

Microbiome Information for: Gout

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 Gout

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
Anaerolineae	class High	292625	Nocardiaceae	family High	85025
Bacteroidia	class High	200643	Porphyromonadaceae	family High	171551
Chloroflexia	class High	32061	Ruminococcaceae	family Low	541000
Erysipelotrichia	class High	526524	Coprococcus	genus Low	33042
Negativicutes	class High	909932	Erysipelatoclostridium	genus High	1505663
Anaerolineaceae	family High	292628	Rhodococcus	genus High	1827
Bacteroidaceae	family High	815	Anaerolineales	order High	292629
Erysipelotrichaceae	family High	128827	Bacteroidales	order High	171549
Lachnospiraceae	family Low	186803	Erysipelotrichales	order High	526525
			Selenomonadales	order High	909929

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.

Astragalus polysaccharide

berberine 1.5 gram/day

bisphenol a (bpa)

Bofutsushosan

brown algae

candida albicans (prescription)

carboxymethyl cellulose (prebiotic)

dairy

galacto-oligosaccharides (prebiotic) 10 gram/day

ginko 240 mg/day

glycerol monolaurate (Monolaurin)

glycyrrhizic acid (licorice) 32 gram/day

gynostemma pentaphyllum (Jiaogulan)

iron 400 mg/day

isobutyric acid

isovaleric acid(fatty acid)

Lentilactobacillus buchneri

non-starch polysaccharides

partial sleep deprivation

smoking

triphala 9000 mg/day

Vitamin B1,thiamine hydrochloride 1.8 gram/day

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.

arabinogalactan (prebiotic)	lactobacillus reuteri (probiotics)
bacillus subtilis (probiotics)	lactobacillus rhamnosus gg (probiotics)
barley	lauric acid(fatty acid in coconut oil,in palm kernel oil,)
bifidobacterium longum (probiotics)	polysorbate 80
bifidobacterium pseudocatenulatum,(probiotics)	saccharomyces boulardii (probiotics)
Burdock Root	salt (sodium chloride)
Cacao	soy
fruit/legume fibre	β-glucan
garlic (allium sativum)	tea
glycine	walnuts
inulin (prebiotic)	wheat
lactobacillus plantarum (probiotics)	whole-grain barley

Sample of Literature Used

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

Estimating modifiers from bacteria associations

Microbiome Prescription , Volume: 2023 Issue: 3 2023 Apr

Authors K Lassesen

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

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

Astragalus polysaccharide ameliorated complex factor-induced chronic fatigue syndrome by modulating the gut microbiota and metabolites in mice.

Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie , Volume: 163 2023 May 9

Authors Wei X,Xin J,Chen W,Wang J,Lv Y,Wei Y,Li Z,Ding Q,Shen Y,Xu X,Zhang X,Zhang W,Zu X

Licorice extract ameliorates hyperglycemia through reshaping gut microbiota structure and inhibiting TLR4/NF- κ B signaling pathway in type 2 diabetic mice.

Food research international (Ottawa, Ont.) , Volume: 153 2022 Mar

Authors Zhang Y,Xu Y,Zhang L,Chen Y,Wu T,Liu R,Sui W,Zhu Q,Zhang M

Protective Effect of Ginkgolide B against Cognitive Impairment in Mice via Regulation of Gut Microbiota.

Journal of agricultural and food chemistry , Volume: 69 Issue: 41 2021 Oct 20

Authors Liu J,Ye T,Zhang Y,Zhang R,Kong Y,Zhang Y,Sun J

Glycerol Monolaurate Ameliorated Intestinal Barrier and Immunity in Broilers by Regulating Intestinal Inflammation, Antioxidant Balance, and Intestinal Microbiota.

Frontiers in immunology , Volume: 12 2021

Authors Kong L,Wang Z,Xiao C,Zhu Q,Song Z

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 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

Regulatory effects of *Lactobacillus* fermented black barley on intestinal microbiota of NAFLD rats.

Food research international (Ottawa, Ont.) , Volume: 147 2021 Sep

Authors Zhu C,Guan Q,Song C,Zhong L,Ding X,Zeng H,Nie P,Song L

Protective effects of glycine against lipopolysaccharide-induced intestinal apoptosis and inflammation.

Amino acids , 2021 Jun 4

Authors Zhang Y,Mu T,Jia H,Yang Y,Wu Z

Glycine regulates mucosal immunity and the intestinal microbial composition in weaned piglets.

Amino acids , 2021 Apr 11

Authors Ji Y,Fan X,Zhang Y,Li J,Dai Z,Wu Z

Administration of *Saccharomyces boulardii* maffio-1701 improves feed conversion ratio, promotes antioxidant capacity, alleviates intestinal inflammation and modulates gut microbiota in weaned piglets.

Journal of animal science and biotechnology , Volume: 11 Issue: 1 2020 Dec 4

Authors Zhang W,Bao C,Wang J,Zang J,Cao Y

Dynamic gut microbiome changes to low-iron challenge.

Applied and environmental microbiology , 2020 Nov 13

Authors Coe GL,Pinkham NV,Celis AI,Johnson C,DuBois JL,Walk ST

Influence of fermented soy protein consumption on hypertension and gut microbial modulation in spontaneous hypertensive rats.

Bioscience of microbiota, food and health , Volume: 39 Issue: 4 2020

Authors Daliri EB,Ofosu FK,Chelliah R,Lee BH,An H,Elahi F,Barathikannan K,Kim JH,Oh DH

Synergistic Effect of Berberine-Based Chinese Medicine Assembled Nanostructures on Diarrhea-Predominant Irritable Bowel

Syndrome In Vivo.**Frontiers in pharmacology** , Volume: 11 2020

Authors Li L,Cui H,Li T,Qi J,Chen H,Gao F,Tian X,Mu Y,He R,Lv S,Chu F,Xu B,Wang P,Lei H,Xu H,Wang C

Modulatory Effects of Triphala and Manjistha Dietary Supplementation on Human Gut Microbiota: A Double-Blind, Randomized, Placebo-Controlled Pilot Study.**Journal of alternative and complementary medicine (New York, N.Y.)** , Volume: 26 Issue: 11 2020 Nov

Authors Peterson CT,Pourang A,Dhaliwal S,Kohn JN,Uchitel S,Singh H,Mills PJ,Peterson SN,Sivamani RK

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

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

Bofutsushosan improves gut barrier function with a bloom of Akkermansia muciniphila and improves glucose metabolism in mice with diet-induced obesity.**Scientific reports** , Volume: 10 Issue: 1 2020 Mar 26

Authors Fujisaka S,Usui I,Nawaz A,Igarashi Y,Okabe K,Furusawa Y,Watanabe S,Yamamoto S,Sasahara M,Watanabe Y,Nagai Y,Yagi K,Nakagawa T,Tobe K

Anti-inflammatory activity of alkali-soluble polysaccharides from Arctium lappa L. and its effect on gut microbiota of mice with inflammation.**International journal of biological macromolecules** , Volume: 154 2020 Jul 1

Authors Zhang X,Zhang N,Kan J,Sun R,Tang S,Wang Z,Chen M,Liu J,Jin C

The Structure Features and Improving Effects of Polysaccharide from Astragalus membranaceus on Antibiotic-Associated Diarrhea.**Antibiotics (Basel, Switzerland)** , Volume: 9 Issue: 1 2019 Dec 23

Authors Li S,Qi Y,Ren D,Qu D,Sun Y

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

Effects of Lactobacillus plantarum on the intestinal morphology, intestinal barrier function and microbiota composition of suckling piglets.**Journal of animal physiology and animal nutrition** , 2019 Sep 9

Authors Wang Q,Sun Q,Qi R,Wang J,Qiu X,Liu Z,Huang J

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

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,McLisans C,Petersen K,Kris-Etherton P,Lamendella R

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

Effects of Different Diets on Microbiota in The Small Intestine Mucus and Weight Regulation in Rats.**Scientific reports** , Volume: 9 Issue: 1 2019 Jun 11

Authors Meng Y,Li X,Zhang J,Wang C,Lu F

In vivo and in vitro anti-inflammatory effects of water-soluble polysaccharide from Arctium lappa.**International journal of biological macromolecules** , Volume: 135 2019 Aug 15

Authors Zhang N,Wang Y,Kan J,Wu X,Zhang X,Tang S,Sun R,Liu J,Qian C,Jin C

Structural characterization of water-soluble polysaccharide from Arctium lappa and its effects on colitis mice.**Carbohydrate polymers** , Volume: 213 2019 Jun 1

Authors Wang Y,Zhang N,Kan J,Zhang X,Wu X,Sun R,Tang S,Liu J,Qian C,Jin C

[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

[Effects of garlic polysaccharide on alcoholic liver fibrosis and intestinal microflora in mice.](#)

Pharmaceutical biology , Volume: 56 Issue: 1 2018 Dec

Authors Wang Y,Guan M,Zhao X,Li X

[Microbiome Responses to an Uncontrolled Short-Term Diet Intervention in the Frame of the Citizen Science Project.](#)

Nutrients , Volume: 10 Issue: 5 2018 May 8

Authors Klimenko NS,Tyakht AV,Popenko AS,Vasiliev AS,Altukhov IA,Ischenko DS,Shashkova TI,Efimova DA,Nikogosov DA,Osipenko DA,Musienko SV,Selezneva KS,Baranova A,Kurilshikov AM,Toshchakov SM,Korzhenkov AA,Samarov NI,Shevchenko MA,Tepluk AV,Alexeev DG

[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

[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

[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

[Flammulina velutipes polysaccharides improve scopolamine-induced learning and memory impairment in mice by modulating gut microbiota composition.](#)

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

Authors Su A,Yang W,Zhao L,Pei F,Yuan B,Zhong L,Ma G,Hu Q

[Antimicrobial Emulsifier-Glycerol Monolaurate Induces Metabolic Syndrome, Gut Microbiota Dysbiosis, and Systemic Low-Grade Inflammation in Low-Fat Diet Fed Mice.](#)

Molecular nutrition & food research , Volume: 62 Issue: 3 2018 Feb

Authors Jiang Z,Zhao M,Zhang H,Li Y,Liu M,Feng F

[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

[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

[Illumina Sequencing Approach to Characterize Thiamine Metabolism Related Bacteria and the Impacts of Thiamine Supplementation on Ruminant Microbiota in Dairy Cows Fed High-Grain Diets.](#)

Frontiers in microbiology , Volume: 8 2017

Authors Pan X,Xue F,Nan X,Tang Z,Wang K,Beckers Y,Jiang L,Xiong B

[Decaffeinated green and black tea polyphenols decrease weight gain and alter microbiome populations and function in diet-induced obese mice.](#)

European journal of nutrition , 2017 Sep 30

Authors Henning SM,Yang J,Hsu M,Lee RP,Grojean EM,Ly A,Tseng CH,Heber D,Li Z

Whole-Grain Starch and Fiber Composition Modifies Ileal Flow of Nutrients and Nutrient Availability in the Hindgut, Shifting Fecal Microbial Profiles in Pigs.

The Journal of nutrition , Volume: 147 Issue: 11 2017 Nov

Authors Fouchse JM,Gänzle MG,Beattie AD,Vasanthan T,Zijlstra RT

Lactobacillus plantarum LP-Only alters the gut flora and attenuates colitis by inducing microbiome alteration in interleukin-10 knockout mice.

Molecular medicine reports , Volume: 16 Issue: 5 2017 Nov

Authors Chen H,Xia Y,Zhu S,Yang J,Yao J,Di J,Liang Y,Gao R,Wu W,Yang Y,Shi C,Hu D,Qin H,Wang Z

Bifidobacterium pseudocatenuatum LI09 and Bifidobacterium catenuatum LI10 attenuate D-galactosamine-induced liver injury by modifying the gut microbiota

Scientific Reports , Volume: 7 2017 Aug 18

Authors Fang D,Shi D,Lv L,Gu S,Wu W,Chen Y,Guo J,Li A,Hu X,Guo F,Ye J,Li Y,Li L

Beef, Chicken, and Soy Proteins in Diets Induce Different Gut Microbiota and Metabolites in Rats.

Frontiers in microbiology , Volume: 8 2017

Authors Zhu Y,Shi X,Lin X,Ye K,Xu X,Li C,Zhou G

Changes in the gut microbial communities following addition of walnuts to the diet.

The Journal of nutritional biochemistry , Volume: 48 2017 Oct

Authors Byerley LO,Samuelson D,Blanchard E 4th,Luo M,Lorenzen BN,Banks S,Ponder MA,Welsh DA,Taylor CM

Effect of ginkgo extract supplementation on in vitro rumen fermentation and bacterial profiles under different dietary conditions.

Animal science journal = Nihon chikusan Gakkaiho , Volume: 88 Issue: 11 2017 Nov

Authors Oh S,Koike S,Kobayashi Y

Effect of Soy Isoflavones on Growth of Representative Bacterial Species from the Human Gut.

Nutrients , Volume: 9 Issue: 7 2017 Jul 8

Authors Vázquez L,Flórez AB,Guadamuro L,Mayo B

The effects of micronutrient deficiencies on bacterial species from the human gut microbiota.

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

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

Berberine protects against diet-induced obesity through regulating metabolic endotoxemia and gut hormone levels.

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

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

Impact of probiotic Saccharomyces boulardii on the gut microbiome composition in HIV-treated patients: A double-blind, randomised, placebo-controlled trial.

PLoS one , Volume: 12 Issue: 4 2017

Authors Villar-García J,Güerri-Fernández R,Moya A,González A,Hernández JJ,Lerma E,Guelar A,Sorli L,Horcajada JP,Artacho A,D Auria G,Knobel H

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

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

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

Dairy and plant based food intakes are associated with altered faecal microbiota in 2 to 3 year old Australian children.

Scientific reports , Volume: 6 2016 Oct 3

Authors Smith-Brown P,Morrison M,Krause L,Davies PS

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

Effects of exposure to bisphenol A and ethinyl estradiol on the gut microbiota of parents and their offspring in a rodent model.

Gut microbes , Volume: 7 Issue: 6 2016 Nov

Authors Javurek AB,Spollen WG,Johnson SA,Bivens NJ,Bromert KH,Givan SA,Rosenfeld CS

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
Lactobacillus rhamnosus GG Intake Modifies Preschool Children`s Intestinal Microbiota, Alleviates Penicillin-Associated Changes, and Reduces Antibiotic Use.
- PLoS one** , Volume: 11 Issue: 4 2016
 Authors Korpela K,Salonen A,Virta LJ,Kumpu M,Kekkonen RA,de Vos WM
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
High Molecular Weight Barley β -Glucan Alters Gut Microbiota Toward Reduced Cardiovascular Disease Risk.
- Frontiers in microbiology** , Volume: 7 2016
 Authors Wang Y,Ames NP,Tun HM,Tosh SM,Jones PJ,Khafipour E
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
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
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
Membrane filter method to study the effects of Lactobacillus acidophilus and Bifidobacterium longum on fecal microbiota.
- Microbiology and immunology** , Volume: 59 Issue: 11 2015 Nov
 Authors Shimizu H,Benno Y
Effect of Bacillus subtilis CGMCC 1.1086 on the growth performance and intestinal microbiota of broilers.
- Journal of applied microbiology** , Volume: 120 Issue: 1 2016 Jan
 Authors Li Y,Xu Q,Huang Z,Lv L,Liu X,Yin C,Yan H,Yuan J
Modulation of gut microbiota by berberine and metformin during the treatment of high-fat diet-induced obesity in rats.
- Scientific reports** , Volume: 5 2015 Sep 23
 Authors Zhang X,Zhao Y,Xu J,Xue Z,Zhang M,Pang X,Zhang X,Zhao L
Lactobacillus rhamnosus GG-supplemented formula expands butyrate-producing bacterial strains in food allergic infants.
- The ISME journal** , Volume: 10 Issue: 3 2016 Mar
 Authors Berni Canani R,Sangwan N,Stefka AT,Nocerino R,Paparo L,Aitoro R,Calignano A,Khan AA,Gilbert JA,Nagler CR
Effect of Whole-Grain Barley on the Human Fecal Microbiota and Metabolome.
- Applied and environmental microbiology** , Volume: 81 Issue: 22 2015 Nov
 Authors De Angelis M,Montemurno E,Vannini L,Cosola C,Cavallo N,Gozzi G,Maranzano V,Di Cagno R,Gobbetti M,Gesualdo L
Candida albicans commensalism in the gastrointestinal tract.
- FEMS yeast research** , Volume: 15 Issue: 7 2015 Nov
 Authors Neville BA,d`Enfert C,Bougnoux ME
Equal status and changes in fecal microbiota in menopausal women receiving long-term treatment for menopause symptoms with a soy-isoflavone concentrate.
- Frontiers in microbiology** , Volume: 6 2015
 Authors Guadamuro L,Delgado S,Redruello B,Flórez AB,Suárez A,Martínez-Cambor P,Mayo B
In vitro digestion and fermentation properties of linear sugar-beet arabinan and its oligosaccharides.
- Carbohydrate polymers** , Volume: 131 2015 Oct 20
 Authors Moon JS,Shin SY,Choi HS,Joo W,Cho SK,Li L,Kang JH,Kim TJ,Han NS
Modulation of gut microbiota in rats fed high-fat diets by processing whole-grain barley to barley malt.
- Molecular nutrition & food research** , Volume: 59 Issue: 10 2015 Oct
 Authors Zhong Y,Nyman M,Fåk F
Wheat and barley differently affect porcine intestinal microbiota.
- Journal of the science of food and agriculture** , Volume: 96 Issue: 6 2016 Apr
 Authors Weiss E,Aumiller T,Spindler HK,Rosenfelder P,Eklund M,Witzig M,Jørgensen H,Bach Knudsen KE,Mosenthin R
In situ identification and quantification of starch-hydrolyzing bacteria attached to barley and corn grain in the rumen of cows fed barley-based diets.
- FEMS microbiology ecology** , Volume: 91 Issue: 8 2015 Aug
 Authors Xia Y,Kong Y,Seviour R,Yang HE,Forster R,Vasanthan T,McAllister T

Review article: dietary fibre-microbiota interactions.

Alimentary pharmacology & therapeutics , Volume: 42 Issue: 2 2015 Jul

Authors Simpson HL,Campbell BJ

Effects of two whole-grain barley varieties on caecal SCFA, gut microbiota and plasma inflammatory markers in rats consuming low- and high-fat diets.

The British journal of nutrition , Volume: 113 Issue: 10 2015 May 28

Authors Zhong Y,Marungruang N,Fåk F,Nyman M

The impact of oral consumption of Lactobacillus plantarum P-8 on faecal bacteria revealed by pyrosequencing.

Beneficial microbes , Volume: 6 Issue: 4 2015

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

Intermittent hypoxia alters gut microbiota diversity in a mouse model of sleep apnoea.

The European respiratory journal , Volume: 45 Issue: 4 2015 Apr

Authors Moreno-Indias I,Torres M,Montserrat JM,Sanchez-Alcoholado L,Cardona F,Tinahones FJ,Gozal D,Poroyko VA,Navajas D,Queipo-Ortuño MI,Farré R

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

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

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

Dietary supplementation with soybean oligosaccharides increases short-chain fatty acids but decreases protein-derived catabolites in the intestinal luminal content of weaned Huanjiang mini-piglets.

Nutrition research (New York, N.Y.) , Volume: 34 Issue: 9 2014 Sep

Authors Zhou XL,Kong XF,Lian GQ,Blachier F,Geng MM,Yin YL

Longitudinal shifts in bacterial diversity and fermentation pattern in the rumen of steers grazing wheat pasture.

Anaerobe , Volume: 30 2014 Dec

Authors Pitta DW,Pinchak WE,Dowd S,Dorton K,Yoon I,Min BR,Fulford JD,Wickersham TA,Malinowski DP

Smoking cessation alters intestinal microbiota: insights from quantitative investigations on human fecal samples using FISH.

Inflammatory bowel diseases , Volume: 20 Issue: 9 2014 Sep

Authors Biedermann L,Brüllsauer K,Zeitl J,Frei P,Scharl M,Vavricka SR,Fried M,Loessner MJ,Rogler G,Schuppler M

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

Fermentable non-starch polysaccharides increases the abundance of Bacteroides-Prevotella-Porphyrromonas in ileal microbial community of growing pigs.

Animal : an international journal of animal bioscience , Volume: 8 Issue: 11 2014 Nov

Authors Ivarsson E,Roos S,Liu HY,Lindberg JE

Impact of diet and individual variation on intestinal microbiota composition and fermentation products in obese men

The ISME Journal , Volume: 8 Issue: 11 2014 Apr 24

Authors Salonen A,Lahti L,Salojärvi J,Holtrop G,Korpela K,Duncan SH,Date P,Farquharson F,Johnstone AM,Lobley GE,Louis P,Flint HJ,de Vos WM

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

FLX pyrosequencing analysis of the effects of the brown-algal fermentable polysaccharides alginate and laminaran on rat cecal microbiotas.

Applied and environmental microbiology , Volume: 79 Issue: 3 2013 Feb

Authors An C,Kuda T,Yazaki T,Takahashi H,Kimura B

Gut microbiome composition is linked to whole grain-induced immunological improvements.

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

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

Rumen bacterial, archaeal, and fungal diversity of dairy cows in response to ingestion of lauric or myristic acid.

Journal of animal science , Volume: 90 Issue: 12 2012 Dec

Authors Hristov AN,Callaway TR,Lee C,Dowd SE

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

Cocoa modulatory effect on rat faecal microbiota and colonic crosstalk.

Archives of biochemistry and biophysics , Volume: 527 Issue: 2 2012 Nov 15

Authors Massot-Cladera M,Pérez-Berezo T,Franch A,Castell M,Pérez-Cano FJ

Effect of garlic powder on the growth of commensal bacteria from the gastrointestinal tract.

Phytomedicine : international journal of phytotherapy and phytopharmacology , Volume: 19 Issue: 8-9 2012 Jun 15

Authors Filocamo A,Nueno-Palop C,Bisignano C,Mandalari G,Narbad A

Arabinoxylans and inulin differentially modulate the mucosal and luminal gut microbiota and mucin-degradation in humanized rats.

Environmental microbiology , Volume: 13 Issue: 10 2011 Oct

Authors Van den Abbeele P,Gérard P,Rabot S,Bruneau A,El Aidy S,Derrien M,Kleerebezem M,Zoetendal EG,Smidt H,Verstraete W, Van de Wiele T,Possemiers S

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 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