

Microbiome Information for: Addison's Disease (hypocortisolism)

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/>)

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

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 Addison's Disease (hypocortisolism)

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
Klebsiella pneumoniae species	High		573

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.

Bovine Milk Products {Dairy}

Lactose {Milk Sugar}

Ulmus rubra {slippery elm}

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.

allium sativum {garlic}

Cinnamomum zeylanicum {Ceylon Cinnamon}

Curcuma longa {Turmeric}

Cymbopogon citratus {Lemongrass}

D-(-)-Fructose {Fruit sugar}

Diferuloylmethane {Curcumin}

foeniculum vulgare,fennel

Moringa Oleifera

Nigella sativa {black cumin}

Ocimum basilicum {Basil}

origanum vulgare {oregano}

Propolis {Bee glue}

Thymus vulgaris {thyme}

Withania somnifera {Ashwagandha}

Zingiber officinale Roscoe {ginger}

Sample of Literature Used

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

A blackening lady–case report.

Nepal Medical College journal : NMCJ , Volume: 6 Issue: 1 2004 Jun

Authors Biswas R,Shenoy D,Bharadwaj A,Shetty K,Rajagopal,Murthy R,Gupta A

Thyme oil-Loaded chitosan microparticles: an antibacterial approach against pathogenic bacteria.

3 Biotech , Volume: 15 Issue: 5 2025 May

Authors Thakur A,Sharma K

Antimicrobial activities of seasonally collected bee products: honey, propolis, royal jelly, venom, and mellitin.

Brazilian journal of biology = Revista brasileira de biologia , Volume: 84 2024

Authors Obeidat M,Haddad MA,Ghnamat SA

Effect of ozonation on the phytochemicals of black seed oil and its anti-microbial, anti-oxidant, anti-inflammatory, and anti-neoplastic activities in vitro.

Scientific reports , Volume: 14 Issue: 1 2024 Dec 11

Authors Al-Rajhi AMH,Abdelghany TM,Almuhayawi MS,Alruhaili MH,Saddiq AA,Baghdadi AM,Al Jaouni SK,Albasri HM,Waznah MS,Alraddadi FA,Selim S

Zingiber officinale Uncovered: Integrating Experimental and Computational Approaches to Antibacterial and Phytochemical Profiling.

Pharmaceuticals (Basel, Switzerland) , Volume: 17 Issue: 11 2024 Nov 19

Authors Sulieman AME,Ibrahim SM,Alshammari M,Abdulaziz F,Idriss H,Alanazi NAH,Abdallah EM,Siddiqui AJ,Shommo SAM,Jamal A,Badraoui R

Ocimum basilicum seed-mediated green synthesis of silver nanoparticles: characterization and evaluation of biological properties.

Discover nano , Volume: 19 Issue: 1 2024 Oct 28

Authors Fatima S,Shahid H,Zafar S,Arooj I,Ijaz S,Elahi A

Synthesis of Tellurium Nanoparticles Using Moringa oleifera Extract, and Their Antibacterial and Antibiofilm Effects against Bacterial Pathogens.

Microorganisms , Volume: 12 Issue: 9 2024 Sep 6

Authors Ao B,Jiang H,Cai X,Liu D,Tu J,Shi X,Wang Y,He F,Lv J,Li J,Hu Y,Xia X,Hou J

Chemical Composition of Turmeric (Curcuma longa L.) Ethanol Extract and Its Antimicrobial Activities and Free Radical Scavenging Capacities.

Foods (Basel, Switzerland) , Volume: 13 Issue: 10 2024 May 16

Authors Wu H,Liu Z,Zhang Y,Gao B,Li Y,He X,Sun J,Choe U,Chen P,Blaustein RA,Yu L

Nanoemulsion of cinnamon oil to combat colistin-resistant Klebsiella pneumoniae and cancer cells.

Microbial pathogenesis , Volume: 192 2024 Jul

Authors El-Sherbiny GM,Kalaba MH,Foda AM,M E S,Youssef ASE,A Elsehemy I,Farghal EE,El-Fakharany EM

Antimicrobial activity of Cinnamomum zeylanicum essential oil against colistin-resistant gram-negative bacteria.

International journal of environmental health research , 2024 May 2

Authors Ben Selma W,Ferjeni S,Farouk A,Marzouk M,Boukadida J

Cymbopogon citratus L. essential oil as a potential anti-biofilm agent active against antibiotic-resistant bacteria isolated from chronic rhinosinusitis patients.

Biofouling , Volume: 40 Issue: 1 2024 Jan

Authors Khosakueng M,Taweekaisupapong S,Boonyanugomol W,Prapatpong P,Wongkaewkhiaw S,Kanthawong S

Molecular docking, molecular dynamics simulation, and MM/PBSA analysis of ginger phytochemicals as a potential inhibitor of AcrB for treating multidrug-resistant Klebsiella pneumoniae infections.

Journal of biomolecular structure & dynamics , 2024 Jan 2

Authors Sahoo M,Behera DU,Gaur M,Subudhi E

Chemoprofiling and antimicrobial activity of medicinal herbs used in the treatment of inflammatory bowel disease.

Cellular and molecular biology (Noisy-le-Grand, France) , Volume: 69 Issue: 13 2023 Dec 10

Authors Alshahrani A,Ali A,Abdelwahab SF

Biosynthesis of Al(2) O(3) and europium-doped Al(2) O(3) nanoparticle using Cymbopogon citratus (lemongrass) extract and its antibacterial property.

Luminescence : the journal of biological and chemical luminescence , Volume: 39 Issue: 1 2024 Jan

Authors Tanwar SN,Parauha YR,There Y,Dhoble SJ

Spices as Sustainable Food Preservatives: A Comprehensive Review of Their Antimicrobial Potential.

Pharmaceuticals (Basel, Switzerland) , Volume: 16 Issue: 10 2023 Oct 12

Authors Sulieman AME, Abdallah EM, Alanazi NA, Ed-Dra A, Jamal A, Idriss H, Alshammari AS, Shommo SAM

Antibacterial activity of Thymus vulgaris (thyme) essential oil against strains of Pseudomonas aeruginosa, Klebsiella pneumoniae and Staphylococcus saprophyticus isolated from meat product.

Brazilian journal of biology = Revista brasleira de biologia , Volume: 83 2023

Authors Diniz AF, Santos B, Nóbrega LMMO, Santos VRL, Mariz WS, Cruz PSC, Nóbrega RO, Silva RL, Paula AFR, Santos JRDA, Pessôa HLF, Oliveira-Filho AA

Assessment of anticancer, antimicrobial, antidiabetic, anti-obesity and antioxidant activity of Ocimum Basilicum seeds essential oil from Palestine.

BMC complementary medicine and therapies , Volume: 23 Issue: 1 2023 Jul 4

Authors Eid AM, Jaradat N, Shraim N, Hawash M, Issa L, Shakhsher M, Nawahda N, Hanbali A, Barahmeh N, Taha B, Mousa A

Comparative study between two different morphological structures based on polylactic acid, nanocellulose and magnetite for co-delivery of flurouracil and curcumin.

International journal of biological macromolecules , Volume: 230 2023 Mar 1

Authors Bakr EA, Gaber M, Saad DR, Salahuddin N

In-Vitro Antibacterial Activity of Curcumin-Loaded Nanofibers Based on Hyaluronic Acid against Multidrug-Resistant ESKAPE Pathogens.

Pharmaceutics , Volume: 14 Issue: 6 2022 May 31

Authors Snetkov P, Rogacheva E, Kremleva A, Morozkina S, Uspenskaya M, Kraeva L

Effects of Brazilian green propolis extract on planktonic cells and biofilms of multidrug-resistant strains of Klebsiella pneumoniae and Pseudomonas aeruginosa.

Biofouling , Volume: 36 Issue: 7 2020 Aug

Authors Santos PBDRED, Ávila DDS, Ramos LP, Yu AR, Santos CEDR, Berretta AA, Camargo SEA, Oliveira JR, Oliveira LD

Use of A Hydroalcoholic Extract of Moringa oleifera Leaves for the Green Synthesis of Bismuth Nanoparticles and Evaluation of Their Anti-Microbial and Antioxidant Activities.

Materials (Basel, Switzerland) , Volume: 13 Issue: 4 2020 Feb 15

Authors Das PE, Majdalawieh AF, Abu-Yousef IA, Narasimhan S, Poltronieri P

Green Synthesis of Encapsulated Copper Nanoparticles Using a Hydroalcoholic Extract of Moringa oleifera Leaves and Assessment of Their Antioxidant and Antimicrobial Activities.

Molecules (Basel, Switzerland) , Volume: 25 Issue: 3 2020 Jan 28

Authors Das PE, Abu-Yousef IA, Majdalawieh AF, Narasimhan S, Poltronieri P

Antimicrobial activity of spices essential oils and its effectiveness on mature biofilms of human pathogens.

Natural product research , 2018 Oct 13

Authors Condò C, Anacarso I, Sabia C, Iseppi R, Anfelli I, Forti L, de Niederhäusern S, Bondi M, Messi P

Screening and characterization of selected drugs having antibacterial potential.

Pakistan journal of pharmaceutical sciences , Volume: 31 Issue: 3 2018 May

Authors Javed H, Tabassum S, Erum S, Murtaza I, Muhammad A, Amin F, Nisar MF

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

Study of anticancer and antibacterial activities of Foeniculum vulgare, Justicia adhatoda and Urtica dioica as natural curatives.

Cellular and molecular biology (Noisy-le-Grand, France) , Volume: 63 Issue: 9 2017 Sep 30

Authors Batool R, Salahuddin H, Mahmood T, Ismail M

Monitoring *in vitro* antibacterial efficacy of 26 Indian spices against multidrug resistant urinary tract infecting bacteria.

Integrative medicine research , Volume: 3 Issue: 3 2014 Sep

Authors Rath S, Padhy RN

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

Draft Genome Sequence of Klebsiella pneumoniae Strain AS Isolated from Zhejiang Provincial Hospital of TCM, China.

Genome announcements , Volume: 4 Issue: 5 2016 Sep 22

Authors Yang XJ, Wang S, Cao JM, Hou JH

In vitro antimicrobial activity of five essential oils on multidrug resistant Gram-negative clinical isolates.

Journal of intercultural ethnopharmacology , Volume: 5 Issue: 3 2016 Jun-Aug

Authors Sakkas H, Gousia P, Economou V, Sakkas V, Petsios S, Papadopoulou C

Survey of the Antibiofilm and Antimicrobial Effects of Zingiber officinale (in Vitro Study).

Jundishapur journal of microbiology , Volume: 9 Issue: 2 2016 Feb

Authors Aghazadeh M,Zahedi Bialvaei A,Aghazadeh M,Kabiri F,Saliani N,Yousefi M,Eslami H,Samadi Kafil H

Gas chromatography coupled with mass spectrometric characterization of Curcuma longa: Protection against pathogenic microbes and lipid peroxidation in rat`s tissue homogenate.

Pakistan journal of pharmaceutical sciences , Volume: 29 Issue: 2 2016 Mar

Authors Hassan W,Gul S,Rehman S,Kanwal F,Afridi MS,Fazal H,Shah Z,Rahman A,da Rocha JB

In vitro antibacterial effect of Withania somnifera root extract on Escherichia coli.

Veterinary world , Volume: 8 Issue: 1 2015 Jan

Authors Kumari M,Gupta RP

CHEMICAL COMPOSITION AND ANTIBACTERIAL ACTIVITY OF SOME MEDICINAL PLANTS FROM LAMIACEAE FAMILY.

Acta poloniae pharmaceutica , Volume: 72 Issue: 4 2015 Jul-Aug

Authors Kozłowska M,Laudy AE,Przybył J,Ziarno M,Majewska E

Antimicrobial Impacts of Essential Oils on Food Borne-Pathogens.

Recent patents on food, nutrition & agriculture , Volume: 7 Issue: 1 2015

Authors Ozogul Y,Kuley E,Ucar Y,Ozogul F

Antioxidant, antimicrobial and phytochemical variations in thirteen Moringa oleifera Lam. cultivars.

Molecules (Basel, Switzerland) , Volume: 19 Issue: 7 2014 Jul 18

Authors Ndhala AR,Mulaudzi R,Ncube B,Abdelgadir HA,du Plooy CP,Van Staden J

Synergetic antimicrobial effects of mixtures of ethiopian honeys and ginger powder extracts on standard and resistant clinical bacteria isolates.

Evidence-based complementary and alternative medicine : eCAM , Volume: 2014 2014

Authors Ewnetu Y,Lemma W,Birhane N

Phytochemical Screening and Antimicrobial Activity of Some Medicinal Plants Against Multi-drug Resistant Bacteria from Clinical Isolates.

Indian journal of pharmaceutical sciences , Volume: 74 Issue: 5 2012 Sep

Authors Dahiya P,Purkayastha S

The ongoing battle against multi-resistant strains: in-vitro inhibition of hospital-acquired MRSA, VRE, Pseudomonas, ESBL E. coli and Klebsiella species in the presence of plant-derived antiseptic oils.

Journal of cranio-maxillo-facial surgery : official publication of the European Association for Cranio-Maxillo-Facial Surgery , Volume: 41 Issue: 4 2013 Jun

Authors Warnke PH,Lott AJ,Sherry E,Wiltfang J,Podschun R

Methanolic extracts of Withania somnifera leaves, fruits and roots possess antioxidant properties and antibacterial activities.

BMC complementary and alternative medicine , Volume: 12 2012 Oct 7

Authors Alam N,Hossain M,Mottalib MA,Sulaiman SA,Gan SH,Khalil MI

Evaluation of antimicrobial efficacy of flavonoids of withania somnifera L.

Indian journal of pharmaceutical sciences , Volume: 73 Issue: 4 2011 Jul

Authors Singh G,Kumar P

Antimicrobial Potency of the Leaf - Stalk Extract of Curcuma longa (LINN).

Ancient science of life , Volume: 20 Issue: 1-2 2000 Jul

Authors Mazumder R,Mendiratta T,Mondal SC,Mazumder A

Antimicrobial activity of extracts of local cough mixtures on upper respiratory tract bacterial pathogens.

The West Indian medical journal , Volume: 52 Issue: 3 2003 Sep

Authors Adeleye IA,Opiah L

Lactose utilization in Klebsiella pneumoniae: the slow utilization of lactose by resting cells of lactose fermenting strains.

Journal of bacteriology , Volume: 70 Issue: 1 1955 Jul

Authors CABELLI VJ

The significance of lactose fermentation and its relationship to resistance in Klebsiella pneumoniae.

Journal of bacteriology , Volume: 66 Issue: 4 1953 Oct

Authors CABELLI VJ,PICKETT MJ

In vitro activity of garlic oil and four diallyl sulphides against antibiotic-resistant Pseudomonas aeruginosa and Klebsiella pneumoniae.

The Journal of antimicrobial chemotherapy , Volume: 47 Issue: 5 2001 May

Authors Tsao S,Yin M

Probiotic activities of Lactobacillus casei rhamnosus: in vitro adherence to intestinal cells and antimicrobial properties.

Research in microbiology , Volume: 152 Issue: 2 2001 Mar

Authors Forestier C,De Champs C,Vatoux C,Joly B

Antimicrobial activity of essential oils and other plant extracts.

Journal of applied microbiology , Volume: 86 Issue: 6 1999 Jun

Authors Hammer KA,Carson CF,Riley TV

Immunomodulatory action of propolis: IV. Prophylactic activity against gram-negative infections and adjuvant effect of the water-soluble derivative.

Vaccine , Volume: 10 Issue: 12 1992

Authors Dimov V,Ivanovska N,Bankova V,Popov S

R-plasmid linked lactose fermentation in Klebsiella pneumoniae.

The Indian journal of medical research , Volume: 70 1979 Nov

Authors Walia SK,Chugh TD,Sharma KB,Bhat MB

Additional APriori Analysis Available

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

Abdominal Aortic Aneurysm

Acne

Addison's Disease (hypocortisolism)

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

Biofilm

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

Cognitive Function

Colorectal Cancer

Constipation

Coronary artery disease

COVID-19

Crohn's Disease

Cushing's Syndrome (hypercortisolism)

cystic fibrosis

d-lactic acidosis (one form of brain fog)
deep vein thrombosis
Denture Wearers Oral Shifts
Depression
Dermatomyositis
Eczema
Endometriosis
Eosinophilic Esophagitis
Epilepsy
erectile dysfunction
Fibromyalgia
Food Allergy
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
Gulf War Syndrome
Halitosis
Hashimoto's thyroiditis
Heart Failure
hemorrhagic stroke
Hemorrhoidal disease, Hemorrhoids, Piles
Hidradenitis Suppurativa
High Histamine/low DAO
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
ischemic stroke
Juvenile idiopathic arthritis
Liver Cirrhosis
Long COVID
Low bone mineral density
Lung Cancer
Lymphoma
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
Peanut Allergy
Polycystic ovary syndrome
Postural orthostatic tachycardia syndrome
Premenstrual dysphoric disorder
primary biliary cholangitis
Primary sclerosing cholangitis
Psoriasis
rheumatoid arthritis (RA),Spondyloarthritis (SpA)
Rosacea
Schizophrenia
scoliosis
sensorineural hearing loss
Sjögren syndrome
Sleep Apnea
Slow gastric motility / Gastroparesis
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
Vitiligo