

Microbiome Information for: Constipation

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 *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 Constipation

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
----------------------	-------------	--------------	--------------------

Blautia	<i>genus</i>	Low	572511
---------	--------------	-----	--------

Citrobacter	<i>genus</i>	High	544
-------------	--------------	------	-----

Escherichia	<i>genus</i>	High	561
-------------	--------------	------	-----

Faecalibacterium	<i>genus</i>	Low	216851
------------------	--------------	-----	--------

Bacteria Name	Rank	Shift	Taxonomy ID
----------------------	-------------	--------------	--------------------

Prevotella	<i>genus</i>	Low	838
------------	--------------	-----	-----

Pseudomonas	<i>genus</i>	High	286
-------------	--------------	------	-----

Roseburia	<i>genus</i>	Low	841
-----------	--------------	-----	-----

Shigella	<i>genus</i>	High	620
----------	--------------	------	-----

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.

(r) -naproxen sodium salt,(prescription)
 5-fluorouracil,(prescription)
 acriflavin (prescription)
 aminoglycoside (antibiotic)s
 apramycin (antibiotic)s
 aspartame (sweetner)
 atorvastatin (prescription) 80 mg/day
 beef
 cadium
 cannabinoids
 carboxymethyl cellulose (prebiotic)
 carob
 cephamycin (antibiotic)s
 cinoxacin (antibiotic)
 colinfant e.coli probiotics
 dairy
 dibekacin (antibiotic)s
 enoxacin (antibiotic)
 feroxacin (antibiotic)
 floxuridine,(prescription)
 fluorine
 General Biotics Equilibrium
 gluten-free diet
 glycylicline (antibiotic)s
 grape polyphenols
 green-lipped mussel
 high animal protein diet
 high sugar diet
 high-protein diet
 hydromorphone
 ibuprofen
 iron 400 mg/day
 isepamicin (antibiotic)s
 kanamycin (antibiotic)s
 ku ding cha tea
 Lactobacillus salivarius UCC118
 linseed(flaxseed) 30 mg/day
 lividomycin (antibiotic)s
 lomefloxacin hydrochloride (antibiotic)
 loperamide hydrochloride,(prescription)
 low carbohydrate diet
 macrolide ((antibiotic)s)
 mannooligosaccharide (prebiotic) 8 gram/day
 mastic gum (prebiotic) 1000 mg/day
 melatonin supplement 10 mg/day
 metformin (prescription)
 nalidixic acid sodium salt (antibiotic)
 netilmicin (antibiotic)s
 norfloxacin (antibiotic)
 oxolinic acid (antibiotic)
 paromomycin (antibiotic)s
 pefloxacin (antibiotic)
 penicillin-moxalactam (antibiotic)s
 pipemidic acid (antibiotic)
 pivmecillinam hydrochloride (antibiotic)
 proton-pump inhibitors (prescription) 60 mg/day
 rare meat
 red alga Laurencia tristicha
 ribostamycin sulfate salt (antibiotic)
 risperidone,(prescription)
 sisomicin sulfate (antibiotic)
 Slippery Elm
 spectinomycin dihydrochloride (antibiotic)
 streptomycin (antibiotic)s
 sulfonamide (antibiotic)s
 symbioflor 2 e.coli probiotics
 thioguanosine,(prescription)
 triclosan
 Vitamin B1,thiamine hydrochloride 1.8 gram/day
 vitamin B3,niacin 3000 mg/day
 Vitamin B9,folic acid 5 mg/day
 zidovudine; azt,(prescription)

Retail Probiotics

Over 260 retail probiotics were evaluated with the following deemed beneficial with no known adverse risks.

symbiopharm / symbioflo 2

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.

amikacin (antibiotic)s
amoxicillin (antibiotic)s[CFS]
ampicillin (antibiotic)s[CFS]
arabinogalactan (prebiotic)
barley
benzylpenicillin sodium (antibiotic)
berberine
cefotaxime sodium salt (antibiotic)
ceftazidime (antibiotic)s
ciprofloxacin (antibiotic)s[CFS]

gentamicin (antibiotic)s
imipenem (antibiotic)s
inulin (prebiotic)
lactobacillus casei (probiotics)
lactobacillus plantarum (probiotics)
lactobacillus rhamnosus gg (probiotics)
oregano (organum vulgare, oil) |
piperacillin-tazobactam (antibiotic)s
trimethoprim (antibiotic)s
vancomycin (antibiotic)[CFS]

Sample of Literature Used

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

Alteration of the faecal microbiota composition in patients with constipation: evidence of American Gut Project.

Beneficial microbes , Volume: 13 Issue: 6 2022 Dec 7

Authors Xu YS,Wang YH,Liu Y,Sun X,Xu JS,Song Y,Jiang X,Xiong ZF,Tian ZB,Zhang CP

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

Carbohydrate polymers , Volume: 316 2023 Sep 15

Authors Nie Q,Sun Y,Li M,Zuo S,Chen C,Lin Q,Nie S

Metformin attenuated sepsis-related liver injury by modulating gut microbiota.

Emerging microbes & infections , Volume: 11 Issue: 1 2022 Dec

Authors Liang H,Song H,Zhang X,Song G,Wang Y,Ding X,Duan X,Li L,Sun T,Kan Q

The Prebiotic Potential of Inulin-type Fructans: A Systematic Review.

Advances in nutrition (Bethesda, Md.) , 2021 Sep 23

Authors Hughes RL,Alvarado DA,Swanson KS,Holscher HD

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

Promiscuous Pseudomonas: Uptake of Non-Endogenous Ligands for Iron Acquisition.

Tetrahedron letters , Volume: 75 2021 Jul 6

Authors Kaplan AR,Wuest WM

Dietary oregano essential oil supplementation improves intestinal functions and alters gut microbiota in late-phase laying hens.

Journal of animal science and biotechnology , Volume: 12 Issue: 1 2021 Jul 6

Authors Feng J,Lu M,Wang J,Zhang H,Qiu K,Qi G,Wu S

The Potential Roles of Very Low Calorie, Very Low Calorie Ketogenic Diets and Very Low Carbohydrate Diets on the Gut Microbiota Composition.

Frontiers in endocrinology , Volume: 12 2021

Authors Rondanelli M,Gasparri C,Peroni G,Faliva MA,Naso M,Perna S,Bazire P,Sajuox I,Maugeri R,Rigon C

Lactobacillus Sps in Reducing the Risk of Diabetes in High-Fat Diet-Induced Diabetic Mice by Modulating the Gut Microbiome and Inhibiting Key Digestive Enzymes Associated with Diabetes.

Biology , Volume: 10 Issue: 4 2021 Apr 20

Authors Gulnaz A,Nadeem J,Han JH,Lew LC,Son JD,Park YH,Rather IA,Hor YY

Effects of colon-targeted vitamins on the composition and metabolic activity of the human gut microbiome- a pilot study.

Gut microbes , Volume: 13 Issue: 1 2021 Jan-Dec

Authors Pham VT,Fehlbaum S,Seifert N,Richard N,Bruins MJ,Sybesma W,Rehman A,Steinert RE

Effects of Iron and Zinc Biofortified Foods on Gut Microbiota In Vivo (Gallus gallus): A Systematic Review.

Nutrients , Volume: 13 Issue: 1 2021 Jan 9

Authors Juste Contin Gomes M,Stampini Duarte Martino H,Tako E

Diet Rich in Simple Sugars Promotes Pro-Inflammatory Response via Gut Microbiota Alteration and TLR4 Signaling.

Cells , Volume: 9 Issue: 12 2020 Dec 16

Authors Fajstova A,Galanova N,Coufal S,Malkova J,Kostovcik M,Cermakova M,Pelantova H,Kuzma M,Sediva B,Hudcovic T,Hrncir T,Taskalova-Hogenova H,Kverka M,Kostovcikova K

Exopolysaccharides from Lactobacillus plantarum YW11 improve immune response and ameliorate inflammatory bowel disease symptoms.

Acta biochimica Polonica , Volume: 67 Issue: 4 2020 Dec 17

Authors Min Z,Xiaona H,Aziz T,Jian Z,Zhennai Y

Adjunctive treatment with probiotics partially alleviates symptoms and reduces inflammation in patients with irritable bowel syndrome.

European journal of nutrition , 2020 Nov 22

Authors Xu H,Ma C,Zhao F,Chen P,Liu Y,Sun Z,Cui L,Kwok LY,Zhang H

Relative abundance of the Prevotella genus within the human gut microbiota of elderly volunteers determines the inter-individual responses to dietary supplementation with wheat bran arabinoxylan-oligosaccharides.

BMC microbiology , Volume: 20 Issue: 1 2020 Sep 14

Authors Chung WSF,Walker AW,Bosscher D,Garcia-Campayo V,Wagner J,Parkhill J,Duncan SH,Flint HJ

Effect of High versus Low Dairy Consumption on the Gut Microbiome: Results of a Randomized, Cross-Over Study.

Nutrients , Volume: 12 Issue: 7 2020 Jul 17

Authors Swarte JC,Eelderink C,Douwes RM,Said MY,Hu S,Post A,Westerhuis R,Bakker SJL,Harmsen HJM

Thyroid-Gut-Axis: How Does the Microbiota Influence Thyroid Function?

Nutrients , Volume: 12 Issue: 6 2020 Jun 12

Authors Knezevic J,Starchl C,Tmava Berisha A,Amrein K

The *in vitro* Effect of Fibers With Different Degrees of Polymerization on Human Gut Bacteria.

Frontiers in microbiology , Volume: 11 2020

Authors Chen M,Fan B,Liu S,Imam KMSU,Xie Y,Wen B,Xin F

Effect of Berberine on Atherosclerosis and Gut Microbiota Modulation and Their Correlation in High-Fat Diet-Fed ApoE^{-/-} Mice.

Frontiers in pharmacology , Volume: 11 2020

Authors Wu M,Yang S,Wang S,Cao Y,Zhao R,Li X,Xing Y,Liu L

Alterations in cecal microbiota and intestinal barrier function of laying hens fed on fluoride supplemented diets.

Ecotoxicology and environmental safety , Volume: 193 2020 Apr 15

Authors Miao L,Gong Y,Li H,Xie C,Xu Q,Dong X,Elwan HAM,Zou X

Milk fat influences proteolytic enzyme activity of dairy *Pseudomonas* species.

International journal of food microbiology , Volume: 320 2020 Jan 28

Authors Zhang D,Palmer J,Teh KH,Calinisan MMA,Flint S

Dietary prophage inducers and antimicrobials: toward landscaping the human gut microbiome.

Gut microbes , 2020 Jan 13

Authors Boling L,Cuevas DA,Grasis JA,Kang HS,Knowles B,Levi K,Maughan H,McNair K,Rojas MI,Sanchez SE,Smurthwaite C,Rohwer F

Dietary Factors and Modulation of Bacteria Strains of *Akkermansia muciniphila* and *Faecalibacterium prausnitzii*: A Systematic Review.

Nutrients , Volume: 11 Issue: 7 2019 Jul 11

Authors Verhoog S,Taneri PE,Roa Díaz ZM,Marques-Vidal P,Troup JP,Bally L,Franco OH,Glisic M,Muka T

The role of short-chain fatty acids in microbiota-gut-brain communication.

Nature reviews. Gastroenterology & hepatology , Volume: 16 Issue: 8 2019 Aug

Authors Dalile B, Van Oudenhove L,Vervliet B,Verbeke K

Fermented *Momordica charantia* L. juice modulates hyperglycemia, lipid profile, and gut microbiota in type 2 diabetic rats.

Food research international (Ottawa, Ont.) , Volume: 121 2019 Jul

Authors Gao H,Wen JJ,Hu JL,Nie QX,Chen HH,Xiong T,Nie SP,Xie MY

Spent Coffee Grounds Extract, Rich in Mannooligosaccharides, Promotes a Healthier Gut Microbial Community in a Dose-Dependent Manner.

Journal of agricultural and food chemistry , Volume: 67 Issue: 9 2019 Mar 6

Authors Pérez-Burillo S,Pastoriza S,Fernández-Arteaga A,Luzón G,Jiménez-Hernández N,D`Auria G,Francino MP,Rufián-Henares JÁ

Prevalence and Antimicrobial Susceptibility of Bacterial Uropathogens Isolated from Pediatric Patients at Yekatit 12 Hospital Medical College, Addis Ababa, Ethiopia.

International journal of microbiology , Volume: 2018 2018

Authors Merga Duffa Y,Terfa Kitila K,Mamuye Gebretsadik D,Bitew A

Probiotic *Lactobacillus plantarum* Promotes Intestinal Barrier Function by Strengthening the Epithelium and Modulating Gut Microbiota.

Frontiers in microbiology , Volume: 9 2018

Authors Wang J, Ji H, Wang S, Liu H, Zhang W, Zhang D, Wang Y

[Microbiological profiles of pathogens causing nosocomial bacteremia in 2011, 2013 and 2016].

Sheng wu gong cheng xue bao = Chinese journal of biotechnology , Volume: 34 Issue: 8 2018 Aug 25

Authors Wang X,Zhao C,Li H,Chen H,Jin L,Wang Z,Liao K,Zeng J,Xu X,Jin Y,Su D,Liu W,Hu Z,Cao B,Chu Y,Zhang R,Luo Y,Hu B,Wang H

Acute Exposure to Commonly Ingested Emulsifiers Alters Intestinal Mucus Structure and Transport Properties.

Scientific reports , Volume: 8 Issue: 1 2018 Jul 3

Authors Lock JY,Carlson TL,Wang CM,Chen A,Carrier RL

Protective Effect of Aplysin Supplementation on Intestinal Permeability and Microbiota in Rats Treated with Ethanol and Iron.

Nutrients , Volume: 10 Issue: 6 2018 May 27

Authors Ma Y,Li R,Liu Y,Liu M,Liang H

Changes in metabolism and microbiota after 24-week risperidone treatment in drug naive, normal weight patients with first episode schizophrenia.

Schizophrenia research , 2018 May 30

Authors Yuan X,Zhang P,Wang Y,Liu Y,Li X,Kumar BU,Hei G,Lv L,Huang XF,Fan X,Song X

[Niacin alters the ruminal microbial composition of cattle under high-concentrate condition.](#)

Animal nutrition (Zhongguo xu mu shou yi xue hui) , Volume: 3 Issue: 2 2017 Jun

Authors Luo D,Gao Y,Lu Y,Qu M,Xiong X,Xu L,Zhao X,Pan K,Ouyang K

[The bacterium Pseudomonas aeruginosa senses and gradually responds to interspecific competition for iron.](#)

Evolution; international journal of organic evolution , 2018 Apr 17

Authors Leinweber A,Weigert M,Kümmerli R

[Metformin: old friend, new ways of action-implication of the gut microbiome?](#)

Current opinion in clinical nutrition and metabolic care , Volume: 21 Issue: 4 2018 Jul

Authors Rodriguez J,Hiel S,Delzenne NM

[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

[Multidrug-resistant gram-negative bacterial infections in a teaching hospital in Ghana.](#)

Antimicrobial resistance and infection control , Volume: 7 2018

Authors Agyepong N,Govinden U,Omusu-Ofori A,Essack SY

[Evaluation of the effects of different diets on microbiome diversity and fatty acid composition of rumen liquor in dairy goat.](#)

Animal : an international journal of animal bioscience , 2018 Jan 8

Authors Cremonesi P,Conte G,Severgnini M,Turri F,Monni A,Capra E,Rapetti L,Colombini S,Chessa S,Battelli G,Alves SP,Mele M,Castiglioni B

[Update of incidence and antimicrobial susceptibility trends of Escherichia coli and Klebsiella pneumoniae isolates from Chinese intra-abdominal infection patients.](#)

BMC infectious diseases , Volume: 17 Issue: 1 2017 Dec 18

Authors Zhang H,Yang Q,Liao K,Ni Y,Yu Y,Hu B,Sun Z,Huang W,Wang Y,Wu A,Feng X,Luo Y,Chu Y,Chen S,Cao B,Su J,Duan Q,Zhang S,Shao H,Kong H,Gui B,Hu Z,Badal R,Xu Y

[Systematic review: human gut dysbiosis induced by non-antibiotic prescription medications.](#)

Alimentary pharmacology & therapeutics , Volume: 47 Issue: 3 2018 Feb

Authors Le Bastard Q,Al-Ghalith GA,Grégoire M,Chapelet G,Javaudin F,Dailly E,Batard E,Knight D,Montassier E

[Genes and Gut Bacteria Involved in Luminal Butyrate Reduction Caused by Diet and Loperamide.](#)

Genes , Volume: 8 Issue: 12 2017 Nov 28

Authors Hwang N,Eom T,Gupta SK,Jeong SY,Jeong DY,Kim YS,Lee JH,Sadowsky MJ,Unno T

[Lactobacillus plantarum HNU082-derived improvements in the intestinal microbiome prevent the development of hyperlipidaemia.](#)

Food & function , Volume: 8 Issue: 12 2017 Dec 13

Authors Shao Y,Huo D,Peng Q,Pan Y,Jiang S,Liu B,Zhang J

[Modulating Effects of Dicafeoylquinic Acids from Ilex kudingcha on Intestinal Microecology in Vitro.](#)

Journal of agricultural and food chemistry , Volume: 65 Issue: 47 2017 Nov 29

Authors Xie M,Chen G,Wan P,Dai Z,Hu B,Chen L,Ou S,Zeng X,Sun Y

[In-vitro antimicrobial activity and identification of bioactive components using GC-MS of commercially available essential oils in Saudi Arabia.](#)

Journal of food science and technology , Volume: 54 Issue: 12 2017 Nov

Authors Ashraf SA,Al-Shammari E,Hussain T,Tajuddin S,Panda BP

[Effects of One-Week Empirical Antibiotic Therapy on the Early Development of Gut Microbiota and Metabolites in Preterm Infants](#)

Scientific Reports , Volume: 7 2017 Aug 14

Authors Zhu D,Xiao S,Yu J,Ai Q,He Y,Cheng C,Zhang Y,Pan Y

[Temporal microbiota changes of high-protein diet intake in a rat model.](#)

Anaerobe , Volume: 47 2017 Oct

Authors Mu C,Yang Y,Luo Z,Zhu W

[The effects of micronutrient deficiencies on bacterial species from the human gut microbiota.](#)

Science translational medicine , Volume: 9 Issue: 390 2017 May 17

Authors Hibberd MC,Wu M,Rodionov DA,Li X,Cheng J,Griffin NW,Barratt MJ,Giannone RJ,Hettich RL,Osterman AL,Gordon JI

[Berberine protects against diet-induced obesity through regulating metabolic endotoxemia and gut hormone levels.](#)

Molecular medicine reports , Volume: 15 Issue: 5 2017 May

Authors Xu JH,Liu XZ,Pan W,Zou DJ

Influence of diet on the gut microbiome and implications for human health.

Journal of translational medicine , Volume: 15 Issue: 1 2017 Apr 8

Authors Singh RK,Chang HW,Yan D,Lee KM,Ucmak D,Wong K,Abrouk M,Farahnik B,Nakamura M,Zhu TH,Bhutani T,Liao W

Key bacterial families (Clostridiaceae, Erysipelotrichaceae and Bacteroidaceae) are related to the digestion of protein and energy in dogs.

PeerJ , Volume: 5 2017

Authors Bermingham EN,Maclean P,Thomas DG,Cave NJ,Young W

Raw meat based diet influences faecal microbiome and end products of fermentation in healthy dogs.

BMC veterinary research , Volume: 13 Issue: 1 2017 Feb 28

Authors Sandri M,Dal Monego S,Conte G,Sgorlon S,Stefanon B

Carob pods (Ceratonia siliqua L.) improve growth performance, antioxidant status and caecal characteristics in growing rabbits.

Journal of animal physiology and animal nutrition , Volume: 101 Issue: 6 2017 Dec

Authors Abu Hafsa SH,Ibrahim SA,Hassan AA

Etiologies of community-onset urinary tract infections requiring hospitalization and antimicrobial susceptibilities of causative microorganisms.

Journal of microbiology, immunology, and infection = Wei mian yu gan ran za zhi , Volume: 50 Issue: 6 2017 Dec

Authors Chiu CC,Lin TC,Wu RX,Yang YS,Hsiao PJ,Lee Y,Lin JC,Chang FY

Antimicrobial Effects of Mastic Extract Against Oral and Periodontal Pathogens.

Journal of periodontology , Volume: 88 Issue: 5 2017 May

Authors Koychev S,Dommisch H,Chen H,Pischon N

A metagenomic study of the preventive effect of Lactobacillus rhamnosus GG on intestinal polyp formation in Apc^{Min/+} mice.

Journal of applied microbiology , Volume: 122 Issue: 3 2017 Mar

Authors Ni Y,Wong VH,Tai WC,Li J,Wong WY,Lee MM,Fong FL,El-Nezami H,Panagiotou G

Prospective randomized controlled study on the effects of Saccharomyces boulardii CNCM I-745 and amoxicillin-clavulanate or the combination on the gut microbiota of healthy volunteers.

Gut microbes , Volume: 8 Issue: 1 2017 Jan 2

Authors Kabani TA,Pallav K,Dowd SE,Villafuerte-Galvez J,Vanga RR,Castillo NE,Hansen J,Dennis M,Leffler DA,Kelly CP

Breaking the resistance of Escherichia coli: Antimicrobial activity of Berberis lycium Royle.

Microbial pathogenesis , Volume: 102 2017 Jan

Authors Malik TA,Kamili AN,Chishti MZ,Ahad S,Tantry MA,Hussain PR,Johri RK

Insights from 100 Years of Research with Probiotic E. Coli

European Journal of Microbiology & Immunology , Volume: 6 Issue: 3 2016 Sep 29

Authors Wassenaar TM

Short- and long-term effects of oral vancomycin on the human intestinal microbiota.

The Journal of antimicrobial chemotherapy , Volume: 72 Issue: 1 2017 Jan

Authors Isaac S,Scher JU,Djukovic A,Jiménez N,Littman DR,Abramson SB,Pamer EG,Ubeda C

Berberine Is a Novel Type Efflux Inhibitor Which Attenuates the MexXY-Mediated Aminoglycoside Resistance in Pseudomonas aeruginosa.

Frontiers in microbiology , Volume: 7 2016

Authors Morita Y,Nakashima K,Nishino K,Kotani K,Tomida J,Inoue M,Kawamura Y

Addition of arabinoxylan and mixed linkage glucans in porcine diets affects the large intestinal bacterial populations.

European journal of nutrition , Volume: 56 Issue: 6 2017 Sep

Authors Gorham JB,Kang S,Williams BA,Grant LJ,McSweeney CS,Gidley MJ,Mikkelsen D

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

Significant pharmacokinetic differences of berberine are attributable to variations in gut microbiota between Africans and Chinese.

Scientific reports , Volume: 6 2016 Jun 10

Authors Alolga RN,Fan Y,Chen Z,Liu LW,Zhao YJ,Li J,Chen Y,Lai MD,Li P,Qi LW

Prevalence and Antimicrobial Resistance Patterns of Diarrheagenic Escherichia coli in Shanghai, China.

The Pediatric infectious disease journal , Volume: 35 Issue: 8 2016 Aug

Authors Huang Z,Pan H,Zhang P,Cao X,Ju W,Wang C,Zhang J,Meng J,Yuan Z,Xu X

Lactobacillus rhamnosus GG Intake Modifies Preschool Children`s Intestinal Microbiota, Alleviates Penicillin-Associated

Changes, and Reduces Antibiotic Use.**PloS one** , Volume: 11 Issue: 4 2016

Authors Korpela K,Salonen A,Virta LJ,Kumpu M,Kekkonen RA,de Vos WM

In vitro extraction and fermentation of polyphenols from grape seeds (Vitis vinifera) by human intestinal microbiota.**Food & function** , Volume: 7 Issue: 4 2016 Apr

Authors Zhou L,Wang W,Huang J,Ding Y,Pan Z,Zhao Y,Zhang R,Hu B,Zeng X

Lactobacillus plantarum NCU116 attenuates cyclophosphamide-induced intestinal mucosal injury, metabolism and intestinal microbiota disorders in mice.**Food & function** , Volume: 7 Issue: 3 2016 Mar

Authors Xie JH,Fan ST,Nie SP,Yu Q,Xiong T,Gong D,Xie MY

Oral versus intravenous iron replacement therapy distinctly alters the gut microbiota and metabolome in patients with IBD.**Gut** , Volume: 66 Issue: 5 2017 May

Authors Lee T,Clavel T,Smirnov K,Schmidt A,Lagkourdos I,Walker A,Lucio M,Michalke B,Schmitt-Kopplin P,Fedorak R,Haller D

Evaluation of probiotic properties of Lactobacillus plantarum WLPL04 isolated from human breast milk.**Journal of dairy science** , Volume: 99 Issue: 3 2016 Mar

Authors Jiang M,Zhang F,Wan C,Xiong Y,Shah NP,Wei H,Tao X

Antibacterial Activity of Probiotic Lactobacillus plantarum HK01: Effect of Divalent Metal Cations and Food Additives on Production Efficiency of Antibacterial Compounds.**Probiotics and antimicrobial proteins** , Volume: 5 Issue: 2 2013 Jun

Authors Sharafi H,Alidost L,Lababpour A,Shahbani Zahiri H,Abbasi H,Vali H,Akbari Noghabi K

From an imbalance to a new imbalance: Italian-style gluten-free diet alters the salivary microbiota and metabolome of African celiac children.**Scientific reports** , Volume: 5 2015 Dec 18

Authors Ercolini D,FrancaVilla R,Vannini L,De Filippis F,Capriati T,Di Cagno R,Iacono G,De Angelis M,Gobbetti M

Prevention of Diet-Induced Obesity Effects on Body Weight and Gut Microbiota in Mice Treated Chronically with ?9-Tetrahydrocannabinol.**PloS one** , Volume: 10 Issue: 12 2015

Authors Cluny NL,Keenan CM,Reimer RA,Le Foll B,Sharkey KA

Modulation of gut microbiota by berberine and metformin during the treatment of high-fat diet-induced obesity in rats.**Scientific reports** , Volume: 5 2015 Sep 23

Authors Zhang X,Zhao Y,Xu J,Xue Z,Zhang M,Pang X,Zhang X,Zhao L

Lactobacillus rhamnosus GG-supplemented formula expands butyrate-producing bacterial strains in food allergic infants.**The ISME journal** , Volume: 10 Issue: 3 2016 Mar

Authors Berni Canani R,Sangwan N,Stefka AT,Nocerino R,Paparo L,Aitoro R,Calignano A,Khan AA,Gilbert JA,Nagler CR

Effect of Whole-Grain Barley on the Human Fecal Microbiota and Metabolome.**Applied and environmental microbiology** , Volume: 81 Issue: 22 2015 Nov

Authors De Angelis M,Montemurno E,Vannini L,Cosola C,Cavallo N,Gozzi G,Maranzano V,Di Cagno R,Gobbetti M,Gesualdo L

Modulation of gut microbiota in rats fed high-fat diets by processing whole-grain barley to barley malt.**Molecular nutrition & food research** , Volume: 59 Issue: 10 2015 Oct

Authors Zhong Y,Nyman M,Fåk F

Wheat and barley differently affect porcine intestinal microbiota.**Journal of the science of food and agriculture** , Volume: 96 Issue: 6 2016 Apr

Authors Weiss E,Aumiller T,Spindler HK,Rosenfelder P,Eklund M,Witzig M,Jørgensen H,Bach Knudsen KE,Mosenthin R

In vitro probiotic characteristics of Lactobacillus plantarum ZDY 2013 and its modulatory effect on gut microbiota of mice.**Journal of dairy science** , Volume: 98 Issue: 9 2015 Sep

Authors Huang R,Tao X,Wan C,Li S,Xu H,Xu F,Shah NP,Wei H

Dietary modulation of the gut microbiota—a randomised controlled trial in obese postmenopausal women.**The British journal of nutrition** , Volume: 114 Issue: 3 2015 Aug 14

Authors Brahe LK,Le Chatelier E,Prifti E,Pons N,Kennedy S,Blædel T,Håkansson J,Dalsgaard TK,Hansen T,Pedersen O,Astrup A,Ehrlich SD,Larsen LH

Effects of dietary linseed oil and propionate precursors on ruminal microbial community, composition, and diversity in Yanbian yellow cattle.**PloS one** , Volume: 10 Issue: 5 2015

Authors Li XZ,Park BK,Shin JS,Choi SH,Smith SB,Yan CG

Phytonutrient diet supplementation promotes beneficial Clostridia species and intestinal mucus secretion resulting in protection against enteric infection.**Scientific reports** , Volume: 5 2015 Mar 19

Authors Wlodarska M, Willing BP, Bravo DM, Finlay BB

[Probiotic potential of lactobacillus strains isolated from sorghum-based traditional fermented food.](#)

Probiotics and antimicrobial proteins , Volume: 7 Issue: 2 2015 Jun

Authors Rao KP, Chennappa G, Suraj U, Nagaraja H, Raj AP, Sreenivasa MY

[Collateral damage from oral ciprofloxacin versus nitrofurantoin in outpatients with urinary tract infections: a culture-free analysis of gut microbiota.](#)

Clinical microbiology and infection : the official publication of the European Society of Clinical Microbiology and Infectious Diseases , Volume: 21 Issue: 4 2015 Apr

Authors Stewardson AJ, Gaia N, François P, Malhotra-Kumar S, Delémont C, Martinez de Tejada B, Schrenzel J, Harbarth S, Lazarevic V, SATURN WP1 and WP3 Study Groups.

[The impact of oral consumption of Lactobacillus plantarum P-8 on faecal bacteria revealed by pyrosequencing.](#)

Beneficial microbes , Volume: 6 Issue: 4 2015

Authors Kwok LY, Guo Z, Zhang J, Wang L, Qiao J, Hou Q, Zheng Y, Zhang H

[Phenotypic and Molecular Characterization of Extended-Spectrum \$\beta\$ -Lactamase Produced by Escherichia coli, and Klebsiella pneumoniae Isolates in an Educational Hospital.](#)

Jundishapur journal of microbiology , Volume: 7 Issue: 10 2014 Oct

Authors Gholipour A, Soleimani N, Shokri D, Mobasherizadeh S, Kardi M, Baradaran A

[Diets high in resistant starch and arabinoxylan modulate digestion processes and SCFA pool size in the large intestine and faecal microbial composition in pigs.](#)

The British journal of nutrition , Volume: 112 Issue: 11 2014 Dec 14

Authors Nielsen TS, Lærke HN, Theil PK, Sørensen JF, Saarinen M, Forssten S, Knudsen KE

[High-level antimicrobial efficacy of representative Mediterranean natural plant extracts against oral microorganisms.](#)

BioMed research international , Volume: 2014 2014

Authors Karygianni L, Cecere M, Skaltsounis AL, Argyropoulou A, Hellwig E, Aligiannis N, Wittmer A, Al-Ahmad A

[Bacteriologic profile and antibiogram of blood culture isolates from a children`s hospital in Kabul.](#)

Journal of the College of Physicians and Surgeons–Pakistan : JCPSP , Volume: 24 Issue: 6 2014 Jun

Authors Tariq TM

[454 pyrosequencing reveals changes in the faecal microbiota of adults consuming Lactobacillus casei Zhang.](#)

FEMS microbiology ecology , Volume: 88 Issue: 3 2014 Jun

Authors Zhang J, Wang L, Guo Z, Sun Z, Gesudu Q, Kwok L, Menghebilige, Zhang H

[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

[Multi-drug resistant gram-negative enteric bacteria isolated from flies at Chengdu Airport, China.](#)

The Southeast Asian journal of tropical medicine and public health , Volume: 44 Issue: 6 2013 Nov

Authors Liu Y, Yang Y, Zhao F, Fan X, Zhong W, Qiao D, Cao Y

[In vitro activity of tigecycline and comparators against Gram-positive and Gram-negative isolates collected from the Middle East and Africa between 2004 and 2011.](#)

International journal of antimicrobial agents , Volume: 43 Issue: 2 2014 Feb

Authors Kanj SS, Whitelaw A, Dowzicky MJ

[Additional oligofructose/inulin does not increase faecal bifidobacteria in critically ill patients receiving enteral nutrition: a randomised controlled trial.](#)

Clinical nutrition (Edinburgh, Scotland) , Volume: 33 Issue: 6 2014 Dec

Authors Majid HA, Cole J, Emery PW, Whelan K

[Probiotic features of two oral Lactobacillus isolates.](#)

Brazilian journal of microbiology : [publication of the Brazilian Society for Microbiology] , Volume: 43 Issue: 1 2012 Jan

Authors Zavisic G, Petricevic S, Radulovic Z, Begovic J, Golic N, Topisirovic L, Strahinic I

[Fecal microbial communities of healthy adult dogs fed raw meat-based diets with or without inulin or yeast cell wall extracts as assessed by 454 pyrosequencing.](#)

FEMS microbiology ecology , Volume: 84 Issue: 3 2013 Jun

Authors Beloshapka AN, Dowd SE, Suchodolski JS, Steiner JM, Duclos L, Swanson KS

[Gut microbiome composition is linked to whole grain-induced immunological improvements.](#)

The ISME journal , Volume: 7 Issue: 2 2013 Feb

Authors Martínez I, Lattimer JM, Hubach KL, Case JA, Yang J, Weber CG, Louk JA, Rose DJ, Kyureghian G, Peterson DA, Haub MD, Walter J

[Structural changes of gut microbiota during berberine-mediated prevention of obesity and insulin resistance in high-fat diet-fed rats.](#)

PLoS one , Volume: 7 Issue: 8 2012

Authors Zhang X,Zhao Y,Zhang M,Pang X,Xu J,Kang C,Li M,Zhang C,Zhang Z,Zhang Y,Li X,Ning G,Zhao L

Low iron availability in continuous in vitro colonic fermentations induces strong dysbiosis of the child gut microbial consortium and a decrease in main metabolites.

FEMS microbiology ecology , Volume: 83 Issue: 1 2013 Jan

Authors Dostal A,Fehlbaum S,Chassard C,Zimmermann MB,Lacroix C

Green-lipped mussel extract (Perna canaliculus) and glucosamine sulphate in patients with knee osteoarthritis: therapeutic efficacy and effects on gastrointestinal microbiota profiles.

Inflammopharmacology , Volume: 21 Issue: 1 2013 Feb

Authors Coulson S,Butt H,Vecchio P,Gramotnev H,Vitetta L

Does the piperacillin minimum inhibitory concentration for Pseudomonas aeruginosa influence clinical outcomes of children with pseudomonal bacteremia?

Clinical infectious diseases : an official publication of the Infectious Diseases Society of America , Volume: 55 Issue: 6 2012 Sep

Authors Tamma PD,Turnbull AE,Milstone AM,Hsu AJ,Carroll KC,Cosgrove SE

Additional APriori Analysis Available

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

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