

Microbiome Information for: Sjögren 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 Sjögren 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
Actinomycetia	<i>class</i>	Low	1760
Lachnospiraceae	<i>family</i>	Low	186803
Ruminococcaceae	<i>family</i>	Low	541000
Agathobacter	<i>genus</i>	Low	1766253
Alistipes	<i>genus</i>	Low	239759
Alloscardovia	<i>genus</i>	High	419014
Bacteroides	<i>genus</i>	Low	816
Barnesiella	<i>genus</i>	Low	397864
Bifidobacterium	<i>genus</i>	Low	1678
Dorea	<i>genus</i>	Low	189330
Escherichia	<i>genus</i>	High	561
Faecalibacterium	<i>genus</i>	Low	216851
Megasphaera	<i>genus</i>	High	906

Bacteria Name	Rank	Shift	Taxonomy ID
Odoribacter	<i>genus</i>	High	283168
Prevotella	<i>genus</i>	High	838
Pseudobutyrvibrio	<i>genus</i>	High	46205
Shigella	<i>genus</i>	High	620
Streptococcus	<i>genus</i>	High	1301
Subdoligranulum	<i>genus</i>	Low	292632
Veillonella	<i>genus</i>	High	29465
Bacteroides uniformis	<i>species</i>	Low	820
Bifidobacterium adolescentis	<i>species</i>	Low	1680
Granulicatella adiacens	<i>species</i>	High	46124
Lactobacillus acidophilus	<i>species</i>	High	1579
Prevotella copri	<i>species</i>	High	165179
Veillonella atypica	<i>species</i>	High	39777
Veillonella parvula	<i>species</i>	High	29466

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.

ascophyllum nodosum (sea weed)

candida albicans (prescription)

cefixime (antibiotic)

dairy

d-ribose 10 gram/day

Exercise

fat

gatifloxacin (antibiotic)

gluten-free diet

high-fat diets

lactobacillus gasseri (probiotics) 10 BCFU/day

linseed(flaxseed) 30 mg/day

low fodmap diet

macrolide ((antibiotic)s)

mannooligosaccharide (prebiotic) 8 gram/day

navy bean

proton-pump inhibitors (prescription) 60 mg/day

smoking

sodium stearoyl lactylate

sucralose 340 mg/day

Tributylin

vitamin a 25000 IU/day

Vitamin B9,folic acid 5 mg/day

Retail Probiotics

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

spain (es) / muvagyn probiotico

philips / colon health

wakamoto (jp) / wakamoto pharmaceutical intestinal drug

CustomProbiotics.com / L. Gasseri Probiotic Powder

SuperSmart / Lactobacillus Gasseri

Note: Some of these are only available regionally – search the web for sources.

Substance to Consider Reducing or Eliminating

These are the most significant substances have been identified as probably contributing to the microbiome dysfunction.

In some cases blood work may show low levels of some vitamins, etc. listed below. This may be due to *greedy* bacteria reported at a high level above. Viewing bacteria data on the Kyoto Encyclopedia of Genes and Genomes (<https://www.kegg.jp/>) may provide better insight on the course of action to take.

arabinogalactan (prebiotic)

bacillus subtilis (probiotics)

clostridium butyricum (probiotics), Miya, Miyarisan

fructo-oligosaccharides (prebiotic)

gentamicin (antibiotic)s

Human milk oligosaccharides (prebiotic, Holigos, Stachyose)

inulin (prebiotic)

lactobacillus plantarum (probiotics)

resistant starch

soy

wheat

Sample of Literature Used

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

- [Fecal Microbiota Alterations and Small Intestinal Bacterial Overgrowth in Functional Abdominal Bloating/Distention.](#)
Journal of neurogastroenterology and motility , Volume: 26 Issue: 4 2020 Sep 30
 Authors Noh CK, Lee KJ
- [\[Characteristics of intestinal flora in patients with primary Sjögren syndrome\].](#)
Nan fang yi ke da xue xue bao = Journal of Southern Medical University , Volume: 40 Issue: 7 2020 Jul 30
 Authors Wang X, Wang J, Guo W, Zhou Y, Sun C, Li Z, Chen L, Pan X
- [Gut microbial dysbiosis in individuals with Sjögren`s syndrome.](#)
Microbial cell factories , Volume: 19 Issue: 1 2020 Apr 15
 Authors Mendez R, Watane A, Farhangí M, Cavuoto KM, Leith T, Budree S, Galor A, Banerjee S
- [Gut dysbiosis is prevailing in Sjögren`s syndrome and is related to dry eye severity.](#)
PloS one , Volume: 15 Issue: 2 2020
 Authors Moon J, Choi SH, Yoon CH, Kim MK
- [Small intestinal bacterial overgrowth is associated with Diarrhea-predominant irritable bowel syndrome by increasing mainly *Prevotella* abundance.](#)
Scandinavian journal of gastroenterology , Volume: 54 Issue: 12 2019 Dec
 Authors Wu KQ, Sun WJ, Li N, Chen YQ, Wei YL, Chen DF
- [Severe intestinal dysbiosis is prevalent in primary Sjögren`s syndrome and is associated with systemic disease activity.](#)
Arthritis research & therapy , Volume: 19 Issue: 1 2017 Oct 24
 Authors Mandl T, Marsal J, Olsson P, Ohlsson B, Andréasson K
- [Severe intestinal dysbiosis is prevalent in primary Sjögren`s syndrome and is associated with systemic disease activity.](#)
Arthritis research & therapy , Volume: 19 Issue: 1 2017 Oct 24
 Authors Mandl T, Marsal J, Olsson P, Ohlsson B, Andréasson K
- [Infective endocarditis and Sjögren`s syndrome diagnosed simultaneously.](#)
IDCases , Volume: 7 2017
 Authors Morita F, Hirai Y, Suzuki K, Uehara Y, Mitsuhashi K, Amano A, Naito T
- [Microbiological and bioinformatics analysis of primary Sjögren`s syndrome patients with normal salivation.](#)
Journal of oral microbiology , Volume: 8 2016
 Authors Siddiqui H, Chen T, Aliko A, Mydel PM, Jonsson R, Olsen I
- [A preliminary study of the oral microbiota in Chinese patients with Sjögren`s syndrome.](#)
Archives of oral biology , Volume: 70 2016 Oct
 Authors Li M, Zou Y, Jiang Q, Jiang L, Yu Q, Ding X, Yu Y
- [Altered Mucosal Microbiome Diversity and Disease Severity in Sjögren Syndrome.](#)
Scientific reports , Volume: 6 2016 Apr 18
 Authors de Paiva CS, Jones DB, Stern ME, Bian F, Moore QL, Corbiere S, Streckfus CF, Hutchinson DS, Ajami NJ, Petrosino JF, Pflugfelder SC
- [Supra-gingival microbiota in Sjögren`s syndrome.](#)
Clinical oral investigations , Volume: 11 Issue: 4 2007 Dec
 Authors Leung KC, Leung WK, McMillan AS
- [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
- [Comparing the Influences of Metformin and Berberine on the Intestinal Microbiota of Rats With Nonalcoholic Steatohepatitis.](#)
In vivo (Athens, Greece) , Volume: 37 Issue: 5 2023 Sep-Oct
 Authors Chen D, Xiong J, Chen G, Zhang Z, Liu Y, Xu J, Xu H
- [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
- [Gentamicin alleviates cholestatic liver injury by decreasing gut microbiota-associated bile salt hydrolase activity in rats.](#)
European journal of pharmacology , Volume: 951 2023 May 12
 Authors Ma Y, Wang H, Yang J, Xin M, Wu X
- [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

[The Effect and Mechanism of Exercise Training on Rats with Poststroke Depression Based on the Intestinal Flora.](#)

Computational and mathematical methods in medicine , Volume: 2021 2021

Authors Yang J, Zhou G, Ou Z, Jia N, Wang D

[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

[Long-Term Overconsumption of Fat and Sugar Causes a Partially Reversible Pre-inflammatory Bowel Disease State.](#)

Frontiers in nutrition , Volume: 8 2021

Authors Arnone D, Vallier M, Hergalant S, Chabot C, Ndiaye NC, Moulin D, Aignatoaei AM, Alberto JM, Louis H, Boulard O, Mayeur C, Dreumont N, Peuker K, Strigli A, Zeissig S, Hansmann F, Chamaillard M, Kökten T, Peyrin-Biroulet L

[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

[Effects of dietary tributyrin and physterol ester supplementation on growth performance, intestinal morphology, microbiota and metabolites in weaned piglets.](#)

Journal of applied microbiology , 2021 Oct 27

Authors Chen G, Zhuo R, Ding H, Yang K, Xue J, Zhang S, Chen L, Yin Y, Fang R

[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

[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

[Unravelling the collateral damage of antibiotics on gut bacteria.](#)

Nature , Volume: 599 Issue: 7883 2021 Nov

Authors Maier L, Goemans CV, Wirbel J, Kuhn M, Eberl C, Pruteanu M, Müller P, Garcia-Santamarina S, Cacace E, Zhang B, Gekeler C, Banerjee T, Anderson EE, Milanese A, Löber U, Forslund SK, Patil KR, Zimmermann M, Stecher B, Zeller G, Bork P, Typas A

[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

[The role of genotype and diet in shaping gut microbiome in a genetic Vitamin A deficient mouse model.](#)

Journal of genetics and genomics = Yi chuan xue bao , 2021 Sep 16

Authors Xu J, Zhang JN, Sun BH, Liu Q, Ma J, Zhang Q, Liu YX, Chen N, Chen F

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

Frontiers in medicine , Volume: 8 2021

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

[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

[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

Effects of Bacillus subtilis and Bacillus licheniformis on growth performance, immunity, short chain fatty acid production, antioxidant capacity, and cecal microflora in broilers.

Poultry science , Volume: 100 Issue: 9 2021 Jun 26

Authors Xu Y,Yu Y,Shen Y,Li Q,Lan J,Wu Y,Zhang R,Cao G,Yang C

Home-based exercise training influences gut bacterial levels in multiple sclerosis.

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

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

Intestinal Microbiota Mediates High-Fructose and High-Fat Diets to Induce Chronic Intestinal Inflammation.

Frontiers in cellular and infection microbiology , Volume: 11 2021

Authors Tan R,Dong H,Chen Z,Jin M,Yin J,Li H,Shi D,Shao Y,Wang H,Chen T,Yang D,Li J

Effect of Dietary Inulin Supplementation on the Gut Microbiota Composition and Derived Metabolites of Individuals Undergoing Hemodialysis: A Pilot Study.

Journal of renal nutrition : the official journal of the Council on Renal Nutrition of the National Kidney Foundation , 2021 Jun 11

Authors Biruete A,Cross TL,Allen JM,Kistler BM,de Loor H,Evenepoel P,Fahey GC Jr,Bauer L,Swanson KS,Wilund KR

Effect of Vitamin A Supplementation on Growth Performance, Serum Biochemical Parameters, Intestinal Immunity Response and Gut Microbiota in American Mink (Neovison vison).

Animals : an open access journal from MDPI , Volume: 11 Issue: 6 2021 May 28

Authors Nan W,Si H,Yang Q,Shi H,Zhang T,Shi Q,Li G,Zhang H,Liu H

Intensive, prolonged exercise seemingly causes gut dysbiosis in female endurance runners.

Journal of clinical biochemistry and nutrition , Volume: 68 Issue: 3 2021 May

Authors Morishima S,Aoi W,Kawamura A,Kawase T,Takagi T,Naito Y,Tsukahara T,Inoue R

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

Modulation of the fecal microbiome and metabolome by resistant dextrin ameliorates hepatic steatosis and mitochondrial abnormalities in mice.

Food & function , 2021 Apr 22

Authors Zhang Z,Chen X,Cui B

Implications of Tributyrin on Gut Microbiota Shifts Related to Performances of Weaning Piglets.

Microorganisms , Volume: 9 Issue: 3 2021 Mar 12

Authors Miragoli F,Patrone V,Prandini A,Sigolo S,Del`Anno M,Rossi L,Senizza A,Morelli L,Callegari ML

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

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

Prevention and Alleviation of Dextran Sulfate Sodium Salt-Induced Inflammatory Bowel Disease in Mice With Bacillus subtilis-Fermented Milk via Inhibition of the Inflammatory Responses and Regulation of the Intestinal Flora.

Frontiers in microbiology , Volume: 11 2020

Authors Zhang X,Tong Y,Lyu X,Wang J,Wang Y,Yang R

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,Anglenius 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,Kiewiet MBG,Logtenberg MJ,Groeneveld A,Nauta A,Schols HA,Walvoort MTC,Harmsen HJM,de Vos P

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

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

Neuroprotective effects associated with immune modulation by selected lactic acid bacteria in a Parkinson`s disease model.

Nutrition (Burbank, Los Angeles County, Calif.) , Volume: 79-80 2020 Nov - Dec

Authors Perez Visñuk D,Savoy de Giori G,LeBlanc JG,de Moreno de LeBlanc A

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

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

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

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

Nutrients , Volume: 12 Issue: 7 2020 Jul 17

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

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

Soy food intake associates with changes in the metabolome and reduced blood pressure in a gut microbiota dependent manner.

Nutrition, metabolism, and cardiovascular diseases : NMCD , 2020 May 18

Authors Shah RD,Tang ZZ,Chen G,Huang S,Ferguson JF

Dietary Emulsifier Sodium Stearoyl Lactylate Alters Gut Microbiota *in vitro* and Inhibits Bacterial Butyrate Producers.

Frontiers in microbiology , Volume: 11 2020

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

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

Nutrients , Volume: 12 Issue: 5 2020 May 1

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

Effects of Tributyrin Supplementation on Growth Performance, Insulin, Blood Metabolites and Gut Microbiota in Weaned Piglets.

Animals : an open access journal from MDPI , Volume: 10 Issue: 4 2020 Apr 22

Authors Sotira S,Dell`Anno M,Caprarulo V,Hejna M,Pirrone F,Callegari ML,Tucci TV,Rossi L

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

Nutrients , Volume: 12 Issue: 4 2020 Apr 5

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

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

Prebiotic activity of garlic (*Allium sativum*) extract on *Lactobacillus acidophilus*.

Veterinary world , Volume: 12 Issue: 12 2019 Dec

Authors Sunu P,Sunarti D,Mahfudz LD,Yunianto VD

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

Gut microbes , 2020 Jan 13

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

Rapid gut microbiome changes in a world-class ultramarathon runner.

Physiological reports , Volume: 7 Issue: 24 2019 Dec

Authors Grosicki GJ,Durk RP,Bagley JR

Steatosis and gut microbiota dysbiosis induced by high-fat diet are reversed by 1-week chow diet administration.

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

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

Dietary resistant starch modifies the composition and function of caecal microbiota of broilers.

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

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

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,Blädel T,Larsen LH,Iglesias JR,Madera C,Sanz Y,Larsen TM,MyNewGut Consortium.

Regulatory Function of Buckwheat-Resistant Starch Supplementation on Lipid Profile and Gut Microbiota in Mice Fed with a High-Fat Diet.

Journal of food science , Volume: 84 Issue: 9 2019 Sep

Authors Zhou Y,Zhao S,Jiang Y,Wei Y,Zhou X

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

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

Nutrients , Volume: 11 Issue: 7 2019 Jul 11

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

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

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

Influence of proton pump inhibitors on microbiota in chronic liver disease patients.

Hepatology international , Volume: 13 Issue: 2 2019 Mar

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

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

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

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

Intestinal Morphologic and Microbiota Responses to Dietary *Bacillus* spp. in a Broiler Chicken Model.

Frontiers in physiology , Volume: 9 2018

Authors Li CL,Wang J,Zhang HJ,Wu SG,Hui QR,Yang CB,Fang RJ,Qi GH

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 Caniglia L,Pérez GT

A low-gluten diet induces changes in the intestinal microbiome of healthy Danish adults.

Nature communications , Volume: 9 Issue: 1 2018 Nov 13

Authors Hansen LBS,Roager HM,Søndertoft NB,Gøbel RJ,Kristensen M,Vallès-Colomer M,Vieira-Silva S,Ibrügger S,Lind

MV, Mærkedahl RB, Bahl MI, Madsen ML, Havelund J, Falony G, Tetens I, Nielsen T, Allin KH, Frandsen HL, Hartmann B, Holst JJ, Sparholt MH, Holck J, Blennow A, Moll JM, Meyer AS, Hoppe C, Poulsen JH, Carvalho V, Sagnelli D, Dalgaard MD, Christensen AF, Lydolph MC, Ross AB, Villas-Bôas S, Brix S, Sicheritz-Pontén T, Buschard K, Linneberg A, Rumessen JJ, Ekstrøm CT, Ritz C, Kristiansen K, Nielsen HB, Vestergaard H, Færgeman NJ, Raes J, Frøkiær H, Hansen T, Lauritzen L, Gupta R, Licht TR, Pedersen O

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

Gut microbes , 2018 Nov 5

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

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

International journal of microbiology , Volume: 2018 2018

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

[Simultaneous Supplementation of *Bacillus subtilis* and Antibiotic Growth Promoters by Stages Improved Intestinal Function of Pullets by Altering Gut Microbiota.](#)

Frontiers in microbiology , Volume: 9 2018

Authors Li X, Wu S, Li X, Yan T, Duan Y, Yang X, Duan Y, Sun Q, Yang X

[Supplemental *Bacillus subtilis* DSM 32315 manipulates intestinal structure and microbial composition in broiler chickens.](#)

Scientific reports , Volume: 8 Issue: 1 2018 Oct 18

Authors Ma Y, Wang W, Zhang H, Wang J, Zhang W, Gao J, Wu S, Qi G

[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

[Probiotic *Lactobacillus plantarum* Promotes Intestinal Barrier Function by Strengthening the Epithelium and Modulating Gut Microbiota.](#)

Frontiers in microbiology , Volume: 9 2018

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

[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

[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

[Dietary *Clostridium butyricum* Induces a Phased Shift in Fecal Microbiota Structure and Increases the Acetic Acid-Producing Bacteria in a Weaned Piglet Model.](#)

Journal of agricultural and food chemistry , Volume: 66 Issue: 20 2018 May 23

Authors Zhang J, Chen X, Liu P, Zhao J, Sun J, Guan W, Johnston LJ, Levesque CL, Fan P, He T, Zhang G, Ma X

[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

[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

[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

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

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

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

[Blood lactose after dairy product intake in healthy men.](#)

The British journal of nutrition , Volume: 118 Issue: 12 2017 Dec

Authors Pimentel G,Burton KJ,Rosikiewicz M,Freiburghaus C,von Ah U,Müngrer LH,Pralong FP,Vionnet N,Greub G,Badertscher R,Vergères G

[Gut Microbiome-Induced Shift of Acetate to Butyrate Positively Manages Dysbiosis in High Fat Diet.](#)

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

Authors Si X,Shang W,Zhou Z,Strappe P,Wang B,Bird A,Blanchard C

[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

[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

[Para-psychobiotic Lactobacillus gasseri CP2305 ameliorates stress-related symptoms and sleep quality.](#)

Journal of applied microbiology , Volume: 123 Issue: 6 2017 Dec

Authors Nishida K,Sawada D,Kawai T,Kuwano Y,Fujiwara S,Rokutan K

[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

[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

[Effect of Probiotic Lactobacilli on the Growth of Streptococcus Mutans and Multispecies Biofilms Isolated from Children with Active Caries.](#)

Medical science monitor : international medical journal of experimental and clinical research , Volume: 23 2017 Aug 30

Authors Lin X,Chen X,Tu Y,Wang S,Chen H

[Lactobacillus plantarum LP-Onlly 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

[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

[Effects of Consuming Xylitol on Gut Microbiota and Lipid Metabolism in Mice.](#)

Nutrients , Volume: 9 Issue: 7 2017 Jul 14

Authors Uebanso T,Kano S,Yoshimoto A,Naito C,Shimohata T,Mawatari K,Takahashi A

[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

[Human Milk Oligosaccharides Exhibit Antimicrobial and Antibiofilm Properties against Group B Streptococcus.](#)

ACS infectious diseases , Volume: 3 Issue: 8 2017 Aug 11

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

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

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

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

Additional APriori Analysis Available

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

Acne
ADHD
Allergic Rhinitis (Hay Fever)
Allergies
Alopecia (Hair Loss)
Alzheimer's disease
Amyotrophic lateral sclerosis (ALS) Motor Neuron
Ankylosing spondylitis
Anorexia Nervosa
Antiphospholipid syndrome (APS)
Asthma
Atherosclerosis
Autism
Autoimmune Disease
Barrett esophagus cancer
Bipolar Disorder
Brain Trauma
Carcinoma
Celiac Disease
Cerebral Palsy
Chronic Fatigue Syndrome
Chronic Kidney Disease
Chronic Lyme
Chronic Obstructive Pulmonary Disease (COPD)
Chronic Urticaria (Hives)
Coagulation / Micro clot triggering bacteria
Colorectal Cancer
Constipation
Coronary artery disease
COVID-19
Crohn's Disease
cystic fibrosis
deep vein thrombosis
Depression
Dermatomyositis
Eczema
Endometriosis
Eosinophilic Esophagitis
Epilepsy
Fibromyalgia
Functional constipation / chronic idiopathic constipation
gallstone disease (gsd)
Gastroesophageal reflux disease (Gerd) including Barrett's esophagus
Generalized anxiety disorder
Gout
Graves' disease
Hashimoto's thyroiditis
Hidradenitis Suppurativa
Histamine Issues From Ubiome
Histamine Issues,Mast Cell Issue, DAO Insufficiency

hypercholesterolemia (High Cholesterol)
hyperglycemia
Hyperlipidemia (High Blood Fats)
hypersomnia
hypertension (High Blood Pressure)
Hypoxia
IgA nephropathy (IgAN)
Inflammatory Bowel Disease
Insomnia
Intelligence
Irritable Bowel Syndrome
Juvenile idiopathic arthritis
Liver Cirrhosis
Long COVID
Lung Cancer
ME/CFS with IBS
ME/CFS without IBS
Menopause
Metabolic Syndrome
Mood Disorders
Multiple Sclerosis
Multiple system atrophy (MSA)
Neuropathy (all types)
neuropsychiatric disorders (PANDAS, PANS)
Nonalcoholic Fatty Liver Disease (nafld) Nonalcoholic
NonCeliac Gluten Sensitivity
Obesity
obsessive-compulsive disorder
Osteoarthritis
Osteoporosis
Parkinson's Disease
Postural orthostatic tachycardia syndrome
Premenstrual dysphoric disorder
Psoriasis
rheumatoid arthritis (RA), Spondyloarthritis (SpA)
Rosacea
Schizophrenia
Sjögren syndrome
Sleep Apnea
Small Intestinal Bacterial Overgrowth (SIBO)
Stress / posttraumatic stress disorder
Systemic Lupus Erythematosus
Tic Disorder
Tourette syndrome
Type 1 Diabetes
Type 2 Diabetes
Ulcerative colitis
Unhealthy Ageing