

Microbiome Information for: Metabolic 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 Metabolic Syndrome

Nota Bena: Many studies are done with a small sample size or mixtures of condition subsets which can greatly diminish the ability to detect bacteria shifts.

Bacteria Name	Rank	Shift	Taxonomy ID	Bacteria Name	Rank	Shift	Taxonomy ID
Actinomycetia	class	High	1760	Methanosphaera	genus	High	2316
Bacteroidia	class	Low	200643	Morganella	genus	High	581
Clostridia	class	Low	186801	Olsenella	genus	Low	133925
Deltaproteobacteria	class	Low	28221	Oribacterium	genus	Low	265975
Gammaproteobacteria	class	High	1236	Oscillibacter	genus	Low	459786
Atopobiaceae	family	High	1643824	Oscillospira	genus	High	119852
Bacillaceae	family	High	186817	Oxalobacter	genus	High	846
Bifidobacteriaceae	family	High	31953	Paenibacillus	genus	Low	44249
Clostridiaceae	family	Low	31979	Pantoea	genus	High	53335
Comamonadaceae	family	High	80864	Parabacteroides	genus	High	375288
Coriobacteriaceae	family	High	84107	Paraprevotella	genus	Low	577309
Desulfovibrionaceae	family	Low	194924	Parasutterella	genus	Low	577310
Enterobacteriaceae	family	High	543	Parvimonas	genus	Low	543311
Lachnospiraceae	family	Low	186803	Peptococcus	genus	High	2740
Leptospiraceae	family	Low	170	Phoceae	genus	High	1926663
Odoribacteraceae	family	Low	1853231	Porphyromonas	genus	High	836
Oscillospiraceae	family	Low	216572	Prevotella	genus	High	838
Peptococcaceae	family	High	186807	Propionibacterium	genus	Low	1743
Peptostreptococcaceae	family	Low	186804	Proteiniborus	genus	High	415014
Prevotellaceae	family	High	171552	Pseudoflavonifractor	genus	High	1017280
Syntrophomonadaceae	family	Low	68298	Pyramidobacter	genus	High	638847
Thermotogaceae	family	Low	188709	Rhodococcus	genus	High	1827
Veillonellaceae	family	High	31977	Rhodococcus	genus	High	1661425
Verrucomicrobiaceae	family	Low	203557	Romboutsia	genus	Low	1501226
Acetobacteroides	genus	High	1647173	Roseburia	genus	Low	841
Acidaminococcus	genus	High	904	Rothia	genus	High	32207
Acinetobacter	genus	High	469	Rothia	genus	High	508215
Adlercreutzia	genus	High	447020	Ruminiclostridium	genus	Low	1508657
Aeriscardovia	genus	Low	240233	Ruminococcus	genus	High	1263
Aestuariuspira	genus	High	1647175	Selenomonas	genus	Low	970
Akkermansia	genus	Low	239934	Serratia	genus	High	613
Allobaculum	genus	High	174708	Shigella	genus	High	620
Alloprevotella	genus	High	1283313	Staphylococcus	genus	High	1279
Anaeroplasma	genus	Low	2086	Streptococcus	genus	High	1301
Anaerostipes	genus	High	207244	Subdoligranulum	genus	High	292632
Anaerotruncus	genus	High	244127	Succinivibrio	genus	High	83770
Bacteroides	genus	Low	816	Sutterella	genus	High	40544
Barnesiella	genus	High	397864	Treponema	genus	Low	157
Bifidobacterium	genus	Low	1678	Turicibacter	genus	Low	191303
Bilophila	genus	High	35832	Vampirovibrio	genus	High	213484
Blautia	genus	Low	572511	Vibrio	genus	High	662

Bacteria Name	Rank	Shift	Taxonomy ID	Bacteria Name	Rank	Shift	Taxonomy ID
Butyricococcus	genus	Low	580596	Victivallis	genus	Low	172900
Butyrivibrio	genus	Low	830	Weissella	genus	High	46255
Campylobacter	genus	High	194	Chromatiales	order	High	135613
Catabacter	genus	High	270497	Eubacteriales	order	High	186802
Cellulosibacter	genus	High	1246649	Akkermansia muciniphila	species	Low	239935
Cellulosilyticum	genus	Low	698776	Bacteroides caccae	species	High	47678
Christensenella	genus	High	990721	Bacteroides fragilis	species	Low	817
Collinsella	genus	High	102106	Bacteroides intestinalis	species	High	329854
Coprobacillus	genus	High	100883	Bacteroides stercoris	species	High	46506
Coprococcus	genus	Low	33042	Bacteroides uniformis	species	Low	820
Desulfovibrio	genus	High	872	Bifidobacterium adolescentis	species	Low	1680
Dorea	genus	High	189330	Bifidobacterium animalis	species	Low	28025
Eggerthella	genus	High	84111	Bifidobacterium longum	species	Low	216816
Eisenbergiella	genus	Low	1432051	Bifidobacterium pseudolongum	species	Low	1694
Elusimicrobium	genus	Low	423604	Clostridium butyricum	species	Low	1492
Escherichia	genus	High	561	Collinsella aerofaciens	species	High	74426
Eubacterium	genus	Low	1730	Corynebacterium ammoniagenes	species	High	1697
Faecalibacterium	genus	Low	216851	Enterococcus faecalis	species	High	1351
Faecalibaculum	genus	High	1729679	Enterococcus faecium	species	Low	1352
Faecalitalea	genus	High	1573534	Escherichia coli	species	High	562
Finegoldia	genus	Low	150022	Faecalibacterium prausnitzii	species	Low	853
Flavonifractor	genus	High	946234	Klebsiella pneumoniae	species	High	573
Fusobacterium	genus	High	848	Lactiplantibacillus plantarum	species	Low	1590
Geosporobacter	genus	High	390805	Lactobacillus intestinalis	species	High	151781
Gordonibacter	genus	High	644652	Ligilactobacillus ruminis	species	High	1623
Haemophilus	genus	Low	724	Limosilactobacillus reuteri	species	Low	1598
Holdemania	genus	High	61170	Micrococcus luteus	species	High	1270
Intestinimonas	genus	High	1392389	Phascolarctobacterium faecium	species	Low	33025
Klebsiella	genus	High	570	Phocaeicola vulgatus	species	Low	821
Lactobacillus	genus	Low	1578	Roseburia hominis	species	Low	301301
Lactococcus	genus	High	1357	Ruminococcus flavefaciens	species	High	1265
Leptotrichia	genus	High	32067	Ruminococcus gnavus	species	High	33038
Leuconostoc	genus	Low	1243	Anaerobutyricum hallii DSM 3353	strain	Low	411469
Megasphaera	genus	High	906	Clostridium beijerinckii NCIMB 8052	strain	Low	290402
				Clostridium beijerinckii NRRL B-598	strain	Low	1428454
				Bifidobacterium longum subsp. infantis	subspecies	Low	1682

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.

5-fluorouracil,(prescription)
 alcoholic beverages
 aspartame (sweetner)
Baking Soda, Sodium Bicarbonate
 beef
cadium
cefixime (antibiotic)
cefmetazole sodium salt (antibiotic)
cefotiam hydrochloride (antibiotic)
cefoxitin (antibiotic)s
cephalothin sodium salt (antibiotic)
cinoxacin (antibiotic)
colinfant e.coli probiotics
 dairy
DOXYCYCLINE (ANTIBIOTIC)S[CFS]
enoxacin (antibiotic)
 ethanol
 fat
floxacin (antibiotic)
floxuridine,(prescription)
fluorine
 gluten-free diet
 green-lipped mussel
 high animal protein diet
 high sugar diet
ibuprofen
lactobacillus gasseri (probiotics) 10 BCFU/day
Lactobacillus salivarius UCC118
 lactulose
 linseed(flaxseed) 30 mg/day
lomefloxacin hydrochloride (antibiotic)
loracarbef (antibiotic)
 low carbohydrate diet
LYMECYCLINE (ANTIBIOTIC)[CFS]
moxifloxacin (antibiotic)
nadifloxacin (antibiotic)
nalidixic acid sodium salt (antibiotic)
 navy bean
norfloxacin (antibiotic)
oligosaccharides (prebiotic)
oxolinic acid (antibiotic)
paromomycin (antibiotic)s
pefloxacin (antibiotic)
penicillin-moxalactam (antibiotic)s
pipemidic acid (antibiotic)
pivmecillinam hydrochloride (antibiotic)
proton-pump inhibitors (prescription) 60 mg/day
 red alga *Laurencia tristicha*
ribostamycin sulfate salt (antibiotic)
risperidone,(prescription)
sarafloxacin (antibiotic)
Slippery Elm
 smoking
 sodium stearoyl lactylate
spectinomycin dihydrochloride (antibiotic)
sucralose 340 mg/day
symbioflor 2 e.coli probiotics
thioguanosine,(prescription)
 Toothpaste fluoride
Vitamin B9,folic acid 5 mg/day
zidovudine; azt,(prescription)

Retail Probiotics

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

symbiopharm / symbioflo 2
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.

amikacin (antibiotic)s

amoxicillin (antibiotic)s[CFS]

arabinogalactan (prebiotic)

bacillus subtilis (probiotics)

barley

berberine

ciprofloxacin (antibiotic)s[CFS]

clostridium butyricum (probiotics),Miya,Miyarisan

fasting

gentamicin (antibiotic)s

imipenem (antibiotic)s

inulin (prebiotic)

lactobacillus plantarum (probiotics)

oregano (origanum vulgare, oil) |

piperacillin-tazobactam (antibiotic)s

resveratrol (grape seed/polyphenols/red wine)

soy

trimethoprim (antibiotic)s

wheat

Sample of Literature Used

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

[Is the Gut Microbiome Implicated in the Excess Risk of Hypertension Associated with Obstructive Sleep Apnea? A Contemporary Review.](#)

Antioxidants (Basel, Switzerland) , Volume: 12 Issue: 4 2023 Apr 3

Authors Munir SS,Sert Kuniyoshi FH,Singh P,Covassin N

[Characterization of microbial communities from gut microbiota of hypercholesterolemic and control subjects.](#)

Frontiers in cellular and infection microbiology , Volume: 12 2022

Authors Morales C,Rojas G,Rebolledo C,Rojas-Herrera M,Arias-Carrasco R,Cuadros-Orellana S,Maracaja-Coutinho V,Saavedra K,Leal P,Lanas F,Salazar LA,Saavedra N

[\[The characteristics of gut microbiota in type 2 diabetes mellitus patients with hypertriglyceridemia\].](#)

Zhonghua yi xue za zhi , Volume: 102 Issue: 47 2022 Dec 20

Authors Zhang Q,Hu WM,Deng YL,Long Q,Jin P

[Gut microbiome alterations in preclinical Alzheimer`s disease.](#)

PloS one , Volume: 17 Issue: 11 2022

Authors Jung JH,Kim G,Byun MS,Lee JH,Yi D,Park H,Lee DY,KBASE Research Group

[The importance of Faecalibacterium prausnitzii in human health and diseases.](#)

New microbes and new infections , Volume: 43 2021 Sep

Authors Parsaei M,Sarafraz N,Moaddab SY,Ebrahimzadeh Leylabadlo H

[Administration with Quinoa Protein Reduces the Blood Pressure in Spontaneously Hypertensive Rats and Modifies the Fecal Microbiota.](#)

Nutrients , Volume: 13 Issue: 7 2021 Jul 17

Authors Guo H,Hao Y,Fan X,Richel A,Everaert N,Yang X,Ren G

[Characterization of the gut microbiota in diabetes mellitus II patients with adequate and inadequate metabolic control.](#)

BMC research notes , Volume: 14 Issue: 1 2021 Jun 24

Authors Hamasaki-Matos AJ,Cóndor-Marín KM,Aquino-Ortega R,Carrillo-Ng H,Ugarte-Gil C,Silva-Caso W,Aguilar-Luis MA,Del Valle-Mendoza J

[Fecal Metaproteomics Reveals Reduced Gut Inflammation and Changed Microbial Metabolism Following Lifestyle-Induced Weight Loss.](#)

Biomolecules , Volume: 11 Issue: 5 2021 May 12

Authors Biemann R,Buß E,Berndorf D,Lehmann T,Schallert K,Püttker S,Reichl U,Isermann B,Schneider JG,Saake G,Heyer R

[Bifidobacterium reduction is associated with high blood pressure in children with type 1 diabetes mellitus.](#)

Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie , Volume: 140 2021 Aug

Authors Lakshmanan AP,Shatat IF,Zaidan S,Jacob S,Bangarusamy DK,Al-Abduljabbar S,Al-Khalaf F,Petroviski G,Terranegra A

[Gut microbiome diversity and composition is associated with hypertension in women.](#)

Journal of hypertension , 2021 May 10

Authors Louca P,Nogal A,Wells PM,Asnicar F,Wolf J,Stevens CJ,Spector TD,Segata N,Berry SE,Valdes AM,Menni C

[Enterococcus faecalis contributes to hypertension and renal injury in Sprague-Dawley rats by disturbing lipid metabolism.](#)

Journal of hypertension , Volume: 39 Issue: 6 2021 Jun 1

Authors Zhu Y,Liu Y,Wu C,Li H,Du H,Yu H,Huang C,Chen Y,Wang W,Zhu Q,Wang L

[Changes of gut microbiome composition and metabolites associated with hypertensive heart failure rats.](#)

BMC microbiology , Volume: 21 Issue: 1 2021 May 5

Authors Li L,Zhong SJ,Hu SY,Cheng B,Qiu H,Hu ZX

[Gut Microbiome of Indonesian Adults Associated with Obesity and Type 2 Diabetes: A Cross-Sectional Study in an Asian City, Yogyakarta.](#)

Microorganisms , Volume: 9 Issue: 5 2021 Apr 22

Authors Therdtatha P,Song Y,Tanaka M,Mariyatun M,Almunifah M,Manurung NEP,Indriarsih S,Lu Y,Nagata K,Fukami K,Ikeda T,Lee YK,Rahayu ES,Nakayama J

[Trans-ethnic gut microbial signatures of prediabetic subjects from India and Denmark.](#)

Genome medicine , Volume: 13 Issue: 1 2021 Mar 3

Authors Pinna NK,Anjana RM,Saxena S,Dutta A,Gnanaprakash V,Rameshkumar G,Aswath S,Raghavan S,Rani CSS,Radha V,Balasubramanyam M,Pant A,Nielsen T,Jørgensen T,Færch K,Kashani A,Silva MCA,Vestergaard H,Hansen TH,Hansen T,Arumugam M,Nair GB,Das B,Pedersen O,Mohan V,Mande SS

[Could dysbiosis of inflammatory and anti-inflammatory gut bacteria have an implications in the development of type 2 diabetes? A pilot investigation.](#)

BMC research notes , Volume: 14 Issue: 1 2021 Feb 6

Authors Kulkarni P,Devkumar P,Chattopadhyay I

[Exercise and food supplement of vitamin C ameliorate hypertension through improvement of gut microflora in the spontaneously hypertensive rats.](#)

Life sciences , Volume: 269 2021 Mar 15

Authors Li Y,Zafar S,Salih Ibrahim RM,Chi HL,Xiao T,Xia WJ,Li HB,Kang YM

[Multiple bacteria associated with the more dysbiotic genitourinary microbiomes in patients with type 2 diabetes mellitus.](#)

Scientific reports , Volume: 11 Issue: 1 2021 Jan 19

Authors Zha H,Liu F,Ling Z,Chang K,Yang J,Li L

[Metagenomic 16S rDNA amplicon data of microbial diversity of guts in Vietnamese humans with type 2 diabetes and nondiabetic adults.](#)

Data in brief , Volume: 34 2021 Feb

Authors Hoang HT,Le DH,Le TTH,Nguyen TTN,Chu HH,Nguyen NT

[Improvement of intestinal flora: accompany with the antihypertensive effect of electroacupuncture on stage 1 hypertension.](#)

Chinese medicine , Volume: 16 Issue: 1 2021 Jan 7

Authors Wang JM,Yang MX,Wu QF,Chen J,Deng SF,Chen L,Wei DN,Liang FR

[Correlation between alterations of gut microbiota and miR-122-5p expression in patients with type 2 diabetes mellitus.](#)

Annals of translational medicine , Volume: 8 Issue: 22 2020 Nov

Authors Li L,Li C,Lv M,Hu Q,Guo L,Xiong D

[The Alteration in Composition and Function of Gut Microbiome in Patients with Type 2 Diabetes.](#)

Journal of diabetes research , Volume: 2020 2020

Authors Zhao X,Zhang Y,Guo R,Yu W,Zhang F,Wu F,Shang J

[Alterations of Gut Microbiota in Type 2 Diabetes Individuals and the Confounding Effect of Antidiabetic Agents.](#)

Journal of diabetes research , Volume: 2020 2020

Authors Almuqadam BS,Liu Y,Chen SM,Wang CH,Shao CY,Ren BW,Tang L

[Changes in the Gut Microbiota are Associated with Hypertension, Hyperlipidemia, and Type 2 Diabetes Mellitus in Japanese Subjects.](#)

Nutrients , Volume: 12 Issue: 10 2020 Sep 30

Authors Takagi T,Naito Y,Kashiwagi S,Uchiyama K,Mizushima K,Kamada K,Ishikawa T,Inoue R,Okuda K,Tsujimoto Y,Ohnogi H,Itoh Y

[Human genetic determinants of the gut microbiome and their associations with health and disease: a phenome-wide association study.](#)

Scientific reports , Volume: 10 Issue: 1 2020 Sep 8

Authors Groot HE,van de Vegte YJ,Verweij N,Lipsic E,Karper JC,van der Harst P

[Akkermansia muciniphila is Negatively Correlated with Hemoglobin A1c in Refractory Diabetes.](#)

Microorganisms , Volume: 8 Issue: 9 2020 Sep 5

Authors Shih CT,Yeh YT,Lin CC,Yang LY,Chiang CP

[Associations between gut microbiota, faecal short-chain fatty acids, and blood pressure across ethnic groups: the HELIUS study.](#)

European heart journal , Volume: 41 Issue: 44 2020 Nov 21

Authors Verhaar BJH,Collard D,Prodan A,Levels JHM,Zwinderman AH,Bäckhed F,Vogt L,Peters MJL,Muller M,Nieuwdorp M,van den Born BH

[Type 2 diabetes influences bacterial tissue compartmentalisation in human obesity.](#)

Nature metabolism , Volume: 2 Issue: 3 2020 Mar

Authors Anhe FF,Jensen BAH,Varin TV,Servant F,Van Blerk S,Richard D,Marceau S,Surette M,Biertho L,Lelouvier B,Schertzer JD,Tchernof A,Marette A

[Gut Microbiota in T1DM-Onset Pediatric Patients: Machine-Learning Algorithms to Classify Microorganisms as Disease Linked.](#)

The Journal of clinical endocrinology and metabolism , Volume: 105 Issue: 9 2020 Sep 1

Authors Biassoni R,Di Marco E,Squillario M,Barla A,Piccolo G,Ugolotti E,Gatti C,Minuto N,Patti G,Maghnie M,d`Annunzio G

[Improvements to postprandial glucose control in subjects with type 2 diabetes: a multicenter, double blind, randomized placebo-controlled trial of a novel probiotic formulation.](#)

BMJ open diabetes research & care , Volume: 8 Issue: 1 2020 Jul

Authors Perraudeau F,McMurdie P,Bullard J,Cheng A,Cutcliffe C,Deo A,Eid J,Gines J,Iyer M,Justice N,Loo WT,Nemchek M,Schicklberger M,Souza M,Stoneburner B,Tyagi S,Kolterman O

[A comparative study of microbial community and functions of type 2 diabetes mellitus patients with obesity and healthy people.](#)

Applied microbiology and biotechnology , Volume: 104 Issue: 16 2020 Aug

Authors Wang TY,Zhang XQ,Chen AL,Zhang J,Lv BH,Ma MH,Lian J,Wu YX,Zhou YT,Ma CC,Dong RJ,Ge DY,Gao SH,Jiang GJ

[Insights into the gut microbiota of Nigerian elderly with type 2 diabetes and non-diabetic elderly persons.](#)

Heliyon , Volume: 6 Issue: 5 2020 May

Authors Afolayan AO,Adebusoye LA,Cadmus EO,Ayeni FA

[Phocea, Pseudoflavonifractor and Lactobacillus intestinalis: Three Potential Biomarkers of Gut Microbiota That Affect Progression and Complications of Obesity-Induced Type 2 Diabetes Mellitus.](#)

Diabetes, metabolic syndrome and obesity : targets and therapy , Volume: 13 2020

Authors Wang Y,Ouyang M,Gao X,Wang S,Fu C,Zeng J,He X

[The Gut Microbial Diversity of Newly Diagnosed Diabetics but Not of Prediabetics Is Significantly Different from That of Healthy Nondiabetics.](#)

mSystems , Volume: 5 Issue: 2 2020 Mar 31

Authors Gaike AH,Paul D,Bhute S,Dhotre DP,Pande P,Upadhyaya S,Reddy Y,Sampath R,Ghosh D,Chandraprabha D,Acharya J,Banerjee G,Sinkar VP,Ghaskadbi SS,Shouche YS

[The Gut Microbial Diversity of Newly Diagnosed Diabetics but Not of Prediabetics Is Significantly Different from That of Healthy Nondiabetics.](#)

mSystems , Volume: 5 Issue: 2 2020 Mar 31

Authors Gaike AH,Paul D,Bhute S,Dhotre DP,Pande P,Upadhyaya S,Reddy Y,Sampath R,Ghosh D,Chandraprabha D,Acharya J,Banerjee G,Sinkar VP,Ghaskadbi SS,Shouche YS

[Implication of the gut microbiome composition of type 2 diabetic patients from northern China.](#)

Scientific reports , Volume: 10 Issue: 1 2020 Mar 25

Authors Li Q,Chang Y,Zhang K,Chen H,Tao S,Zhang Z

[Gut Microbiome Profiles Are Associated With Type 2 Diabetes in Urban Africans.](#)

Frontiers in cellular and infection microbiology , Volume: 10 2020

Authors Doumatey AP,Adeyemo A,Zhou J,Lei L,Adebamowo SN,Adebamowo C,Rotimi CN

[Altered Gut Microbiome Profile in Patients With Pulmonary Arterial Hypertension.](#)

Hypertension (Dallas, Tex. : 1979) , 2020 Feb 24

Authors Kim S,Rigatto K,Gazzana MB,Knorst MM,Richards EM,Pepine CJ,Raizada MK

[Intestinal Flora Modulates Blood Pressure by Regulating the Synthesis of Intestinal-Derived Corticosterone in High Salt-Induced Hypertension.](#)

Circulation research , 2020 Feb 13

Authors Yan X,Jin J,Su X,Yin X,Gao J,Wang X,Zhang S,Bu P,Wang M,Zhang Y,Wang Z,Zhang Q

[Characterization of the Gut Microbiota of Individuals at Different T2D Stages Reveals a Complex Relationship with the Host.](#)

Microorganisms , Volume: 8 Issue: 1 2020 Jan 10

Authors Chávez-Carbajal A,Pizano-Zárate ML,Hernández-Quiroz F,Ortiz-Luna GF,Morales-Hernández RM,De Sales-Millán A,Hernández-Trejo M,García-Vite A,Beltrán-Lagunes L,Hoyo-Vadillo C,García-Mena J

[Role of gut microbiota in type 2 diabetes pathophysiology.](#)

EBioMedicine , Volume: 51 2020 Jan 2

Authors Gurung M,Li Z,You H,Rodrigues R,Jump DB,Morgun A,Shulzhenko N

[Akkermansia muciniphila: key player in metabolic and gastrointestinal disorders.](#)

European review for medical and pharmacological sciences , Volume: 23 Issue: 18 2019 Sep

Authors Macchione IG,Lopetuso LR,Ianiro G,Napoli M,Gibiino G,Rizzatti G,Petito V,Gasbarrini A,Scaldaferri F

[Probiotic strains improve high-fat diet-induced hypercholesterolemia through modulating gut microbiota in ways different from atorvastatin.](#)

Food & function , Volume: 10 Issue: 9 2019 Sep 18

Authors Sudun,Liu S,Xiao C,Peng C,Liang L,He X,Zhao S,Zhang G

[Obese Individuals with and without Type 2 Diabetes Show Different Gut Microbial Functional Capacity and Composition.](#)

Cell host & microbe , Volume: 26 Issue: 2 2019 Aug 14

Authors Thingholm LB,Rühlemann MC,Koch M,Fuqua B,Laucke G,Boehm R,Bang C,Franzosa EA,Hübenthal M,Rahnavard A,Frost F,Lloyd-Price J,Schirmer M,Lusis AJ,Vulpe CD,Lerch MM,Homuth G,Kacprowski T,Schmidt CO,Nöthlings U,Karlsen TH,Lieb W,Laudes M,Franke A,Huttenhower C

[Differential Analysis of Hypertension-Associated Intestinal Microbiota.](#)

International journal of medical sciences , Volume: 16 Issue: 6 2019

Authors Dan X,Mushi Z,Baili W,Han L,Enqi W,Huanhu Z,Shuchun L

[Strain-Specific Anti-inflammatory Properties of Two <i>Akkermansia muciniphila</i> Strains on Chronic Colitis in Mice.](#)

Frontiers in cellular and infection microbiology , Volume: 9 2019

Authors Zhai R,Xue X,Zhang L,Yang X,Zhao L,Zhang C

[Gut microbiota imbalances in Tunisian participants with type 1 and type 2 diabetes mellitus.](#)

Bioscience reports , Volume: 39 Issue: 6 2019 Jun 28

Authors Fassatoui M,Lopez-Siles M,Díaz-Rizzolo DA,Jmel H,Naouali C,Abdessalem G,Chikhaoui A,Nadal B,Jamoussi H,Abid

A,Gomis R,Abdelhak S,Martinez-Medina M,Kefi R

[A Metagenomic Meta-analysis Reveals Functional Signatures of Health and Disease in the Human Gut Microbiome.](#)

mSystems , Volume: 4 Issue: 4 2019 Jul-Aug

Authors Armour CR,Nayfach S,Pollard KS,Sharpton TJ

[Critical Role of the Interaction Gut Microbiota - Sympathetic Nervous System in the Regulation of Blood Pressure.](#)

Frontiers in physiology , Volume: 10 2019

Authors Toral M,Robles-Vera I,de la Visitación N,Romero M,Yang T,Sánchez M,Gómez-Guzmán M,Jiménez R,Raizada MK,Duarte J

[Faecal bacterial and short-chain fatty acids signature in hypercholesterolemia.](#)

Scientific reports , Volume: 9 Issue: 1 2019 Feb 11

Authors Granado-Serrano AB,Martín-Garí M,Sánchez V,Riart Solans M,Berdún R,Ludwig IA,Rubió L,Vilapriñó E,Portero-Otín M,Serrano JCE

[Gut microbiota profiling in Han Chinese with type 1 diabetes.](#)

Diabetes research and clinical practice , Volume: 141 2018 May 5

Authors Huang Y,Li SC,Hu J,Ruan HB,Guo HM,Zhang HH,Wang X,Pei YF,Pan Y,Fang C

[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

[Elevated circulating levels of succinate in human obesity are linked to specific gut microbiota.](#)

The ISME journal , Volume: 12 Issue: 7 2018 Jun

Authors Serena C,Ceperuelo-Mallafre V,Keiran N,Queipo-Ortuño MI,Bernal R,Gomez-Huelgas R,Urpi-Sarda M,Sabater M,Pérez-Brocá V,Andrés-Lacueva C,Moya A,Tinahones FJ,Fernández-Real JM,Vendrell J,Fernández-Veledo S

[Gut Microbiota Dysbiosis Drives and Implies Novel Therapeutic Strategies for Diabetes Mellitus and Related Metabolic Diseases](#)

Frontiers in Immunology , Volume: 8 2017 Dec 20

Authors Li X,Watanabe K,Kimura I

[DIFFERENCES IN MICROBIOME IN RAT MODELS OF CARDIOVASCULAR DISEASE.](#)

South African journal of surgery. Suid-Afrikaanse tydskrif vir chirurgie , Volume: 55 Issue: 2 2017 Jun

Authors Thiba A,Umar CA,Myende S,Nweke E,Rumbold K,Candy G

[The association of type II diabetes with gut microbiota composition.](#)

Microbial pathogenesis , Volume: 110 2017 Sep

Authors Navab-Moghadam F,Sedighi M,Khamseh ME,Alaei-Shahmiri F,Talebi M,Razavi S,Amirmozafari N

[Gut microbiota and diet in patients with different glucose tolerance.](#)

Endocrine connections , Volume: 5 Issue: 1 2016 Jan

Authors Egshatyan L,Kashtanova D,Popenko A,Tkacheva O,Tyakht A,Alexeev D,Karamnova N,Kostryukova E,Babenko V,Vakhitova M,Boytsov S

[Effects of short chain fatty acid producing bacteria on epigenetic regulation of FFAR3 in type 2 diabetes and obesity.](#)

Gene , Volume: 537 Issue: 1 2014 Mar 1

Authors Remely M,Aumueller E,Merold C,Dworzak S,Hippe B,Zanner J,Pointner A,Brath H,Haslberger AG

[Ability of lactic acid bacteria isolated from mink to remove cholesterol: in vitro and in vivo studies.](#)

Canadian journal of microbiology , Volume: 59 Issue: 8 2013 Aug

Authors Liu H,Yang C,Jing Y,Li Z,Zhong W,Li G

[Evidence for hypocholesterolemic effect of Lactobacillus reuteri in hypercholesterolemic mice.](#)

Journal of dairy science , Volume: 81 Issue: 9 1998 Sep

Authors Taranto MP,Medici M,Perdigón G,Ruiz Holgado AP,Valdez GF

[Additional sources and private correspondance](#)

Private Correspondance , Volume: 1 Issue: 2018

[Estimating modifiers from bacteria associations](#)

Microbiome Prescription , Volume: 2023 Issue: 3 2023 Apr

Authors K Lassen

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

Journal of veterinary internal medicine , 2023 Sep 8

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

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

Food & function , 2023 Sep 1

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

Effect of an Enteroprotective Complementary Feed on Faecal Markers of Inflammation and Intestinal Microbiota Composition in Weaning Puppies.

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

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

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*

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*

Low dosage fluorine ameliorates the bioaccumulation, hepatorenal dysfunction and oxidative stress, and gut microbiota perturbation of cadmium in rats.

Environmental pollution (Barking, Essex : 1987) , Volume: 324 2023 May 1

Authors *Li D,Yang C,Xu X,Li S,Luo G,Zhang C,Wang Z,Sun D,Cheng J,Zhang Q*

Folic acid attenuates chronic visceral pain by reducing Clostridiales abundance and hydrogen sulfide production.

Molecular pain , 2022 Dec 22

Authors *Weng RX,Wei YX,Li YC,Xu X,Zhuang JB,Xu GY,Li R*

Effects of Dietary Oregano Essential Oil on Cecal Microorganisms and Muscle Fatty Acids of Luhua Chickens.

Animals : an open access journal from MDPI , Volume: 12 Issue: 22 2022 Nov 20

Authors *Wu T,Yang F,Jiao T,Zhao S*

Lactobacillus rhamnosus GG protects against atherosclerosis by improving ketone body synthesis.

Applied microbiology and biotechnology , Volume: 106 Issue: 24 2022 Dec

Authors *Zhai T,Ren W,Wang P,Zheng L*

Resveratrol modulates the gut microbiota of cholestasis in pregnant rats.

Journal of physiology and pharmacology : an official journal of the Polish Physiological Society , Volume: 73 Issue: 2 2022 Apr

Authors *Li Z,Lei L,Ling L,Liu Y,Xiong Z,Shao Y*

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*

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*

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*

Gut microbiota modulation as a possible mediating mechanism for fasting-induced alleviation of metabolic complications: a systematic review.

Nutrition & metabolism , Volume: 18 Issue: 1 2021 Dec 14

Authors *Angoorani P,Ejtahed HS,Hasani-Ranjbar S,Siadat SD,Soroush AR,Larijani B*

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,Hansmannel 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*

Regulatory Effect of Resveratrol on Inflammation Induced by Lipopolysaccharides via Reprogramming Intestinal Microbes and

Ameliorating Serum Metabolism Profiles.**Frontiers in immunology** , Volume: 12 2021

Authors Ding S,Jiang H,Fang J,Liu G

Multidimensional exploration of essential oils generated via eight oregano cultivars: Compositions, chemodiversities, and antibacterial capacities.**Food chemistry** , Volume: 374 2022 Apr 16

Authors Hao Y,Kang J,Yang R,Li H,Cui H,Bai H,Tsitsilin A,Li J,Shi L

Effects of Dietary Supplementation With *Clostridium butyricum* on the Amelioration of Growth Performance, Rumen Fermentation, and Rumen Microbiota of Holstein Heifers.**Frontiers in nutrition** , Volume: 8 2021

Authors Li Y,Wang Y,Lv J,Dou X,Zhang Y

Gut microbiome and metabolome in a non-human primate model of chronic excessive alcohol drinking.**Translational psychiatry** , Volume: 11 Issue: 1 2021 Dec 1

Authors Piacentino D,Grant-Beurmann S,Vizioli C,Li X,Moore CF,Ruiz-Rodado V,Lee MR,Joseph PV,Fraser CM,Weerts EM,Leggjo L

Metagenomic Analysis of Intestinal Microbiota in Flolated Rats.**Biological trace element research** , Volume: 200 Issue: 7 2022 Jul

Authors Komuroglu AU,Seckin H,Ertas M,Meydan I

Time to abandon ampicillin plus gentamicin in favour of ampicillin plus ceftriaxone in Enterococcus faecalis infective endocarditis? A meta-analysis of comparative trials.**Clinical research in cardiology : official journal of the German Cardiac Society** , 2021 Nov 9

Authors Mirna M,Topf A,Schmutzler L,Hoppe UC,Lichtenauer M

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

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,Luis 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

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

Low-Dose Lactulose as a Prebiotic for Improved Gut Health and Enhanced Mineral Absorption.**Frontiers in nutrition** , Volume: 8 2021

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

Gut microbial biomarkers for the treatment response in first-episode, drug-naïve schizophrenia: a 24-week follow-up study.**Translational psychiatry** , Volume: 11 Issue: 1 2021 Aug 10

Authors Yuan X,Wang Y,Li X,Jiang J,Kang Y,Pang L,Zhang P,Li A,Lv L,Andreassen OA,Fan X,Hu S,Song X

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

Dietary oregano essential oil supplementation improves intestinal functions and alters gut microbiota in late-phase laying hens.

Journal of animal science and biotechnology , Volume: 12 Issue: 1 2021 Jul 6

Authors Feng J,Lu M,Wang J,Zhang H,Qiu K,Qi G,Wu S

Dietary oregano essential oil supplementation improves intestinal functions and alters gut microbiota in late-phase laying hens.

Journal of animal science and biotechnology , Volume: 12 Issue: 1 2021 Jul 6

Authors Feng J,Lu M,Wang J,Zhang H,Qiu K,Qi G,Wu S

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

Microbiota and Metabolite Modifications after Dietary Exclusion of Dairy Products and Reduced Consumption of Fermented Food in Young and Older Men.

Nutrients , Volume: 13 Issue: 6 2021 Jun 1

Authors Kim J,Burton-Pimentel KJ,Fleuti C,Blaser C,Scherz V,Badertscher R,Marmonier C,Lyon-Belgy N,Caille A,Pidou V,Blot A,Bertelli C,David J,Bütikofer U,Greub G,Dardevet D,Polakof S,Vergères G

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 Sadovnikova IS,Gureev AP,Ignatyeva DA,Gryaznova MV,Chernyshova EV,Krutsikikh 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

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

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

Modulatory Effects of Bacillus subtilis on the Performance, Morphology, Cecal Microbiota and Gut Barrier Function of Laying Hens.

Animals : an open access journal from MDPI , Volume: 11 Issue: 6 2021 May 24

Authors Zhang G,Wang H,Zhang J,Tang X,Raheem A,Wang M,Lin W,Liang L,Qi Y,Zhu Y,Jia Y,Cui S,Qin T

Gut Microbiota Induced by Pterostilbene and Resveratrol in High-Fat-High-Fructose Fed Rats: Putative Role in Steatohepatitis Onset.

Nutrients , Volume: 13 Issue: 5 2021 May 20

Authors Milton-Laskibar I,Marcos-Zambrano LJ,Gómez-Zorita S,Fernández-Quintela A,Carrillo de Santa Pau E,Martínez JA,Portillo MP

The Potential Roles of Very Low Calorie, Very Low Calorie Ketogenic Diets and Very Low Carbohydrate Diets on the Gut Microbiota Composition.

Frontiers in endocrinology , Volume: 12 2021

Authors Rondanelli M,Gasparri C,Peroni G,Faliva MA,Naso M,Perna S,Bazire P,Sajuox I,Maugeri R,Rigon C

Beneficial gut microbiome remodeled during intermittent fasting in humans.

Rejuvenation research , 2021 May 27

Authors Larrick JW,Mendelsohn AR,Larrick J

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

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

Influence of Proton Pump Inhibitors and Histamine Receptor 2 Antagonists on Blastocystis ST3 and Selected Microorganisms of Intestinal Microbiota In Vitro.

Clinical and translational gastroenterology , Volume: 12 Issue: 4 2021 Apr 9

Authors Lepczynska M,Dzika E,Chen W,Lu CY

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

Impaired Intestinal *Akkermansia muciniphila* and Aryl Hydrocarbon Receptor Ligands Contribute to Nonalcoholic Fatty Liver Disease in Mice.

mSystems , Volume: 6 Issue: 1 2021 Feb 23

Authors Shi Z,Lei H,Chen G,Yuan P,Cao Z,Ser HL,Zhu X,Wu F,Liu C,Dong M,Song Y,Guo Y,Chen C,Hu K,Zhu Y,Zeng XA,Zhou J,Lu Y,Patterson AD,Zhang L

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

Berberine alters gut microbial function through modulation of bile acids.

BMC microbiology , Volume: 21 Issue: 1 2021 Jan 11

Authors Wolf PG,Devendran S,Doden HL,Ly LK,Moore T,Takei H,Nitto H,Murai T,Kurosawa T,Chlipala GE,Green SJ,Kakiyama G,Kashyap P,McCracken VJ,Gaskins HR,Gillevet PM,Ridlon JM

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

Beneficial microbes , 2021 Jan 4

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

Diet Rich in Simple Sugars Promotes Pro-Inflammatory Response via Gut Microbiota Alteration and TLR4 Signaling.

Cells , Volume: 9 Issue: 12 2020 Dec 16

Authors Fajstova A,Galanova N,Coufal S,Malkova J,Kostovcik M,Cermakova M,Pelantova H,Kuzma M,Sediva B,Hudcovic T,Hrncir T,Tlaskalova-Hogenova H,Kverka M,Kostovcikova K

Exopolysaccharides from *Lactobacillus plantarum* YW11 improve immune response and ameliorate inflammatory bowel disease symptoms.

Acta biochimica Polonica , Volume: 67 Issue: 4 2020 Dec 17

Authors Min Z,Xiaona H,Aziz T,Jian Z,Zhennai Y

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

Modulation of the Gut Microbiome and Obesity Biomarkers by *Lactobacillus Plantarum* KC28 in a Diet-Induced Obesity Murine Model.

Probiotics and antimicrobial proteins , 2020 Nov 14

Authors Huang E, Kim S, Park H, Park S, Ji Y, Todorov SD, Lim SD, Holzapfel WH

Alcohol decreases intestinal ratio of *Lactobacillus* to *Enterobacteriaceae* and induces hepatic immune tolerance in a murine model of DSS-colitis.

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

Authors Kuprys PV, Cannon AR, Shieh J, Iftekhar N, Park SK, Eberhardt JM, Ding X, Choudhry MA

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

Relationship between gut environment, feces-to-food ratio, and androgen deficiency-induced metabolic disorders.

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

Authors Harada N, Minami Y, Hanada K, Hanaoka R, Kobayashi Y, Izawa T, Sato T, Kato S, Inui H, Yamaji R

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

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

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

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

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

Impacts of Habitual Diets Intake on Gut Microbial Counts in Healthy Japanese Adults.

Nutrients , Volume: 12 Issue: 8 2020 Aug 12

Authors Sugimoto T, Shima T, Amamoto R, Kaga C, Kado Y, Watanabe O, Shiinoki J, Iwazaki K, Shigemura H, Tsuji H, Matsumoto S

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, Elderink 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

The ameliorative effect of *Lactobacillus plantarum* Y44 oral administration on inflammation and lipid metabolism in obese mice fed with a high fat diet.

Food & function , Volume: 11 Issue: 6 2020 Jun 24

Authors Liu Y, Gao Y, Ma F, Sun M, Mu G, Tuo Y

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

Frontiers in microbiology , Volume: 11 2020

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

Supplemental *Clostridium butyricum* Modulates Lipid Metabolism Through Shaping Gut Microbiota and Bile Acid Profile of Aged Laying Hens.

Frontiers in microbiology , Volume: 11 2020

Authors Wang WW,Wang J,Zhang HJ,Wu SG,Qi GH

[Effect of resveratrol on intestinal tight junction proteins and the gut microbiome in high-fat diet-fed insulin resistant mice.](#)

International journal of food sciences and nutrition , Volume: 71 Issue: 8 2020 Dec

Authors Chen K,Zhao H,Shu L,Xing H,Wang C,Lu C,Song G

[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

[Effect of Berberine on Atherosclerosis and Gut Microbiota Modulation and Their Correlation in High-Fat Diet-Fed ApoE^{-/-} Mice.](#)

Frontiers in pharmacology , Volume: 11 2020

Authors Wu M,Yang S,Wang S,Cao Y,Zhao R,Li X,Xing Y,Liu L

[Alterations in cecal microbiota and intestinal barrier function of laying hens fed on fluoride supplemented diets.](#)

Ecotoxicology and environmental safety , Volume: 193 2020 Apr 15

Authors Miao L,Gong Y,Li H,Xie C,Xu Q,Dong X,Elwan HAM,Zou X

[Alterations in cecal microbiota and intestinal barrier function of laying hens fed on fluoride supplemented diets.](#)

Ecotoxicology and environmental safety , Volume: 193 2020 Apr 15

Authors Miao L,Gong Y,Li H,Xie C,Xu Q,Dong X,Elwan HAM,Zou X

[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

[Food for thought about manipulating gut bacteria.](#)

Nature , Volume: 577 Issue: 7788 2020 Jan

Authors Delzenne NM,Bindels LB

[Islamic fasting leads to an increased abundance of Akkermansia muciniphila and Bacteroides fragilis group: A preliminary study on intermittent fasting.](#)

The Turkish journal of gastroenterology : the official journal of Turkish Society of Gastroenterology , Volume: 30 Issue: 12 2019 Dec

Authors Özkul C,Yalinay M,Karakan T

[Berberine combined with stachyose induces better glycometabolism than berberine alone through modulating gut microbiota and fecal metabolomics in diabetic mice.](#)

Phytotherapy research : PTR , 2019 Dec 13

Authors Li CN,Wang X,Lei L,Liu MZ,Li RC,Sun SJ,Liu SN,Huan Y,Zhou T,Liu Q,Cao H,Bai GL,Han YW,Shen ZF

[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

[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.

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

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

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

[A comprehensive assessment of demographic, environmental, and host genetic associations with gut microbiome diversity in healthy individuals.](#)

Microbiome , Volume: 7 Issue: 1 2019 Sep 13

Authors Scepanovic P,Hodel F,Mondot S,Partula V,Byrd A,Hammer C,Alanio C,Bergstedt J,Patin E,Touvier M,Lantz O,Albert ML,Duffy D,Quintana-Murci L,Fellay J,Milieu Intérieur Consortium.

[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

[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

[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

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

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

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