

Microbiome Information for: Postural orthostatic tachycardia syndrome

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 Postural orthostatic tachycardia syndrome

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
Enterobacteriaceae	family High	543	Coprobacter	genus Low	1348911
Bifidobacterium	genus Low	1678	Coprococcus	genus Low	33042
Clostridium	genus High	1485	Lachnoclostridium	genus High	1506553

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.

aspartame (sweetner)

berberine 1.5 gram/day

bile (acid/salts)

carboxymethyl cellulose (prebiotic)

carob

Feric citrate

glycyrrhizic acid (licorice) 32 gram/day

high-protein diet

iron 400 mg/day

macrolide ((antibiotic)s)

non-starch polysaccharides

penicillin-moxalactam (antibiotic)s

Rutin 60 mg/day

synbioflor 2 e.coli probiotics

vegetarians

vitamin a 25000 IU/day

Vitamin B9,folic acid 5 mg/day

walnuts 75 gram/day

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	lactobacillus acidophilus (probiotics)
apple	lactobacillus casei (probiotics)
arabinogalactan (prebiotic)	lactobacillus paracasei (probiotics)
bacillus subtilis (probiotics)	lactobacillus plantarum (probiotics)
benzylpenicillin sodium (antibiotic)	lactobacillus plantarum,xylooligosaccharides,(prebiotic)
bifidobacterium longum (probiotics)	(probiotics)
Cacao	lactobacillus reuteri (probiotics)
cinnamon (oil. spice)	lactobacillus rhamnosus gg (probiotics)
ciprofloxacin (antibiotic)s[CFS]	lactulose
clostridium butyricum (probiotics),Miya,Miyarisan	oregano (origanum vulgare, oil)
enterococcus faecium (probiotic)	pediococcus acidilactic (probiotic)
fructo-oligosaccharides (prebiotic)	piperacillin-tazobactam (antibiotic)s
galacto-oligosaccharides (prebiotic)	raffinose(sugar beet)
gentamicin (antibiotic)s	resistant starch
Glucomannan	rosmarinus officinalis,rosemary
green tea	soy
Human milk oligosaccharides (prebiotic, Holigos, Stachyose)	thyme (thymol, thyme oil)
imipenem (antibiotic)s	trimethoprim (antibiotic)s
inulin (prebiotic)	wheat
	wheat bran
	whey

Sample of Literature Used

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

[The Gut Microbiota and Short-Chain Fatty Acids Profile in Postural Orthostatic Tachycardia Syndrome.](#)

Frontiers in physiology , Volume: 13 2022

Authors Ishimwe JA,Breier N,Saleem M,Kastner PD,Kirabo A,Shibao CA

[Relationship Between the Fecal Microbiota and Depression and Anxiety in Pediatric Patients With Orthostatic Intolerance.](#)

The primary care companion for CNS disorders , Volume: 21 Issue: 2 2019 Apr 11

Authors Ishii W,Komine-Aizawa S,Takano C,Fujita Y,Morioka I,Hayakawa S

[Positive efficacy of Lactiplantibacillus plantarum MH-301 as a postoperative adjunct to endoscopic sclerotherapy for internal hemorrhoids: a randomized, double-blind, placebo-controlled trial.](#)

Food & function , 2023 Sep 1

Authors Zhang K,Liu H,Liu P,Feng Q,Gan L,Yao L,Huang G,Fang Z,Chen T,Fang N

[Effect of an Enteroprotective Complementary Feed on Faecal Markers of Inflammation and Intestinal Microbiota Composition in Weaning Puppies.](#)

Veterinary sciences , Volume: 10 Issue: 7 2023 Jul 3

Authors Meineri G,Cocolin L,Morelli G,Schievano C,Atuahene D,Ferrocino I

[Bile Acids and Short-Chain Fatty Acids Are Modulated after Onion and Apple Consumption in Obese Zucker Rats.](#)

Nutrients , Volume: 15 Issue: 13 2023 Jul 5

Authors Balderas C,de Ancos B,Sánchez-Moreno C

[Miya Improves Osteoarthritis Characteristics via the Gut-Muscle-Joint Axis According to Multi-Omics Analyses.](#)

Frontiers in pharmacology , Volume: 13 2022

Authors Xu T,Yang D,Liu K,Gao Q,Liu Z,Li G

[Substitution of Refined Conventional Wheat Flour with Wheat High in Resistant Starch Modulates the Intestinal Microbiota and Fecal Metabolites in Healthy Adults: A Randomized, Controlled Trial.](#)

The Journal of nutrition , 2022 Jan 31

Authors Gondalia SV,Wymond B,Benassi-Evans B,Berbezy P,Bird AR,Belobrajdic DP

[Bifidobacterium longum subsp. longum 5^{1A} attenuates intestinal injury against irinotecan-induced mucositis in mice.](#)

Life sciences , Volume: 289 2022 Jan 15

Authors Quintanilha MF,Miranda VC,Souza RO,Gallotti B,Cruz C,Santos EA,Alvarez-Leite JJ,Jesus LCL,Azevedo V,Trindade LM,Cardoso VN,Ferreira E,Carvalho BA,Soares PMG,Vieira AT,Nicoli JR,Martins FS

[Effects of Dietary Supplementation With Bacillus subtilis, as an Alternative to Antibiotics, on Growth Performance, Serum Immunity, and Intestinal Health in Broiler Chickens.](#)

Frontiers in nutrition , Volume: 8 2021

Authors Qiu K,Li CL,Wang J,Qi GH,Gao J,Zhang HJ,Wu SG

[The relationship between human milk, a functional nutrient, and microbiota.](#)

Critical reviews in food science and nutrition , 2021 Dec 6

Authors Sakarya E,Sanlier NT,Sanlier N

[Bacillus subtilis Attenuates Hepatic and Intestinal Injuries and Modulates Gut Microbiota and Gene Expression Profiles in Mice Infected with Schistosoma japonicum.](#)

Frontiers in cell and developmental biology , Volume: 9 2021

Authors Lin D,Song Q,Zhang Y,Liu J,Chen F,Du S,Xiang S,Wang L,Wu X,Sun X

[Cinnamaldehyde Promotes the Intestinal Barrier Functions and Reshapes Gut Microbiome in Early Weaned Rats.](#)

Frontiers in nutrition , Volume: 8 2021

Authors Qi L,Mao H,Lu X,Shi T,Wang J

[Bifidobacterium catabolism of human milk oligosaccharides overrides endogenous competitive exclusion driving colonization and protection.](#)

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

Authors Heiss BE,Ehrlich AM,Maldonado-Gomez MX,Taft DH,Larke JA,Goodson ML,Slupsky CM,Tancredi DJ,Raybould HE,Mills DA

[Pediococcus acidilactici CCFM6432 mitigates chronic stress-induced anxiety and gut microbial abnormalities.](#)

Food & function , Volume: 12 Issue: 22 2021 Nov 15

Authors Tian P,Chen Y,Qian X,Zou R,Zhu H,Zhao J,Zhang H,Wang G,Chen W

[Supplementation with Lactiplantibacillus plantarum IMC 510 Modifies Microbiota Composition and Prevents Body Weight Gain Induced by Cafeteria Diet in Rats.](#)

International journal of molecular sciences , Volume: 22 Issue: 20 2021 Oct 16

Authors Micioni Di Bonaventura MV,Coman MM,Tomassoni D,Micioni Di Bonaventura E,Botticelli L,Gabrielli MG,Rossolini GM,Di Pilato V,Cecchini C,Amedei A,Silvi S,Verdenelli MC,Cifani C

Treatment with a spore-based probiotic containing five strains of *Bacillus* induced changes in the metabolic activity and community composition of the gut microbiota in a SHIME® model of the human gastrointestinal system.

Food research international (Ottawa, Ont.) , Volume: 149 2021 Nov

Authors Marzorati M, Van den Abbeele P, Bubeck S, Bayne T, Krishnan K, Young A

Bacillus pumilus and *Bacillus subtilis* Promote Early Maturation of Cecal Microbiota in Broiler Chickens.

Microorganisms , Volume: 9 Issue: 9 2021 Sep 7

Authors Bilal M, Achard C, Barbe F, Chevaux E, Ronholm J, Zhao X

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

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

Dose-response and functional role of whey permeate as a source of lactose and milk oligosaccharides on intestinal health and growth of nursery pigs.

Journal of animal science , Volume: 99 Issue: 1 2021 Jan 1

Authors Jang KB, Purvis JM, Kim SW

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

Effect of *Lactocaseibacillus paracasei* Strain Shirota on Improvement in Depressive Symptoms, and Its Association with Abundance of Actinobacteria in Gut Microbiota.

Microorganisms , Volume: 9 Issue: 5 2021 May 10

Authors Otaka M, Kikuchi-Hayakawa H, Ogura J, Ishikawa H, Yomogida Y, Ota M, Hidese S, Ishida I, Aida M, Matsuda K, Kawai M, Yoshida S, Kunugi H

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

Pediococcus acidilactici Strains Improve Constipation Symptoms and Regulate Intestinal Flora in Mice.

Frontiers in cellular and infection microbiology , Volume: 11 2021

Authors Qiao Y, Qiu Z, Tian F, Yu L, Zhao J, Zhang H, Zhai Q, Chen W

Xylooligosaccharides Increase *Bifidobacteria* and *Lachnospiraceae* in Mice on a High-Fat Diet, with a Concomitant Increase in Short-Chain Fatty Acids, Especially Butyric Acid.

Journal of agricultural and food chemistry , Volume: 69 Issue: 12 2021 Mar 31

Authors Berger K, Burleigh S, Lindahl M, Bhattacharya A, Patil P, Stålbrand H, Nordberg Karlsson E, Hållenius F, Nyman M, Adlercreutz P

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 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

Dose-response and functional role of whey permeate as a source of lactose and milk oligosaccharides on intestinal health and growth of nursery pigs.

Journal of animal science , Volume: 99 Issue: 1 2021 Jan 1

Authors Jang KB, Purvis JM, Kim SW

Dose-response and functional role of whey permeate as a source of lactose and milk oligosaccharides on intestinal health and growth of nursery pigs.

Journal of animal science , 2021 Jan 12

Authors Jang K, Purvis JM, Kim SW

Conversion of Rutin, a Prevalent Dietary Flavonol, by the Human Gut Microbiota.

Frontiers in microbiology , Volume: 11 2020

Authors Riva A, Kolimár D, Spittler A, Wisgrill L, Herbold CW, Abrankó L, Berry D

Lactulose ingestion causes an increase in the abundance of gut-resident bifidobacteria in Japanese women: a randomised, double-blind, placebo-controlled crossover trial.

Beneficial microbes , 2021 Jan 4

Authors Sakai Y,Hamano H,Ochi H,Abe F,Masuda K,Iino H

Selective Utilization of the Human Milk Oligosaccharides 2`-Fucosyllactose, 3-Fucosyllactose, and Difucosyllactose by Various Probiotic and Pathogenic Bacteria.

Journal of agricultural and food chemistry , Volume: 69 Issue: 1 2021 Jan 13

Authors Salli K,Hirvonen J,Siitonen J,Ahonen I,Angenius H,Maukonen J

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

Effects of Different Human Milk Oligosaccharides on Growth of *Bifidobacteria* in Monoculture and Co-culture With *Faecalibacterium prausnitzii*.

Frontiers in microbiology , Volume: 11 2020

Authors Cheng L,Kieviet MBG,Logtenberg MJ,Groeneveld A,Nauta A,Schols HA,Walvoort MTC,Harmsen HJM,de Vos P

Alginate- and Gelatin-Coated Apple Pieces as Carriers for *Bifidobacterium animalis* subsp. *lactis* DSM 10140.

Frontiers in microbiology , Volume: 11 2020

Authors Campaniello D,Bevilacqua A,Speranza B,Sinigaglia M,Corbo MR

Enterococcus faecium R0026 combined with *Bacillus subtilis* R0179 prevent obesity-associated hyperlipidaemia and modulate gut microbiota in C57BL/6 mice.

Journal of microbiology and biotechnology , 2020 Oct 20

Authors Huang J,Huang J,Yin T,Lv H,Zhang P,Li 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

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

Dietary supplementation with *Bacillus subtilis* DSM 32315 alters the intestinal microbiota and metabolites in weaned piglets.

Journal of applied microbiology , 2020 Jul 6

Authors Ding H,Zhao X,Ma C,Gao Q,Yin Y,Kong X,He J

Cocoa Polyphenols and Gut Microbiota Interplay: Bioavailability, Prebiotic Effect, and Impact on Human Health.

Nutrients , Volume: 12 Issue: 7 2020 Jun 27

Authors Sorrenti V,Ali S,Mancin L,Davinelli S,Paoli A,Scapagnini G

Cocoa Polyphenols and Gut Microbiota Interplay: Bioavailability, Prebiotic Effect, and Impact on Human Health.

Nutrients , Volume: 12 Issue: 7 2020 Jun 27

Authors Sorrenti V,Ali S,Mancin L,Davinelli S,Paoli A,Scapagnini G

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

Lactobacillus paracasei subsp. *paracasei* NTU 101 lyophilized powder improves loperamide-induced constipation in rats.

Heliyon , Volume: 6 Issue: 4 2020 Apr

Authors Chen CL,Chao SH,Pan TM

Conserved and variable responses of the gut microbiome to resistant starch type 2

Nutrition research (New York, N.Y.) , Volume: 77 2020 Feb 22

Authors Bendiks ZA,Knudsen KEB,Keenan MJ,Marco ML

Beneficial effects of flaxseed polysaccharides on metabolic syndrome via gut microbiota in high-fat diet fed mice.

Food research international (Ottawa, Ont.) , Volume: 131 2020 May

Authors Yang C,Xu Z,Deng Q,Huang Q,Wang X,Huang F

The effect of inulin and resistant maltodextrin on weight loss during energy restriction: a randomised, placebo-controlled, double-blinded intervention.

European journal of nutrition , 2019 Oct 11

Authors Hess AL, Benítez-Páez A, Blædel T, Larsen LH, Iglesias JR, Madera C, Sanz Y, Larsen TM, MyNewGut Consortium.

[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 MM, van der Kraan PM, van Lent PLEM, van de Loo FAJ, Abdollahi-Roodsaz S, Koenders MI

[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

[Arabinoxylan from Argentinian whole wheat flour promote the growth of Lactobacillus reuteri and Bifidobacterium breve.](#)

Letters in applied microbiology , Volume: 68 Issue: 2 2019 Feb

Authors Paesani C, Salvucci E, Moiraghi M, Fernandez Canigia L, Pérez GT

[The Phosphate Binder Ferric Citrate Alters the Gut Microbiome in Rats with Chronic Kidney Disease.](#)

The Journal of pharmacology and experimental therapeutics , Volume: 367 Issue: 3 2018 Dec

Authors Lau WL, Vaziri ND, Nunes ACF, Comeau AM, Langille MGI, England W, Khazaeli M, Suematsu Y, Phan J, Whiteson K

[Effects of dietary supplementation with Clostridium butyricum on laying performance, egg quality, serum parameters, and cecal microflora of laying hens in the late phase of production.](#)

Poultry science , Volume: 98 Issue: 2 2019 Feb 1

Authors Zhan HQ, Dong XY, Li LL, Zheng YX, Gong YJ, Zou XT

[Introducing insoluble wheat bran as a gut microbiota niche in an in vitro dynamic gut model stimulates propionate and butyrate production and induces colon region specific shifts in the luminal and mucosal microbial community.](#)

Environmental microbiology , Volume: 20 Issue: 9 2018 Sep

Authors De Paepe K, Verspreet J, Verbeke K, Raes J, Courtin CM, Van de Wiele T

[Inulin fiber dose-dependently modulates energy balance, glucose tolerance, gut microbiota, hormones and diet preference in high-fat-fed male rats.](#)

The Journal of nutritional biochemistry , Volume: 59 2018 Sep

Authors Singh A, Zapata RC, Pezeshki A, Reidelberger RD, Chelikani PK

[Beneficial effects of the commercial lactic acid bacteria product, Vigis 101, on gastric mucosa and intestinal bacterial flora in rats.](#)

Journal of microbiology, immunology, and infection = Wei mian yu gan ran za zhi , 2018 Jun 23

Authors Kao L, Liu TH, Tsai TY, Pan TM

[Role of probiotics in the treatment of minimal hepatic encephalopathy in patients with HBV-induced liver cirrhosis.](#)

The Journal of international medical research , Volume: 46 Issue: 9 2018 Sep

Authors Xia X, Chen J, Xia J, Wang B, Liu H, Yang L, Wang Y, Ling Z

[Catechin supplemented in a FOS diet induces weight loss by altering cecal microbiota and gene expression of colonic epithelial cells.](#)

Food & function , Volume: 9 Issue: 5 2018 May 23

Authors Luo J, Han L, Liu L, Gao L, Xue B, Wang Y, Ou S, Miller M, Peng X

[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

[Role of Lactobacillus reuteri in Human Health and Diseases.](#)

Frontiers in microbiology , Volume: 9 2018

Authors Mu Q, Tavella VJ, Luo XM

[Prebiotic Mannan-Oligosaccharides Augment the Hypoglycemic Effects of Metformin in Correlation with Modulating Gut Microbiota.](#)

Journal of agricultural and food chemistry , Volume: 66 Issue: 23 2018 Jun 13

Authors Zheng J, Li H, Zhang X, Jiang M, Luo C, Lu Z, Xu Z, Shi J

Lactobacillus plantarum MTCC 9510 supplementation protects from chronic unpredictable and sleep deprivation-induced behaviour, biochemical and selected gut microbial aberrations in mice.

Journal of applied microbiology , Volume: 125 Issue: 1 2018 Jul

Authors Dhaliwal J,Singh DP,Singh S,Pinnaka AK,Boparai RK,Bishnoi M,Kondepudi KK,Chopra K

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

Wheat-derived arabinoxylan oligosaccharides with bifidogenic properties abolishes metabolic disorders induced by western diet in mice.

Nutrition & diabetes , Volume: 8 Issue: 1 2018 Mar 7

Authors Neyrinck AM,Hiel S,Bouzin C,Campayo VG,Cani PD,Bindels LB,Delzenne NM

Enhancing syntrophic associations among Clostridium butyricum, Syntrophomonas and two types of methanogen by zero valent iron in an anaerobic assay with a high organic loading.

Bioresource technology , Volume: 257 2018 Jun

Authors Kong X,Yu S,Fang W,Liu J,Li H

A Walnut-Enriched Diet Affects Gut Microbiome in Healthy Caucasian Subjects: A Randomized, Controlled Trial.

Nutrients , Volume: 10 Issue: 2 2018 Feb 22

Authors Bamberg C,Rossmeyer A,Lechner K,Wu L,Waldmann E,Fischer S,Stark RG,Altenhofer J,Henze K,Parhofer KG

Effects of a galacto-oligosaccharide-rich diet on fecal microbiota and metabolite profiles in mice.

Food & function , 2018 Feb 21

Authors Cheng W,Lu J,Lin W,Wei X,Li H,Zhao X,Jiang A,Yuan J

The effect of Clostridium butyricum on symptoms and fecal microbiota in diarrhea-dominant irritable bowel syndrome: a randomized, double-blind, placebo-controlled trial.

Scientific reports , Volume: 8 Issue: 1 2018 Feb 14

Authors Sun YY,Li M,Li YY,Li LX,Zhai WZ,Wang P,Yang XX,Gu X,Song LJ,Li Z,Zuo XL,Li YQ

Prebiotic Wheat Bran Fractions Induce Specific Microbiota Changes.

Frontiers in microbiology , Volume: 9 2018

Authors D`hoe K,Conterno L,Fava F,Falony G,Vieira-Silva S,Vermeiren J,Tuohy K,Raes J

The Relationship between Habitual Dietary Intake and Gut Microbiota in Young Japanese Women.

Journal of nutritional science and vitaminology , Volume: 63 Issue: 6 2017

Authors Seura T,Yoshino Y,Fukuwatari T

Protective effects of natural and partially degraded konjac glucomannan on Bifidobacteria against antibiotic damage.

Carbohydrate polymers , Volume: 181 2018 Feb 1

Authors Mao YH,Song AX,Yao ZP,Wu JY

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

Effects of microencapsulated Lactobacillus plantarum LIP-1 on the gut microbiota of hyperlipidaemic rats.

The British journal of nutrition , Volume: 118 Issue: 7 2017 Oct

Authors Song JJ,Tian WJ,Kwok LY,Wang YL,Shang YN,Menghe B,Wang JG

Effects of microencapsulated Lactobacillus plantarum LIP-1 on the gut microbiota of hyperlipidaemic rats.

The British journal of nutrition , Volume: 118 Issue: 7 2017 Oct

Authors Song JJ,Tian WJ,Kwok LY,Wang YL,Shang YN,Menghe B,Wang JG

Prebiotics Mediate Microbial Interactions in a Consortium of the Infant Gut Microbiome.

International journal of molecular sciences , Volume: 18 Issue: 10 2017 Oct 4

Authors Medina DA,Pinto F,Ovalle A,Thomson P,Garrido D

Dietary soy, meat, and fish proteins modulate the effects of prebiotic raffinose on composition and fermentation of gut microbiota in rats.

International journal of food sciences and nutrition , Volume: 69 Issue: 4 2018 Jun

Authors Bai G,Tsuruta T,Nishino N

Fructooligosaccharide (FOS) and Galactooligosaccharide (GOS) Increase Bifidobacterium but Reduce Butyrate Producing Bacteria with Adverse Glycemic Metabolism in healthy young population.

Scientific reports , Volume: 7 Issue: 1 2017 Sep 18

Authors Liu F, Li P, Chen M, Luo Y, Prabhakar M, Zheng H, He Y, Qi Q, Long H, Zhang Y, Sheng H, Zhou H

[A single early-in-life macrolide course has lasting effects on murine microbial network topology and immunity](#)

Nature Communications, Volume: 8 2017 Sep 11

Authors Ruiz VE, Battaglia T, Kurtz ZD, Bijns L, Ou A, Engstrand I, Zheng X, Izumi T, Mullins BJ, Müller CL, Cadwell K, Bonneau R, Perez-Perez GI, Blaser MJ

[Characterization of an antimicrobial substance produced by *Lactobacillus plantarum* NTU 102](#)

Journal of microbiology, immunology, and infection = Wei mian yu gan ran za zhi, 2017 Aug 29

Authors Lin TH, Pan TM

[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

[Lactobacillus casei CCFM419 attenuates type 2 diabetes via a gut microbiota dependent mechanism](#)

Food & function, Volume: 8 Issue: 9 2017 Sep 20

Authors Wang G, Li X, Zhao J, Zhang H, Chen W

[Dose-Dependent Prebiotic Effect of Lactulose in a Computer-Controlled In Vitro Model of the Human Large Intestine](#)

Nutrients, Volume: 9 Issue: 7 2017 Jul 18

Authors Bothe MK, Maathuis AJH, Bellmann S, van der Vossen JMBM, Berressem D, Koehler A, Schwejda-Guettes S, Gaigg B, Kuchinka-Koch A, Stover JF

[Fat binding capacity and modulation of the gut microbiota both determine the effect of wheat bran fractions on adiposity](#)

Scientific reports, Volume: 7 Issue: 1 2017 Jul 17

Authors Suriano F, Bindels LB, Verspreet J, Courtin CM, Verbeke K, Cani PD, Neyrinck AM, Delzenne NM

[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

[Cocoa and Dark Chocolate Polyphenols: From Biology to Clinical Applications](#)

Frontiers in Immunology, Volume: 8 2017 Jun 9

Authors Magrone T, Russo MA, Jirillo E

[Cocoa and Dark Chocolate Polyphenols: From Biology to Clinical Applications](#)

Frontiers in immunology, Volume: 8 2017

Authors Magrone T, Russo MA, Jirillo E

[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 the *Lactobacillus casei* strain on obesity in children: a pilot study](#)

Beneficial microbes, Volume: 8 Issue: 4 2017 Aug 24

Authors Nagata S, Chiba Y, Wang C, Yamashiro Y

[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

[Effect of dietary supplementation with *Lactobacillus acidophilus* D2/CSL \(CECT 4529\) on caecum microbioma and productive performance in broiler chickens](#)

PloS one, Volume: 12 Issue: 5 2017

Authors De Cesare A, Sirri F, Manfreda G, Moniaci P, Giardini A, Zampiga M, Meluzzi A

[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

[Effect of a probiotic beverage consumption \(*Enterococcus faecium* CRL 183 and *Bifidobacterium longum* ATCC 15707\) in rats with chemically induced colitis](#)

PloS one, Volume: 12 Issue: 4 2017

Authors Celiberto LS, Bedani R, Dejana NN, Ivo de Medeiros A, Sampaio Zuanon JA, Spolidorio LC, Tallarico Adorno MA, Amâncio Varesche MB, Carrilho Galvão F, Valentini SR, Font de Valdez G, Rossi EA, Cavallini DCU

[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

[Carbohydrate Staple Food Modulates Gut Microbiota of Mongolians in China](#)

Frontiers in microbiology, Volume: 8 2017

Authors Li J, Hou Q, Zhang J, Xu H, Sun Z, Menghe B, Zhang H

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

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

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

Epigallocatechin gallate induces a hepatospecific decrease in the CYP3A expression level by altering intestinal flora.

European journal of pharmaceutical sciences : official journal of the European Federation for Pharmaceutical Sciences , Volume: 100 2017 Mar 30

Authors Ikarashi N,Ogawa S,Hirobe R,Kon R,Kusunoki Y,Yamashita M,Mizukami N,Kaneko M,Wakui N,Machida Y,Sugiyama K

Impact of short-chain galactooligosaccharides on the gut microbiome of lactose-intolerant individuals.

Proceedings of the National Academy of Sciences of the United States of America , Volume: 114 Issue: 3 2017 Jan 17

Authors Azcarate-Peril MA,Ritter AJ,Savaiano D,Monteagudo-Mera A,Anderson C,Magness ST,Klaenhammer TR

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

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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