

Microbiome Information for: Chronic Obstructive Pulmonary Disease (COPD)

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 Chronic Obstructive Pulmonary Disease (COPD)

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
Aerococcaceae	family	Low	186827	Lawsonibacter	genus	High	2172004
Christensenellaceae	family	Low	990719	Megasphaera	genus	High	906
Lachnospiraceae	family	High	186803	Oscillibacter	genus	High	459786
Oscillospiraceae	family	Low	216572	Prevotella	genus	High	838
Acinetobacter	genus	High	469	Romboutsia	genus	High	1501226
Aerococcus	genus	High	1375	Roseburia	genus	Low	841
Coprococcus	genus	Low	33042	Rothia	genus	High	32207
Corynebacterium	genus	High	1716	Rothia	genus	High	508215
Eubacterium	genus	Low	1730	Stenotrophomonas	genus	High	40323
Faecalicatena	genus	High	2005359	Streptococcus	genus	High	1301
Flavonifractor	genus	High	946234	Streptomyces	genus	High	1883
Fusobacterium	genus	High	848	Veillonella	genus	High	29465
Intestinibacter	genus	High	1505657	Streptococcus parasanguinis	species	High	1318
Lachnodostridium	genus	Low	1506553	Streptococcus salivarius	species	High	1304
Lachnospira	genus	Low	28050	Streptococcus vestibularis	species	High	1343

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.

berberine 1.5 gram/day

candida albicans (prescription)

chondrus crispus, red sea weed

Exercise

fat

fish oil 4 gram/day

lactobacillus gasseri (probiotics) 10 BCFU/day

lactulose

lard

linseed(flaxseed) 30 mg/day

macrolide ((antibiotic)s)

mediterranean diet

oligosaccharides (prebiotic)

proton-pump inhibitors (prescription) 60 mg/day

raffinose(sugar beet)

sarcoditheca gaudichaudii (red sea weed)

vsl#3 (probiotics)

Retail Probiotics

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

organic 3 / primal gut
spain (es) / muvagyn probiotico
probiotic pur (de) / realdose nutrition
ASEA VIA / BIOME
Smidge / Sensitive Probiotic
LiveWell Nutrition / Pro-45
Realdose
douglas laboratories / multi probiotic 40 billion
philips / colon health
quantum wellness / restora flora
wakamoto (jp) / wakamoto pharmaceutical intestinal drug
organic 3 / gutpro
1 md / complete probiotics platinum
up4 / women's
CustomProbiotics.com / L. Gasseri Probiotic Powder
MegaFood / MegaFlora
NaturalPharma / Profit Probiotics
SuperSmart / Lactobacillus Gasseri

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.

acarbose,(prescription)	hyoscyamine (l),(prescription)
amikacin (antibiotic)s	imipenem (antibiotic)s
amiodarone hydrochloride,(prescription)	inulin (prebiotic)
amoxicillin (antibiotic)s[CFS]	iron
ampicillin (antibiotic)s[CFS]	ketoconazole,(prescription)
benzylpenicillin sodium (antibiotic)	lactobacillus reuteri (probiotics)
bifonazole,(prescription)	loratadine,(prescription)
butoconazole nitrate,(prescription)	meropenem (antibiotic)s
Caffeine	metronidazole (antibiotic)s[CFS]
cefotaxime sodium salt (antibiotic)	minocycline (antibiotic)s[CFS]
ceftazidime (antibiotic)s	oxiconazole nitrate,(prescription)
cinnamon (oil. spice)	piperacillin-tazobactam (antibiotic)s
ciprofloxacin (antibiotic)s[CFS]	resistant starch
clemizole hydrochloride,(prescription)	saccharin
clofilium tosylate,(prescription)	sertaconazole nitrate,(prescription)
clomiphene citrate (z,e),(prescription)	stanozolol,(prescription)
clotrimazole,(prescription)	streptomycin (antibiotic)s
dopamine (prescription)	sulconazole nitrate,(prescription)
fluoroquinolone (antibiotic)s	tobramycin (antibiotic)s
gefitinib,(prescription)	trimethoprim (antibiotic)s
gentamicin (antibiotic)s	triphala
Guaiacol (polyphenol)	vancomycin (antibiotic)[CFS]
halofantrine hydrochloride,(prescription)	Vitamin B-12
Human milk oligosaccharides (prebiotic, Holigos, Stachyose)	vitamin B3,niacin
	walnuts

Sample of Literature Used

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

[Seabuckthorn Wuwei Pulvis attenuates chronic obstructive pulmonary disease in rat through gut microbiota-short chain fatty acids axis.](#)

Journal of ethnopharmacology , 2023 May 3

Authors Wang J, Ren C, Jin L, Batu W

[The Bidirectional Gut-Lung Axis in Chronic Obstructive Pulmonary Disease.](#)

American journal of respiratory and critical care medicine , Volume: 207 Issue: 9 2023 May 1

Authors Wang L, Cai Y, Garssen J, Henricks PAJ, Folkerts G, Braber S

[The gut microbiome is a significant risk factor for future chronic lung disease.](#)

The Journal of allergy and clinical immunology , Volume: 151 Issue: 4 2023 Apr

Authors Liu Y, Teo SM, Méric G, Tang HHF, Zhu Q, Sanders JG, Vázquez-Baeza Y, Verspooor K, Vartiainen VA, Jousilahti P, Lahti L, Niranen T, Havulinna AS, Knight R, Salomaa V, Inouye M

[The Role of Gut Bacteriome in Asthma, Chronic Obstructive Pulmonary Disease and Obstructive Sleep Apnoea.](#)

Microorganisms , Volume: 10 Issue: 12 2022 Dec 13

Authors Bikov A, Dragonieri S, Csoma B, Mazzuca C, Finamore P, Rocchi G, Putignani L, Guarino M, Scarlata S

[Comprehensive profiling of the gut microbiota in patients with chronic obstructive pulmonary disease of varying severity.](#)

PLoS one , Volume: 16 Issue: 4 2021

Authors Chiu YC, Lee SW, Liu CW, Lin RC, Huang YC, Lan TY, Wu LS

[Longitudinal effects of oral administration of antimicrobial drugs on fecal microbiota of horses.](#)

Journal of veterinary internal medicine , 2023 Sep 8

Authors Gomez D, Toribio R, Caddeley B, Costa M, Vijan S, Dembek K

[Dietary Prebiotic Oligosaccharides and Arachidonate Alter the Fecal Microbiota and Mucosal Lipid Composition of Suckling Pigs.](#)

The Journal of nutrition , 2023 Jun 20

Authors Eudy BJ, Odle J, Lin X, Maltecca C, Walter KR, McNulty NP, Fellner V, Jacobi SK

[The regulatory effects of specific polyphenols on Akkermansia are dependent on uridine.](#)

Food chemistry , Volume: 410 2023 Jun 1

Authors Gao X, Yue C, Tian R, Yu L, Tian F, Zhao J, Chen W, Zhai Q

[A Comparison of Production Performance, Egg Quality, and Cecal Microbiota in Laying Hens Receiving Graded Levels of Vitamin B₁₂.](#)

Frontiers in veterinary science , Volume: 8 2021

Authors Wang R, Bai Y, Yang Y, Wu X, Li R

[Dietary and Pharmacologic Manipulations of Host Lipids and Their Interaction With the Gut Microbiome in Non-human Primates.](#)

Frontiers in medicine , Volume: 8 2021

Authors Lang JM, Sedgeman LR, Cai L, Layne JD, Wang Z, Pan C, Lee R, Temel RE, Lulis AJ

[Low-Dose Lactulose as a Prebiotic for Improved Gut Health and Enhanced Mineral Absorption.](#)

Frontiers in nutrition , Volume: 8 2021

Authors Karakan T, Tuohy KM, Janssen-van Solingen G

[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

[Home-based exercise training influences gut bacterial levels in multiple sclerosis.](#)

Complementary therapies in clinical practice , Volume: 45 2021 Jul 30

Authors Mokhtarzade M, Molanouri Shamsi M, Abolhasani M, Bakhshi B, Sahraian MA, Quinn LS, Negares R

[Habitual Dietary Intake Affects the Altered Pattern of Gut Microbiome by Acarbose in Patients with Type 2 Diabetes.](#)

Nutrients , Volume: 13 Issue: 6 2021 Jun 19

Authors Takewaki F, Nakajima H, Takewaki D, Hashimoto Y, Majima S, Okada H, Senmaru T, Ushigome E, Hamaguchi M, Yamazaki M, Tanaka Y, Nakajima S, Ohno H, Fukui M

[The influence of exercise training volume alterations on the gut microbiome in highly-trained middle-distance runners.](#)

European journal of sport science , 2021 May 26

Authors Craven J, Cox AJ, Bellinger P, Desbrow B, Irwin C, Buchan J, McCartney D, Sabapathy S

[Potato resistant starch inhibits diet-induced obesity by modifying the composition of intestinal microbiota and their metabolites in obese mice.](#)

International journal of biological macromolecules , Volume: 180 2021 Mar 9

Authors Liang D,Zhang L,Chen H,Zhang H,Hu H,Dai X

[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

[Impact of Mediterranean Diet on Disease Activity and Gut Microbiota Composition of Rheumatoid Arthritis Patients.](#)

Microorganisms , Volume: 8 Issue: 12 2020 Dec 14

Authors Picchianti Diamanti A,Panebianco C,Salerno G,Di Rosa R,Salemi S,Sorgi ML,Meneguzzi G,Mariani MB,Rai A,Iacono D,Sesti G,Pazienza V,Laganà B

[A high-fat diet and high-fat and high-cholesterol diet may affect glucose and lipid metabolism differentially through gut microbiota in mice.](#)

Experimental animals , 2020 Oct 1

Authors Liang H,Jiang F,Cheng R,Luo Y,Wang J,Luo Z,Li M,Shen X,He F

[Nuts and their Effect on Gut Microbiota, Gut Function and Symptoms in Adults: A Systematic Review and Meta-Analysis of Randomised Controlled Trials.](#)

Nutrients , Volume: 12 Issue: 8 2020 Aug 6

Authors Creedon AC,Hung ES,Berry SE,Whelan K

[The Protective Effects of 2`-Fucosyllactose against *E. Coli* O157 Infection Are Mediated by the Regulation of Gut Microbiota and the Inhibition of Pathogen Adhesion.](#)

Nutrients , Volume: 12 Issue: 5 2020 May 1

Authors Wang Y,Zou Y,Wang J,Ma H,Zhang B,Wang S

[2`-fucosyllactose Supplementation Improves Gut-Brain Signaling and Diet-Induced Obese Phenotype and Changes the Gut Microbiota in High Fat-Fed Mice.](#)

Nutrients , Volume: 12 Issue: 4 2020 Apr 5

Authors Lee S,Goodson M,Vang W,Kalanetra K,Barile D,Raybould H

[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

[Rapid gut microbiome changes in a world-class ultramarathon runner.](#)

Physiological reports , Volume: 7 Issue: 24 2019 Dec

Authors Grosicki GJ,Durk RP,Bagley JR

[Steatosis and gut microbiota dysbiosis induced by high-fat diet are reversed by 1-week chow diet administration.](#)

Nutrition research (New York, N.Y.) , Volume: 71 2019 Nov

Authors Safari Z,Monnoye M,Abuja PM,Mariadassou M,Kashofer K,Gérard P,Zatloukal K

[Dietary resistant starch modifies the composition and function of caecal microbiota of broilers.](#)

Journal of the science of food and agriculture , Volume: 100 Issue: 3 2020 Feb

Authors Zhang Y,Liu Y,Li J,Xing T,Jiang Y,Zhang L,Gao F

[Lactulose drives a reversible reduction and qualitative modulation of the faecal microbiota diversity in healthy dogs.](#)

Scientific reports , Volume: 9 Issue: 1 2019 Sep 16

Authors Ferreira MDF,Salavati Schmitz S,Schoenebeck JJ,Clements DN,Campbell SM,Gaylor DE,Mellanby RJ,Gow AG,Salavati M

[Lactobacillus reuteri DSM 17938 feeding of healthy newborn mice regulates immune responses while modulating gut microbiota and boosting beneficial metabolites.](#)

American journal of physiology. Gastrointestinal and liver physiology , 2019 Sep 4

Authors Liu Y,Tian X,He B,Hoang TK,Taylor CM,Blanchard E,Freeborn J,Park S,Luo M,Couturier J,Tran DQ,Roos S,Wu G,Rhoads JM

[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

[Supplementation of diet with non-digestible oligosaccharides alters the intestinal microbiota, but not arthritis development, in IL-1 receptor antagonist deficient mice.](#)

PloS one , Volume: 14 Issue: 7 2019

Authors Rogier R,Ederveen THA,Wopereis H,Hartog A,Boekhorst J,van Hijum SAFT,Knol J,Garssen J,Walgreen B,Helsen MIM,van der Kraan PM,van Lent PLEM,van de Loo FAJ,Abdollahi-Roodsaz S,Koenders MI

[Walnuts and Vegetable Oils Differentially Affect the Gut Microbiome and Associations with Cardiovascular Risk Factors \(OR29-06-19\).](#)

Current developments in nutrition , Volume: 3 Issue: Suppl 1 2019 Jun

Authors Tindall A,McLimans C,Petersen K,Kris-Etherton P,Lamendella R

[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

[Influence of proton pump inhibitors on microbiota in chronic liver disease patients.](#)

Hepatology international , Volume: 13 Issue: 2 2019 Mar

Authors Yamamoto K, Ishigami M, Honda T, Takeyama T, Ito T, Ishizu Y, Kuzuya T, Hayashi K, Goto H, Hirooka Y

[Inulin-type fructans improve active ulcerative colitis associated with microbiota changes and increased short-chain fatty acids levels.](#)

Gut microbes , 2018 Nov 5

Authors Valcheva R, Koleva P, Martínez I, Walter J, Gänzle MG, Dieleman LA

[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

[In vitro fermentation of raffinose by the human gut bacteria.](#)

Food & function , Volume: 9 Issue: 11 2018 Nov 14

Authors Mao B, Tang H, Gu J, Li D, Cui S, Zhao J, Zhang H, Chen W

[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

[VSL#3 can prevent ulcerative colitis-associated carcinogenesis in mice.](#)

World journal of gastroenterology , Volume: 24 Issue: 37 2018 Oct 7

Authors Wang CS, Li WB, Wang HY, Ma YM, Zhao XH, Yang H, Qian JM, Li JN

[Gut Microbiome Composition in Non-human Primates Consuming a Western or Mediterranean Diet.](#)

Frontiers in nutrition , Volume: 5 2018

Authors Nagpal R, Shively CA, Appt SA, Register TC, Michalson KT, Vitolins MZ, Yadav H

[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

[Walnut Consumption Alters the Gastrointestinal Microbiota, Microbially Derived Secondary Bile Acids, and Health Markers in Healthy Adults: A Randomized Controlled Trial.](#)

The Journal of nutrition , Volume: 148 Issue: 6 2018 Jun 1

Authors Holscher HD, Guetterman HM, Swanson KS, An R, Matthan NR, Lichtenstein AH, Novotny JA, Baer DJ

[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

[Inulin-type fructan improves diabetic phenotype and gut microbiota profiles in rats.](#)

PeerJ , Volume: 6 2018

Authors Zhang Q, Yu H, Xiao X, Hu L, Xin F, Yu X

[Fermentation of non-digestible raffinose family oligosaccharides and galactomannans by probiotics.](#)

Food & function , Volume: 9 Issue: 3 2018 Mar 1

Authors Zartl B, Silberbauer K, Loepfert R, Viernstein H, Praznik W, Mueller M

[Investigation of probiotics in multiple sclerosis.](#)

Multiple sclerosis (Houndmills, Basingstoke, England) , Volume: 24 Issue: 1 2018 Jan

Authors Tankou SK, Regev K, Healy BC, Cox LM, Tjon E, Kivisakk P, Vanande IP, Cook S, Gandhi R, Glanz B, Stankiewicz J, Weiner HL

[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

The Influence of Proton Pump Inhibitors on the Fecal Microbiome of Infants with Gastroesophageal Reflux-A Prospective Longitudinal Interventional Study.**Frontiers in cellular and infection microbiology** , Volume: 7 2017

Authors Castellani C,Singer G,Kashofer K,Huber-Zeyringer A,Flucher C,Kaiser M,Till H

Reduced obesity, diabetes, and steatosis upon cinnamon and grape pomace are associated with changes in gut microbiota and markers of gut barrier.**American journal of physiology. Endocrinology and metabolism** , Volume: 314 Issue: 4 2018 Apr 1

Authors Van Hul M,Geurts L,Plovier H,Druart C,Everard A,Ståhlman M,Rhimi M,Chira K,Teissedre PL,Delzenne NM,Maguin E,Guilbot A,Brochot A,Gérard P,Bäckhed F,Cani PD

Prebiotic Potential and Chemical Composition of Seven Culinary Spice Extracts.**Journal of food science** , Volume: 82 Issue: 8 2017 Aug

Authors Lu QY,Summanen PH,Lee RP,Huang J,Henning SM,Heber D,Finegold SM,Li Z

Human Milk Oligosaccharides Exhibit Antimicrobial and Antibiofilm Properties against Group B Streptococcus.**ACS infectious diseases** , Volume: 3 Issue: 8 2017 Aug 11

Authors Ackerman DL,Doster RS,Weitkamp JH,Aronoff DM,Gaddy JA,Townsend SD

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 JJ

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 N

Anti Bacterial Efficacy of <i>Terminalia Chebula, Terminalia Bellirica, Embilica Officinalis</i> and <i>Triphala</i> on Salivary <i>Streptococcus Mutans</i> Count - A Linear Randomized Cross Over Trial.**Journal of clinical and diagnostic research : JCDR** , Volume: 11 Issue: 2 2017 Feb

Authors Saxena S,Lakshminarayan N,Gudli S,Kumar M

Antibiotic use in childhood alters the gut microbiota and predisposes to overweight**Microbial Cell** , Volume: 3 Issue: 7 2016 Jun 20

Authors Korpela K,de Vos WM

Impact of Westernized Diet on Gut Microbiota in Children on Leyte Island.**Frontiers in microbiology** , Volume: 8 2017

Authors Nakayama J,Yamamoto A,Palermo-Conde LA,Higashi K,Sonomoto K,Tan J,Lee YK

Prebiotic inulin-type fructans induce specific changes in the human gut microbiota.**Gut** , Volume: 66 Issue: 11 2017 Nov

Authors Vandeputte D,Falony G,Vieira-Silva S,Wang J,Sailer M,Theis S,Verbeke K,Raes J

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

Clinical characteristics and antimicrobial susceptibilities of anaerobic bacteremia in an acute care hospital.**Anaerobe** , Volume: 43 2017 Feb

Authors Tan TY,Ng LS,Kwang LL,Rao S,Eng LC

Gastric microbiota in the functional dyspepsia patients treated with probiotic yogurt**BMJ Open Gastroenterology** , Volume: 3 Issue: 1 2016 Sep 16

Authors Nakae H,Tsuda A,Matsuoka T,Mine T,Koga Y

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

Efficacy and role of inulin in mitigation of enteric sulfur-containing odor in pigs.**Journal of the science of food and agriculture** , Volume: 97 Issue: 8 2017 Jun

Authors Deng YF,Liu YY,Zhang YT,Wang Y,Liang JB,Tufarelli V,Laudadio V,Liao XD

Impact of dietary resistant starch type 4 on human gut microbiota and immunometabolic functions.

Scientific reports , Volume: 6 2016 Jun 30

Authors Upadhyaya B,McCormack L,Fardin-Kia AR,Juenemann R,Nichenametla S,Clapper J,Specker B,Dey M

[Significant pharmacokinetic differences of berberine are attributable to variations in gut microbiota between Africans and Chinese.](#)

Scientific reports , Volume: 6 2016 Jun 10

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

[Mediterranean diet and faecal microbiota: a transversal study.](#)

Food & function , Volume: 7 Issue: 5 2016 May 18

Authors Gutiérrez-Díaz I,Fernández-Navarro T,Sánchez B,Margolles A,González S

[Inflammasome signaling affects anxiety- and depressive-like behavior and gut microbiome composition.](#)

Molecular psychiatry , Volume: 21 Issue: 6 2016 Jun

Authors Wong ML,Inserra A,Lewis MD,Mastronardi CA,Leong L,Choo J,Kentish S,Xie P,Morrison M,Wesselingh SL,Rogers GB,Licinio J

[Effect of Formula Containing Lactobacillus reuteri DSM 17938 on Fecal Microbiota of Infants Born by Cesarean-Section.](#)

Journal of pediatric gastroenterology and nutrition , Volume: 63 Issue: 6 2016 Dec

Authors Garcia Rodenas CL,Lepage M,Ngom-Bru C,Fotiou A,Papağaroufalís K,Berger B

[Manipulation of the gut microbiota using resistant starch is associated with protection against colitis-associated colorectal cancer in rats.](#)

Carcinogenesis , Volume: 37 Issue: 4 2016 Apr

Authors Hu Y,Le Leu RK,Christophersen CT,Somashekar R,Conlon MA,Meng XQ,Winter JM,Woodman RJ,McKinnon R,Young GP

[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,Lagkouravdos I,Walker A,Lucio M,Michalke B,Schmitt-Kopplin P,Fedorak R,Haller D

[Minocycline as A Substitute for Doxycycline in Targeted Scenarios: A Systematic Review.](#)

Open forum infectious diseases , Volume: 2 Issue: 4 2015 Dec

Authors Carris NW,Pardo J,Montero J,Shaeer KM

[Dietary Isomers of Sialyllactose Increase Ganglioside Sialic Acid Concentrations in the Corpus Callosum and Cerebellum and Modulate the Colonic Microbiota of Formula-Fed Piglets.](#)

The Journal of nutrition , Volume: 146 Issue: 2 2016 Feb

Authors Jacobi SK,Yatsunenkov T,Li D,Dasgupta S,Yu RK,Berg BM,Chichlowski M,Odle J

[Two Healthy Diets Modulate Gut Microbial Community Improving Insulin Sensitivity in a Human Obese Population.](#)

The Journal of clinical endocrinology and metabolism , Volume: 101 Issue: 1 2016 Jan

Authors Haro C,Montes-Borrego M,Rangel-Zúñiga OA,Alcalá-Díaz JF,Gómez-Delgado F,Pérez-Martínez P,Delgado-Lista J,Quintana-Navarro GM,Tinahones FJ,Landa BB,López-Miranda J,Camargo A,Pérez-Jiménez F

[High-level adherence to a Mediterranean diet beneficially impacts the gut microbiota and associated metabolome.](#)

Gut , Volume: 65 Issue: 11 2016 Nov

Authors De Filippis F,Pellegrini N,Vannini L,Jeffery IB,La Stora A,Laghi L,Serrazanetti DI,Di Cagno R,Ferrocino I,Lazzi C,Turroni S,Cocolin L,Brigidi P,Neviani E,Gobbetti M,O`Toole PW,Ercolini D

[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

[Candida albicans commensalism in the gastrointestinal tract.](#)

FEMS yeast research , Volume: 15 Issue: 7 2015 Nov

Authors Neville BA,d`Enfert C,Bougnoux ME

[The effect of dietary resistant starch type 2 on the microbiota and markers of gut inflammation in rural Malawi children.](#)

Microbiome , Volume: 3 2015 Sep 3

Authors Ordiz MI,May TD,Mihindukulasuriya K,Martin J,Crowley J,Tarr PI,Ryan K,Mortimer E,Gopalsamy G,Maleta K,Mitreva M,Young G,Manary MJ

[Antibacterial activity and mechanism of berberine against Streptococcus agalactiae.](#)

International journal of clinical and experimental pathology , Volume: 8 Issue: 5 2015

Authors Peng L,Kang S,Yin Z,Jia R,Song X,Li L,Li Z,Zou Y,Liang X,Li L,He C,Ye G,Yin L,Shi F,Lv C,Jing B

[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

[Oral Microbiota Shift after 12-Week Supplementation with Lactobacillus reuteri DSM 17938 and PTA 5289; A Randomized Control Trial.](#)

PloS one , Volume: 10 Issue: 5 2015

Authors Romani Vestman N,Chen T,Lif Holgerson P,Öhman C,Johansson I

[GUT MICROBIOTA DYSBIOSIS IS LINKED TO HYPERTENSION](#)

Hypertension , Volume: 65 Issue: 6 2015 Apr 13

Authors Yang T,Santisteban MM,Rodríguez V,Li E,Ahmari N,Carvajal JM,Zadeh M,Gong M,Qi Y,Zubcevic J,Sahay B,Pepine CJ,Raizada MK,Mohamadzadeh M

[Monosodium L-Glutamate and Dietary Fat Differently Modify the Composition of the Intestinal Microbiota in Growing Pigs.](#)

Obesity facts , Volume: 8 Issue: 2 2015

Authors Feng ZM,Li TJ,Wu L,Xiao DF,Blachier F,Yin YL

[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.

[Fecal microbiota composition of breast-fed infants is correlated with human milk oligosaccharides consumed.](#)

Journal of pediatric gastroenterology and nutrition , Volume: 60 Issue: 6 2015 Jun

Authors Wang M,Li M,Wu S,Lebrilla CB,Chapkin RS,Ivanov I,Donovan SM

[\[Characterization and determination of antibiotic resistance profiles of a single clone Acinetobacter baumannii strains isolated from blood cultures\].](#)

Mikrobiyoloji bulteni , Volume: 48 Issue: 4 2014 Oct

Authors Karagöz A,Baran I,Aksu N,Acar S,Durmaz R

[Antimicrobial Effect of Lactobacillus reuteri on Cariogenic Bacteria Streptococcus gordonii, Streptococcus mutans, and Periodontal Diseases Actinomyces naeslundii and Tannerella forsythia.](#)

Probiotics and antimicrobial proteins , Volume: 7 Issue: 1 2015 Mar

Authors Baca-Castañón ML,De la Garza-Ramos MA,Alcázar-Pizaña AG,Grondin Y,Coronado-Mendoza A,Sánchez-Najera RI,Cárdenas-Estrada E,Medina-De la Garza CE,Escamilla-García E

[Feed supplementation with red seaweeds, Chondrus crispus and Sarcodietheca gaudichaudii, affects performance, egg quality, and gut microbiota of layer hens.](#)

Poultry science , Volume: 93 Issue: 12 2014 Dec

Authors Kulshreshtha G,Rathgeber B,Stratton G,Thomas N,Evans F,Critchley A,Hafting J,Prithiviraj B

[Coexpression and secretion of endoglucanase and phytase genes in Lactobacillus reuteri.](#)

International journal of molecular sciences , Volume: 15 Issue: 7 2014 Jul 21

Authors Wang L,Yang Y,Cai B,Cao P,Yang M,Chen Y

[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

[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

[Effect of prebiotic carbohydrates on growth, bile survival and cholesterol uptake abilities of dairy-related bacteria.](#)

Journal of the science of food and agriculture , Volume: 94 Issue: 6 2014 Apr

Authors Ziar H,Gérard P,Riazi A

[Antibacterial activity of probiotic candidates for oral health.](#)

Anaerobe , Volume: 19 2013 Feb

Authors Samot J,Badet C

[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

[The effect of lipid supplements on ruminal bacteria in continuous culture fermenters varies with the fatty acid composition.](#)

Journal of microbiology (Seoul, Korea) , Volume: 49 Issue: 2 2011 Apr

Authors Potu RB,AbuGhazaleh AA,Hastings D,Jones K,Ibrahim SA

Sitafloxacin: in bacterial infections.**Drugs , Volume: 71 Issue: 6 2011 Apr 16**

Authors Keating GM

Effect of incremental levels of fish oil supplementation on specific bacterial populations in bovine ruminal fluid.**Journal of animal physiology and animal nutrition , Volume: 96 Issue: 1 2012 Feb**

Authors Liu SJ,Bu DP,Wang JQ,Liu L,Liang S,Wei HY,Zhou LY,Li D,Loor JJ

Dominant and diet-responsive groups of bacteria within the human colonic microbiota.**The ISME journal , Volume: 5 Issue: 2 2011 Feb**

Authors Walker AW,Ince J,Duncan SH,Webster LM,Holtrop G,Ze X,Brown D,Stares MD,Scott P,Bergerat A,Louis P,McIntosh F,Johnstone AM,Lobley GE,Parkhill J,Flint HJ

Ceftazidime, a pseudomonas-active cephalosporin: in-vitro antimicrobial activity evaluation including recommendations for disc diffusion susceptibility tests.**The Journal of antimicrobial chemotherapy , Volume: 8 Suppl B 1981 Sep**

Authors Jones RN,Barry AL,Thornsberry C,Gerlach EH,Fuchs PC,Gavan TL,Sommers HM

Antibiotic-induced perturbations of the intestinal microbiota alter host susceptibility to enteric infection.**Infection and immunity , Volume: 76 Issue: 10 2008 Oct**

Authors Sekirov I,Tam NM,Jogova M,Robertson ML,Li Y,Lupp C,Finlay BB

[Surveillance of antimicrobial resistance among nosocomial gram-negative pathogens from 15 teaching hospitals in China in 2005].**Zhonghua yi xue za zhi , Volume: 87 Issue: 39 2007 Oct 23**

Authors Yang QW,Xu YC,Chen MJ,Hu YJ,Ni YX,Sun JY,Yu YS,Kong HS,He L,Wu WY,Ye HF,Yang YM,Zhu LN,Guo SH, Ji P,Zhu ZH, Ren JK,Zhang LX,Sun ZY,Zhu XH,Tong MQ,Zhao WS,Mei YN,Liu Y,Zhang ZJ,Duan Q,Li D,Liu PP,Wang J,Han LX,Wang H,Xie XL

Antimicrobial activity against gram negative bacilli from Yaounde Central Hospital, Cameroon.**African health sciences , Volume: 6 Issue: 4 2006 Dec**

Authors Gangoue-Pieboji J,Koulla-Shiro S,Ngassam P,Adiogo D,Ndumbe P

Emerging resistance among bacterial pathogens in the intensive care unit—a European and North American Surveillance study (2000-2002).**Annals of clinical microbiology and antimicrobials , Volume: 3 2004 Jul 29**

Authors Jones ME,Draghi DC,Thornsberry C,Karlowsky JA,Sahm DF,Wenzel RP

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