
Authors Azagra-Boronat I,Massot-Cladera M,Mayneris-Perxachs J,Knipping K,Van`t Land B,Tims S,Stahl B,Garssen J,Franch À,Castell M,Rodríguez-Lagunas MJ,Pérez-Cano FJ

Prebiotic Potential of Herbal Medicines Used in Digestive Health and Disease.
Journal of alternative and complementary medicine (New York, N.Y.) , Volume: 24 Issue: 7 2018 Jul
Authors Peterson CT,Sharma V,Uchitel S,Denniston K,Chopra D,Mills PJ,Peterson SN

Extensive impact of non-antibiotic drugs on human gut bacteria.
Nature , Volume: 555 Issue: 7698 2018 Mar 29
Authors Maier L,Pruteanu M,Kuhn M,Zeller G,Telzerow A,Anderson EE,Brochado AR,Fernandez KC,Dose H,Mori H,Patil KR,Bork P,Typas A

Prebiotics Mediate Microbial Interactions in a Consortium of the Infant Gut Microbiome.
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Authors Medina DA,Pinto F,Ovalle A,Thomson P,Garrido D

Carbohydrate Staple Food Modulates Gut Microbiota of Mongolians in China.
Frontiers in microbiology , Volume: 8 2017
Authors Li J,Hou Q,Zhang J,Xu H,Sun Z,Menghe B,Zhang H

Lactate- and acetate-based cross-feeding interactions between selected strains of lactobacilli, bifidobacteria and colon bacteria in the presence of inulin-type fructans.
International journal of food microbiology , Volume: 241 2017 Jan 16
Authors Moens F,Verce M,De Vuyst L

Effects of long-term Bacillus subtilis CGMCC 1.921 supplementation on performance, egg quality, and fecal and cecal microbiota of laying hens.
Poultry science , Volume: 96 Issue: 5 2017 May 1
Authors Guo JR,Dong XF,Liu S,Tong JM

Fucosyllactose and L-fucose utilization of infant Bifidobacterium longum and Bifidobacterium kashiwanohense.
BMC microbiology , Volume: 16 Issue: 1 2016 Oct 26
Authors Bunesova V,Lacroix C,Schwab C

Active dry Saccharomyces cerevisiae can alleviate the effect of subacute ruminal acidosis in lactating dairy cows.
Journal of dairy science , Volume: 97 Issue: 12 2014 Dec
Authors AlZahal O,Dionissopoulos L,Laarman AH,Walker N,McBride BW

RNA-stable-isotope probing shows utilization of carbon from inulin by specific bacterial populations in the rat large bowel.
Applied and environmental microbiology , Volume: 80 Issue: 7 2014 Apr
Authors Tannock GW,Lawley B,Munro K,Sims IM,Lee J,Butts CA,Roy N

Utilization of major fucosylated and sialylated human milk oligosaccharides by isolated human gut microbes.
Glycobiology , Volume: 23 Issue: 11 2013 Nov
Authors Yu ZT,Chen C,Newburg DS

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Glycobiology , Volume: 23 Issue: 2 2013 Feb
Authors Yu ZT,Chen C,Kling DE,Liu B,McCoy JM,Merighi M,Heidtman M,Newburg DS

Effects of disodium fumarate on ruminal fermentation and microbial communities in sheep fed on high-forage diets.
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Authors Zhou YW,McSweeney CS,Wang JK,Liu JX

Arabinoxylans and inulin differentially modulate the mucosal and luminal gut microbiota and mucin-degradation in humanized rats.
Environmental microbiology , Volume: 13 Issue: 10 2011 Oct
Authors Van den Abbeele P,Gérard P,Rabot S,Bruneau A,El Aidy S,Derrien M,Kleerebezem M,Zoetendal EG,Smidt H,Verstraete W,Van de Wiele T,Possemiers S

Prebiotic effects of wheat arabinoxylan related to the increase in bifidobacteria, Roseburia and Bacteroides/Prevotella in diet-induced obese mice.
PloS one , Volume: 6 Issue: 6 2011
Authors Neyrinck AM,Possemiers S,Druart C,Van de Wiele T,De Backer F,Cani PD,Larondelle Y,Delzenne NM

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Journal of agricultural and food chemistry , Volume: 58 Issue: 9 2010 May 12
Authors Marcobal A,Barboza M,Froehlich JW,Block DE,German JB,Lebrilla CB,Mills DA

Fermentation of mucins and plant polysaccharides by anaerobic bacteria from the human colon.
Applied and environmental microbiology , Volume: 34 Issue: 5 1977 Nov
Authors Salyers AA,West SE,Vercellotti JR,Wilkins TD

Curated database of commensal, symbiotic and pathogenic microbiota
Generative Bioinformatics , Volume: Issue: 2014 Jun
Authors D'Adamo Peter

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