

Microbiome Information for: Intelligence

For non-prescribing Medical professionals Review

The suggestions below are based on an Expert System (Artificial Intelligence) modelled after the MYCIN Expert System produced at Stanford University School of Medicine in 1972. The system uses over 1,800,000 facts with backward chaining to sources of information. The typical sources are studies published on the US National Library of Medicine.

Many recent studies has found that symptoms and symptom severity has strong associations to the microbiome for many conditions. Correcting the microbiome dysfunction is beleived to reduce the severity of symptoms. In some cases, this correction may cause symptoms to disappear.

These are a *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 Intelligence

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
Burkholderiaceae	<i>family</i>	High	119060	Fusicatenibacter	<i>genus</i>	High	1407607
Coriobacteriaceae	<i>family</i>	Low	84107	Oscillibacter	<i>genus</i>	Low	459786
Corynebacteriaceae	<i>family</i>	High	1653	Oscillospira	<i>genus</i>	High	119852
Lachnospiraceae	<i>family</i>	High	186803	Oxalobacter	<i>genus</i>	Low	846
Oscillospiraceae	<i>family</i>	High	216572	Prevotella	<i>genus</i>	Low	838
Porphyromonadaceae	<i>family</i>	Low	171551	Subdoligranulum	<i>genus</i>	Low	292632
Prevotellaceae	<i>family</i>	Low	171552	Sutterella	<i>genus</i>	Low	40544
Catenibacterium	<i>genus</i>	Low	135858	Bacteroides uniformis	<i>species</i>	High	820
Clostridium	<i>genus</i>	High	1485	Faecalibacterium prausnitzii	<i>species</i>	Low	853
Coprococcus	<i>genus</i>	High	33042	Prevotella copri	<i>species</i>	Low	165179
Dialister	<i>genus</i>	Low	39948	Ruminococcus callidus	<i>species</i>	High	40519
				Veillonella dispar	<i>species</i>	High	39778

Substance to Consider Adding or Taking

These are the most significant substances that are likely to improve the microbiome dysfunction. Dosages are based on the dosages used in clinical studies. For more information see: <https://microbiomeprescription.com/library/dosages>. These are provided as examples only

Colors indicates the type of substance: i.e. probiotics and prebiotics, herbs and spices, etc. There is no further meaning to them.

barley 60 gram/day

bile (acid/salts)

chrysanthemum morifolium

clostridium butyricum (probiotics),Miya,Miyarisan 1 gram/day

inulin (prebiotic) 32 gram/day

ku ding cha tea

lactobacillus plantarum (probiotics) 60 BCFU/day

lactobacillus reuteri (probiotics) 22 BCFU/day

mastic gum (prebiotic) 1000 mg/day

resistant starch

salt (sodium chloride)

vitamin B3,niacin 3000 mg/day

wheat

whole-grain barley 60 gram/day

Retail Probiotics

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

nature's way (au) / restore probiotic bowel & colon health 30s
 naturopathica (au) / gastrohealth probiotic dairy free 50 billion
 naturopathica (au) / gastrohealth probiotic dairy free 20 bcfu
 seed / male version
 solaray / microbiome probiotic colon formula
 HLH BIOPHARMA(DE) / LACTOBACT ® LDL-CONTROL
 Bromatech (IT) / Serobiome
 biospec / probiotic-5
 CustomProbiotics.com / L. Plantarum Probiotic Powder
 SuperSmart / Oral Health
 Ombre / Healthy Gut
 OMNI-BIOTIC®/ 10 AAD
 RepHresh / Pro-B Probiotic Supplement for Women
 young living/life 9
 Bromatech (IT) / Adomelle
 miyarian (jp) / miyarian
 naturopathica (au) / gastrohealth women's probiotic with cranberry
 CustomProbiotics.com / L. Reuteri Probiotic Powder
 Ombre / Metabolic Booster
 optibac / for women
 jarrow formulas / fem-dophilus®
 nature's way (au) / restore probiotic 30 billion 30s
 SuperSmart / H. Pylori Fight
 BioGaia / BioGaia Osfortis
 blackmore (au) / probiotics+ daily health
 spain (es) / gum peribalance
 blackmore (au) / probiotics+ womens flora balance
 Pendulum / Pendulum Glucose Control
 SuperSmart / Lactobacillus reuteri
 Ombre / Heart Health
 custom probiotics / six strain probiotic powder
 spain (es) / casenbiotic
 ImmuneBiotech Medical Sweden AB / GutMagnific®
 spain (es) / I3.1
 Bromatech (IT) / Lautoselle
 Resbiotic / resB® Lung Support
 naturopathica (au) / gastrohealth fibrepro
 blackmore (au) / probiotics+ eczema relief
 Microbiome Labs / MEGA Genesis
 Seeking Health / Probiota HistaminX
 jarrow formula / ideal bowel support® Ip299v®
 spain (es) / reuteri gotas
 BioGaia / BioGaia Products
 Bromatech (IT) / Rotanelle plus
 Swiss BioEnergetics / Full Spectrum Probiotic Defence
 blackmores (au) / probiotics + adults daily (90 capsules)
 aor / probiotic-3
 nature's way (au) / restore probiotic daily health 90s
 Sun Wave Pharma/Bio Sun Instant
 SuperSmart / Candalb
 custom probiotics / four strain lactobacilli
 naturopathica (au) / gastrohealth probiotic ultimate daily care 100billion
 zint nutrition / probiotic collagen +
 Metabolics / Lactobacillus Plantarum Powder

spain (es) / vivomixx
Ombre / Ultimate Immunity
PharmExtracta (IT) / Butirisan
jarrow formulas / fem dophilus
optibac / for your cholesterol
ProbioMax® Daily DF
SuperSmart / Lactobacillus Plantarum Postbiotic (Pasturized)
JGL / Lactogyn
Bromatech (IT) / Psicobrain
Ombre / Mood Enhancer
spain (es) / aquilea intimus
up4 / adult
Ombre / Restore
spain (es) / gastrus

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.

acetic acid	lactobacillus casei (probiotics)
Baking Soda, Sodium Bicarbonate	lactobacillus gasseri (probiotics)
bifidobacterium animalis lactis (probiotics)	lard
blackcurrant	Lentilactobacillus buchneri
Cacao	levan
camelina seed	linseed(flaxseed)
candida albicans (prescription)	marijuana
carbohydrates	Methionine
chicken	navy bean
chitosan,(sugar)	non-starch polysaccharides
chondrus crispus,red sea weed	oligosaccharides (prebiotic)
Cranberry	partial sleep deprivation
cranberry bean flour	pomegranate
cruciferous vegetables (broccoli cabbage)	raffinose(sugar beet)
fat	red wine
fructo-oligosaccharides (prebiotic)	resveratrol (grape seed/polyphenols/red wine)
galacto-oligosaccharides (prebiotic)	sarcoditheca gaudichaudii (red sea weed)
heme	smoking
humic substances	sodium stearyl lactylate
Kale	wasabi
	xylan (prebiotic)

Sample of Literature Used

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

[Relationships of the gut microbiome with cognitive development among healthy school-age children.](#)

Frontiers in pediatrics , Volume: 11 2023

Authors Lapidot Y,Maya M,Reshef L,Cohen D,Ornoy A,Gophna U,Muhsen K

[Glutamate interactions with obesity, insulin resistance, cognition and gut microbiota composition.](#)

Acta diabetologica , Volume: 56 Issue: 5 2019 May

Authors Palomo-Buitrago ME,Sabater-Masdeu M,Moreno-Navarrete JM,Caballano-Infantes E,Arnoriaga-Rodríguez M,Coll C,Ramió L,Palomino-Schätzlein M,Gutiérrez-Carcedo P,Pérez-Brocal V,Simó R,Moya A,Ricart W,Herance JR,Fernández-Real JM

[Elderly patients have an altered gut-brain axis regardless of the presence of cirrhosis.](#)

Scientific reports , Volume: 6 2016 Dec 6

Authors Bajaj JS,Ahluwalia V,Steinberg JL,Hobgood S,Boling PA,Godschalk M,Habib S,White MB,Fagan A,Gavis EA,Ganapathy D,Hylemon PB,Stewart KE,Keradman R,Liu EJ,Wang J,Gillevet PM,Sikaroodi M,Moeller FG,Wade JB

[The anti-hyperlipidemic effect and underlying mechanisms of barley \(*Hordeum vulgare* L.\) grass polysaccharides in mice induced by a high-fat diet.](#)

Food & function , 2023 Jul 14

Authors Yan JK,Chen TT,Li LQ,Liu F,Liu X,Li L

[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

[Effects of liposoluble components of highland barley spent grains on physiological indexes, intestinal microorganisms, and the liver transcriptome in mice fed a high-fat diet.](#)

Food science & nutrition , Volume: 11 Issue: 6 2023 Jun

Authors Zhang J,Luo Y,Feng S,Sun W,Li S,Kong L

[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

[A red wine intervention does not modify plasma trimethylamine N-oxide but is associated with broad shifts in the plasma metabolome and gut microbiota composition.](#)

The American journal of clinical nutrition , Volume: 116 Issue: 6 2022 Dec 19

Authors Haas EA,Saad MJA,Santos A,Vitolo N,Lemos WJF,Martins AMA,Picossi CRC,Favarato D,Gaspar RS,Magro DO,Libby P,Laurindo FRM,Da Luz PL,WineFlora Study

[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

[Active Smoking Induces Aberrations in Digestive Tract Microbiota of Rats.](#)

Frontiers in cellular and infection microbiology , Volume: 11 2021

Authors Wang X,Ye P,Fang L,Ge S,Huang F,Polverini PJ,Heng W,Zheng L,Hu Q,Yan F,Wang W

[Effects of molecular weight of chitosan on anti-inflammatory activity and modulation of intestinal microflora in an ulcerative colitis model.](#)

International journal of biological macromolecules , 2021 Nov 5

Authors Niu W,Dong Y,Fu Z,Lv J,Wang L,Zhang Z,Huo J,Ju J

[Alleviation Effects of *Bifidobacterium animalis* subsp. *lactis* XLTG11 on Dextran Sulfate Sodium-Induced Colitis in Mice.](#)

Microorganisms , Volume: 9 Issue: 10 2021 Oct 3

Authors Wang N,Wang S,Xu B,Liu F,Huo G,Li B

[Adjunctive Probiotics Alleviates Asthmatic Symptoms via Modulating the Gut Microbiome and Serum Metabolome.](#)

Microbiology spectrum , 2021 Oct 6

Authors Liu A,Ma T,Xu N,Jin H,Zhao F,Kwok LY,Zhang H,Zhang S,Sun Z

[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

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,Lusis AJ

The Protection of *Lactiplantibacillus plantarum* CCFM8661 Against Benzopyrene-Induced Toxicity via Regulation of the Gut Microbiota.

Frontiers in immunology , Volume: 12 2021

Authors Yu L,Zhang L,Duan H,Zhao R,Xiao Y,Guo M,Zhao J,Zhang H,Chen W,Tian F

Nrf2/ARE Activators Improve Memory in Aged Mice via Maintaining of Mitochondrial Quality Control of Brain and the Modulation of Gut Microbiome.

Pharmaceuticals (Basel, Switzerland) , Volume: 14 Issue: 7 2021 Jun 23

Authors Sadvnikova IS,Gureev AP,Ignatyeva DA,Gryaznova MV,Chernyshova EV,Krutsikh EP,Novikova AG,Popov VN

Millet shell polyphenols prevent atherosclerosis by protecting the gut barrier and remodeling the gut microbiota in ApoE^{-/-} mice.

Food & function , 2021 Jun 25

Authors Liu F,Shan S,Li H,Shi J,Hao R,Yang R,Li Z

Resveratrol and its derivative pterostilbene ameliorate intestine injury in intrauterine growth-retarded weanling piglets by modulating redox status and gut microbiota.

Journal of animal science and biotechnology , Volume: 12 Issue: 1 2021 Jun 10

Authors Chen Y,Zhang H,Chen Y,Jia P, Ji S,Zhang Y,Wang T

Chicken-eaters and pork-eaters have different gut microbiota and tryptophan metabolites.

Scientific reports , Volume: 11 Issue: 1 2021 Jun 7

Authors Shi J,Zhao D,Zhao F,Wang C,Zamaratskaia G,Li C

A multi-omics approach for understanding the effects of moderate wine consumption on human intestinal health.

Food & function , Volume: 12 Issue: 9 2021 May 11

Authors Belda I,Cueva C,Tamargo A,Ravarani CN,Acedo A,Bartolomé B,Moreno-Arribas MV

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

Effect of Lactylate and *Bacillus subtilis* on Growth Performance, Peripheral Blood Cell Profile, and Gut Microbiota of Nursery Pigs.

Microorganisms , Volume: 9 Issue: 4 2021 Apr 10

Authors Wang X,Tsai T,Wei X,Zuo B,Davis E,Rehberger T,Hernandez S,Jochems EJM,Maxwell CV,Zhao J

The Anti-Inflammatory Effect and Mucosal Barrier Protection of *Clostridium butyricum* RH2 in Ceftriaxone-Induced Intestinal Dysbacteriosis.

Frontiers in cellular and infection microbiology , Volume: 11 2021

Authors Li Y,Liu M,Liu H,Sui X,Liu Y,Wei X,Liu C,Cheng Y,Ye W,Gao B,Wang X,Lu Q,Cheng H,Zhang L,Yuan J,Li M

Sulfoquinovose is a select nutrient of prominent bacteria and a source of hydrogen sulfide in the human gut.

The ISME journal , Volume: 15 Issue: 9 2021 Sep

Authors Hanson BT,Dimitri Kits K,Löffler J,Burrlicher AG,Fiedler A,Denger K,Frommeyer B,Herbold CW,Rattei T,Karcher N,Segata N,Schleheck D,Loy A

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

Navy Bean Supplementation in Established High-Fat Diet-Induced Obesity Attenuates the Severity of the Obese Inflammatory Phenotype.

Nutrients , Volume: 13 Issue: 3 2021 Feb 26

Authors Monk JM,Wu W,Lepp D,Pauls KP,Robinson LE,Power KA

Kale Attenuates Inflammation and Modulates Gut Microbial Composition and Function in C57BL/6J Mice with Diet-Induced Obesity.

Microorganisms , Volume: 9 Issue: 2 2021 Jan 24

Authors Shahinozaman M,Raychaudhuri S,Fan S,Obanda DN

Gut microbial bile acid metabolite skews macrophage polarization and contributes to high-fat diet-induced colonic inflammation.

Gut microbes , Volume: 12 Issue: 1 2020 Nov 9

Authors Wang L,Gong Z,Zhang X,Zhu F,Liu Y,Jin C,Du X,Xu C,Chen Y,Cai W,Tian C,Wu J

[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

[Berry Polyphenols and Fibers Modulate Distinct Microbial Metabolic Functions and Gut Microbiota Enterotype-Like Clustering in Obese Mice.](#)

Frontiers in microbiology , Volume: 11 2020

Authors Rodríguez-Daza MC,Roquim M,Dudonné S,Pilon G,Levy E,Marette A,Roy D,Desjardins Y

[Cultural isolation of spore-forming bacteria in human feces using bile acids.](#)

Scientific reports , Volume: 10 Issue: 1 2020 Sep 14

Authors Tanaka M,Onizuka S,Mishima R,Nakayama J

[Intervention with kimchi microbial community ameliorates obesity by regulating gut microbiota.](#)

Journal of microbiology (Seoul, Korea) , 2020 Sep 2

Authors Park SE,Kwon SJ,Cho KM,Seo SH,Kim EJ,Unno T,Bok SH,Park DH,Son HS

[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

[Dietary Emulsifier Sodium Stearoyl Lactylate Alters Gut Microbiota *in vitro* and Inhibits Bacterial Butyrate Producers.](#)

Frontiers in microbiology , Volume: 11 2020

Authors Elmén L,Zlamal JE,Scott DA,Lee RB,Chen DJ,Colas AR,Rodionov DA,Peterson SN

[The influence of wasabi on the gut microbiota of high-carbohydrate, high-fat diet-induced hypertensive Wistar rats.](#)

Journal of human hypertension , 2020 May 26

Authors Thomaz FS,Altemani F,Panchal SK,Worrall S,Dekker Nitert M

[The influence of wasabi on the gut microbiota of high-carbohydrate, high-fat diet-induced hypertensive Wistar rats.](#)

Journal of human hypertension , 2020 May 26

Authors Thomaz FS,Altemani F,Panchal SK,Worrall S,Dekker Nitert M

[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

[Carboxymethyl chitosan perturbs inflammation profile and colonic microbiota balance in mice.](#)

Journal of food and drug analysis , Volume: 28 Issue: 1 2020 Jan

Authors Liu Y,Zong S,Li J

[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

[Exopolysaccharides from *Lactobacillus buchneri* TCP016 Attenuate LPS- and d-GalN-Induced Liver Injury by Modulating the Gut Microbiota.](#)

Journal of agricultural and food chemistry , 2019 Oct 10

Authors Xu R,Aruhan,Xiu L,Sheng S,Liang Y,Zhang H,Liu Y,Tong H,Du R,Wang X

[Dietary cranberry suppressed colonic inflammation and alleviated gut microbiota dysbiosis in dextran sodium sulfate-treated mice.](#)

Food & function , Volume: 10 Issue: 10 2019 Oct 16

Authors Cai X,Han Y,Gu M,Song M,Wu X,Li Z,Li F,Goulette T,Xiao H

[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

[Dietary methionine restriction improves the gut microbiota and reduces intestinal permeability and inflammation in high-fat-fed mice.](#)

Food & function , Volume: 10 Issue: 9 2019 Sep 1

Authors Yang Y,Zhang Y,Xu Y,Luo T,Ge Y,Jiang Y,Shi Y,Sun J,Le G

Dietary Factors and Modulation of Bacteria Strains of <i>Akkermansia muciniphila</i> and <i>Faecalibacterium prausnitzii</i>: 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

Different duck products protein on rat physiology and gut microbiota.

Journal of proteomics , Volume: 206 2019 Jun 29

Authors Wei T,Dang Y,Cao J,Wu Z,He J,Sun Y,Pan D,Tian Z

Dietary supplementation with probiotics regulates gut microbiota structure and function in Nile tilapia exposed to aluminum.

PeerJ , Volume: 7 2019

Authors Yu L,Qiao N,Li T,Yu R,Zhai Q,Tian F,Zhao J,Zhang H,Chen W

Resveratrol attenuates high-fat diet-induced non-alcoholic steatohepatitis by maintaining gut barrier integrity and inhibiting gut inflammation through regulation of the endocannabinoid system.

Clinical nutrition (Edinburgh, Scotland) , 2019 May 30

Authors Chen M,Hou P,Zhou M,Ren Q,Wang X,Huang L,Hui S,Yi L,Mi M

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

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

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

Composition and metabolism of fecal microbiota from normal and overweight children are differentially affected by melibiose, raffinose and raffinose-derived fructans.

Anaerobe , Volume: 52 2018 Aug

Authors Adamberg K,Adamberg S,Ernits K,Larionova A,Voor T,Jaagura M,Visnapuu T,Alamäe T

The effect of leonardite and lignite on the health of weaned piglets.

Research in veterinary science , Volume: 119 2018 Aug

Authors Trckova M,Lorencova A,Babak V,Neca J,Ciganek M

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

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

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

Modifications in gut microbiota and fermentation metabolites in the hindgut of rats after the consumption of galactooligosaccharide glycosylated with a fish peptide.

Food & function , Volume: 9 Issue: 5 2018 May 1

Authors Jin W,Han K,Dong S,Yang Y,Mao Z,Su M,Zeng M

The Endotoxemia Marker Lipopolysaccharide-Binding Protein is Reduced in Overweight-Obese Subjects Consuming Pomegranate Extract by Modulating the Gut Microbiota: A Randomized Clinical Trial.

Molecular nutrition & food research , 2018 Apr 17

Authors González-Sarrías A,Romo-Vaquero M,García-Villalba R,Cortés-Martín A,Selma MV,Espín JC

High salt diet exacerbates colitis in mice by decreasing *Lactobacillus* levels and butyrate production.

Microbiome , Volume: 6 Issue: 1 2018 Mar 22

Authors Miranda PM,De Palma G,Serkis V,Lu J,Louis-Auguste MP,McCarville JL,Verdu EF,Collins SM,Bercik P

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

[Xylan supplement improves 1,3-propanediol fermentation by *Clostridium butyricum*](#)

Journal of bioscience and bioengineering, 2018 Mar 10

Authors Apiwatanapiwat W, Vaithanomsat P, Thanapase W, Ratanakhanokchai K, Kosugi A

[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

[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

[Effects of Blackcurrant and Dietary Fibers on Large Intestinal Health Biomarkers in Rats](#)

Plant foods for human nutrition (Dordrecht, Netherlands), Volume: 73 Issue: 1 2018 Mar

Authors Paturi G, Butts CA, Monro JA, Hedderley D

[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

[Low-Molecular-Weight Chitosan Supplementation Increases the Population of *Prevotella* in the Cecal Contents of Weanling Pigs](#)

Frontiers in microbiology, Volume: 8 2017

Authors Yu T, Wang Y, Chen S, Hu M, Wang Z, Wu G, Ma X, Chen Z, Zheng C

[Camelina Seed Supplementation at Two Dietary Fat Levels Change Ruminal Bacterial Community Composition in a Dual-Flow Continuous Culture System](#)

Frontiers in microbiology, Volume: 8 2017

Authors Dai X, Weimer PJ, Dill-McFarland KA, Brandao VLN, Suen G, Faciola AP

[Polysaccharides from *Chrysanthemum morifolium* Ramat ameliorate colitis rats by modulating the intestinal microbiota community](#)

Oncotarget, Volume: 8 Issue: 46 2017 Oct 6

Authors Tao JH, Duan JA, Jiang S, Feng NN, Qiu WQ, Ling Y

[Associations Between Microbiota, Mitochondrial Function, and Cognition in Chronic Marijuana Users](#)

Journal of neuroimmune pharmacology : the official journal of the Society on NeuroImmune Pharmacology, Volume: 13 Issue: 1 2018 Mar

Authors Panee J, Gerschenson M, Chang L

[*Clostridium butyricum* CGMCC0313.1 Protects against Autoimmune Diabetes by Modulating Intestinal Immune Homeostasis and Inducing Pancreatic Regulatory T Cells](#)

Frontiers in immunology, Volume: 8 2017

Authors Jia L, Shan K, Pan LL, Feng N, Lv Z, Sun Y, Li J, Wu C, Zhang H, Chen W, Diana J, Sun J, Chen YQ

[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

[High-Salt Diet Has a Certain Impact on Protein Digestion and Gut Microbiota: A Sequencing and Proteome Combined Study](#)

Frontiers in microbiology, Volume: 8 2017

Authors Wang C, Huang Z, Yu K, Ding R, Ye K, Dai C, Xu X, Zhou G, Li C

[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

[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

[Navy and black bean supplementation primes the colonic mucosal microenvironment to improve gut health](#)

The Journal of nutritional biochemistry, Volume: 49 2017 Nov

Authors Monk JM, Lepp D, Wu W, Pauls KP, Robinson LE, Power KA

[Effects of different oligosaccharides at various dosages on the composition of gut microbiota and short-chain fatty acids in](#)

mice with constipation.

Food & function , Volume: 8 Issue: 5 2017 May 24

Authors Wang L,Hu L,Yan S,Jiang T,Fang S,Wang G,Zhao J,Zhang H,Chen W

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

Antimicrobial Effects of Mastic Extract Against Oral and Periodontal Pathogens.

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

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

Improved Glucose Homeostasis in Obese Mice Treated With Resveratrol Is Associated With Alterations in the Gut Microbiome.

Diabetes , Volume: 66 Issue: 2 2017 Feb

Authors Sung MM,Kim TT,Denou E,Soltys CM,Hamza SM,Byrne NJ,Masson G,Park H,Wishart DS,Madsen KL,Schertzer JD,Dyck JR

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

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

Dietary Casein and Soy Protein Isolate Modulate the Effects of Raffinose and Fructooligosaccharides on the Composition and Fermentation of Gut Microbiota in Rats.

Journal of food science , Volume: 81 Issue: 8 2016 Aug

Authors Bai G,Ni K,Tsuruta T,Nishino N

In vitro effects of sodium bicarbonate buffer on rumen fermentation, levels of lipopolysaccharide and biogenic amine, and composition of rumen microbiota.

Journal of the science of food and agriculture , Volume: 97 Issue: 4 2017 Mar

Authors Mao S,Huo W,Liu J,Zhang R,Zhu W

Short communication: Modulation of the small intestinal microbial community composition over short-term or long-term administration with Lactobacillus plantarum ZDY2013.

Journal of dairy science , Volume: 99 Issue: 9 2016 Sep

Authors Xie Q,Pan M,Huang R,Tian X,Tao X,Shah NP,Wei H,Wan C

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,Papagaroufalos K,Berger B

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

Regulatory effect of paraprobiotic Lactobacillus gasseri CP2305 on gut environment and function.

Microbial ecology in health and disease , Volume: 27 2016

Authors Sugawara T,Sawada D,Ishida Y,Aihara K,Aoki Y,Takehara I,Takano K,Fujiwara S

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

Diets enriched with cranberry beans alter the microbiota and mitigate colitis severity and associated inflammation.

The Journal of nutritional biochemistry , Volume: 28 2016 Feb

Authors Monk JM,Lepp D,Zhang CP,Wu W,Zarepoor L,Lu JT,Pauls KP,Tsao R,Wood GA,Robinson LE,Power KA

Effects of Cocoa Husk Feeding on the Composition of Swine Intestinal Microbiota.

Journal of agricultural and food chemistry , Volume: 64 Issue: 10 2016 Mar 16

Authors Magistrelli D,Zanchi R,Malagutti L,Galassi G,Canzi E,Rosi F

High purity galacto-oligosaccharides enhance specific Bifidobacterium species and their metabolic activity in the mouse gut microbiome.

Beneficial microbes , Volume: 7 Issue: 2 2016

Authors Monteagudo-Mera A,Arthur JC,Jobin C,Keku T,Bruno-Barcena JM,Azcarate-Peril MA

The Effect of Lactobacillus casei 32G on the Mouse Cecum Microbiota and Innate Immune Response Is Dose and Time

Dependent.**PloS one** , Volume: 10 Issue: 12 2015

Authors Aktas B,De Wolfe TJ,Tandee K,Safdar N,Darien BJ,Steele JL

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,Yatsunenko T,Li D,Dasgupta S,Yu RK,Berg BM,Chichlowski M,Odle J

Effect of chito-oligosaccharides over human faecal microbiota during fermentation in batch cultures.**Carbohydrate polymers** , Volume: 137 2016 Feb 10

Authors Mateos-Aparicio I,Mengibar M,Heras A

Levan Enhances Associated Growth of Bacteroides, Escherichia, Streptococcus and Faecalibacterium in Fecal Microbiota.**PloS one** , Volume: 10 Issue: 12 2015

Authors Adamberg K,Tomson K,Talve T,Pudova K,Puurand M,Visnapuu T,Alamäe T,Adamberg S

Phenolic compounds from red wine and coffee are associated with specific intestinal microorganisms in allergic subjects.**Food & function** , Volume: 7 Issue: 1 2016 Jan

Authors Cuervo A,Hevia A,López P,Suárez A,Díaz C,Sánchez B,Margolles A,González S

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

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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