

## Microbiome Information for: Multiple Sclerosis

### 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](mailto:Research@MicrobiomePrescription.com)

## **Bacteria being reported because of atypical values.**

These bacteria were reported atypical in studies of Multiple Sclerosis

*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.

<b>Bacteria Name</b>	<b>Rank</b>	<b>Shift</b>	<b>Taxonomy ID</b>	<b>Bacteria Name</b>	<b>Rank</b>	<b>Shift</b>	<b>Taxonomy ID</b>
Actinomycetia	class	High	1760	Olsenella	genus	High	133925
Bacteroidia	class	Low	200643	Parabacteroides	genus	Low	375288
Clostridia	class	High	186801	Pedobacter	genus	High	84567
Coriobacteria	class	High	84998	Prevotella	genus	Low	838
Barnesiellaceae	family	Low	2005519	Pseudomonas	genus	High	286
Christensenellaceae	family	High	990719	Roseburia	genus	Low	841
Desulfovibrionaceae	family	High	194924	Sporobacter	genus	High	44748
Lachnospiraceae	family	Low	186803	Streptococcus	genus	High	1301
Methanobacteriaceae	family	High	2159	Sutterella	genus	Low	40544
Oscillospiraceae	family	High	216572	Turicibacter	genus	Low	191303
Ruminococcaceae	family	Low	541000	[Clostridium] leptum	species	High	1535
Verrucomicrobiaceae	family	High	203557	[Eubacterium] rectale	species	Low	39491
Acinetobacter	genus	High	469	Akkermansia muciniphila	species	High	239935
Adlercreutzia	genus	Low	447020	Alistipes onderdonkii	species	High	328813
Akkermansia	genus	High	239934	Anaerostipes hadrus	species	Low	649756
Alistipes	genus	High	239759	Bacteroides fragilis	species	Low	817
Anaerofustis	genus	High	264995	Bacteroides stercoris	species	Low	46506
Anaerostipes	genus	Low	207244	Bifidobacterium longum	species	High	216816
Anaerotruncus	genus	High	244127	Butyricimonas virosa	species	Low	544645
Bacteroides	genus	Low	816	Clostridiaceae bacterium	species	Low	1898204
Bifidobacterium	genus	High	1678	Clostridium perfringens	species	Low	1502
Bilophila	genus	High	35832	Clostridium sp.	species	Low	1506
Blautia	genus	High	572511	Eggerthella lenta	species	High	84112
Butyricoccus	genus	Low	580596	Faecalibacterium prausnitzii	species	Low	853
Butyricimonas	genus	Low	574697	Holdemanella biformis	species	Low	1735
Clostridium	genus	Low	1485	Lachnospira eligens	species	Low	39485
Coprobacillus	genus	Low	100883	Lachnospira pectinoschiza	species	Low	28052
Desulfotomaculum	genus	Low	1562	Lactobacillus rogosae	species	Low	706562
Desulfovibrio	genus	High	872	Limosilactobacillus fermentum	species	Low	1613
Dorea	genus	High	189330	Megamonas funiformis	species	Low	437897
Eggerthella	genus	High	84111	Methanobrevibacter smithii	species	High	2173
Erwinia	genus	High	551	Parabacteroides distasonis	species	Low	823
Faecalibacterium	genus	Low	216851	Phocaeicola coprocola	species	Low	310298
Flavobacterium	genus	High	237	Phocaeicola coprophilus	species	Low	387090
Fusobacterium	genus	High	848	Prevotella copri	species	Low	165179
Gemmiger	genus	Low	204475	Streptococcus anginosus	species	High	1328
Haemophilus	genus	High	724	Streptococcus parasanguinis	species	High	1318
Intestinibacter	genus	Low	1505657	Streptococcus salivarius	species	High	1304
Methanobrevibacter	genus	High	2172	Streptococcus thermophilus	species	High	1308
Mycoplana	genus	High	13159	Sutterella wadsworthensis	species	Low	40545
Mycoplasma	genus	High	2093	Acinetobacter calcoaceticus/baumannii complex	species	High	909768
					group		

## 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.

**Akkermansia muciniphila (probiotic)** 10 BCFU/day

**bacillus subtilis (probiotics)** 10 BCFU/day

**bifidobacterium longum bb536 (probiotics)**

**Cacao** 20 gram/day

**cannabinoids**

**chitosan,(sugar)** 3 gram/day

**Cranberry**

**cranberry bean flour**

**fructo-oligosaccharides (prebiotic)** 15 gram/day

**gluten-free diet**

**grapes**

**green tea**

**high animal protein diet**

**high sugar diet**

**ketogenic diet**

**lactobacillus casei (probiotics)** 48 BCFU/day

**lactobacillus gasseri (probiotics)** 10 BCFU/day

**lactobacillus kefir (NOT KEFIR)**

**lactobacillus rhamnosus (probiotics)** 48 BCFU/day

**lactulose**

**low carbohydrate diet**

**metformin (prescription)**

**METRONIDAZOLE (ANTIBIOTIC)S[CFS]**

**norfloxacin (antibiotic)**

**Olive Oil**

**omega-3 fatty acids** 4 gram/day

**polymannuronic acid**

**raffinose(sugar beet)**

**rhubarb**

**zinc** 300 mg/day

## Retail Probiotics

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

Wholesome Wellness / Raw Probiotic  
 bio-k+  
 spain (es) / muvagyn probiotico  
 Sash Vitality / Bio-Cultures Probiotics for Adults  
 SuperSmart / Vaginal Health  
 optibac / for every day  
 ISCON Elegance/ Ochek Capsule 10  
 just for tummies / live bacteria  
 Jetson (US) / Mood Probiotics  
 NOW FOODS / Clinical GI Probiotic  
 powerlabs (au) / ultra blend  
 ecology\_allergycare  
 PIANETA FARMA/KefiBios  
 cytoplan(uk) /dentavital bifidophilus  
 SuperSmart / Bifidobacterium longum (BB536)  
 Bromatech (IT) / Citogenex  
 CVSHealth / Daily Probiotic  
 Nu U (uk) /Bio-Cultures Complex  
 corebiotic  
 SuperSmart / Oral Health  
 Nutrition Essentials / Probiotic (900 BCFU)  
 RepHresh /Pro-B Probiotic Supplement for Women  
 Ombre / Harmony  
 nature's bounty / probioti 10  
 mwsb / candida yeast support  
 microbiome labs/ megasporebiotic  
 CustomProbiotics.com / L. Gasseri Probiotic Powder  
 optibac / bifidobacteria & fibre  
 claire labs / biospora  
 Energybalance / ColoBiotica 28 Colon Support  
 naturopathica (au) / gastrohealth women's probiotic with cranberry  
 jarro formulas / jarro-dophilus mood  
 microbiome labs /hu58  
 perfect pass / perfect pass probiotic bacillus spore  
 PharmExtracta (IT) / INatal Sachets  
 Ombre / Metabolic Booster  
 spain (es) / ns florabiotic instant  
 SuperSmart / Lactobacillus Gasseri  
 optibac / for women  
 jarro formulas / fem-dophilus®  
 global health trax / threelac  
 HLH BIOPHARMA(DE) / LACTOBACT ® OMNI FOS  
 naturopathica (au)/ gastrohealth probiotic daily care  
 bio-botanical research / proflo4r restorative probiotic  
 Bromatech (IT) / Ramnoselle  
 nature's instincts / ultra spore probiotic  
 Biorela® Daily  
 Prescript-Assist®/SBO Probiotic  
 wakamoto (jp) / wakamoto pharmaceutical intestinal drug  
 blackmore (au) / probiotics+ womens flora balance  
 Pendulum / Pendulum Glucose Control  
 bravo europe / freeze-dried bravo  
 enviromedica terraflora sbo probiotic  
 Microbiome Labs / ZENBIOME Dual

Pendulum / akkermansia muciniphila  
Ombre / Endless Energy  
Jetson / FIT  
bravo europe / starter and complex  
CustomProbiotics.com / L. Rhamnosus Probiotic Powder  
PharmExtracta (IT) / FG5 Forte In Sachets  
aor / probiotic-3  
vitamin angels / just thrive  
CustomProbiotics.com / L. Casei Probiotic Powder  
SuperSmart / Akkermansia Muciniphila Postbiotic (pasturized)  
microbiome labs / restorflora  
Jetson (US) / Immunity Probiotics  
INVIVO THERAPEUTICS / Bio.Me IB +  
jarrow formulas / fem dophilus  
JGL / Lactogyn  
organic 3 / primal soil  
SuperSmart / Bacillus Subtilis  
naturopathica (au) / gastrohealth probiotic adults 50+  
Metabolics / Lactobacillus Rhamnosus Powder  
Bromatech (IT) / Psicobrain  
spain (es) / aquilea intimus  
BIO-BOTANICAL RESEARCH / Megacidin  
reserveage nutrition / beautiflora  
amy meyers / primal earth probiotic  
PrecisionBiotics / Zenflore  
Jetson / Gut Prep  
Ombre / Restore  
jamieson (can) / probiotic 10 bcfu  
optibac / for those on antibiotics  
custom probiotics / d-lactate free probiotics powder  
klaire labs / target gb-x  
spain (es) / ns defenbiotic kids  
philips / colon health

**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.

acetylsalicylic acid,aspirin	pectin
amoxicillin (antibiotic)s[CFS]	piperacillin-tazobactam (antibiotic)s
arabinogalactan (prebiotic)	Psyllium (Plantago Ovata Husk)
berberine	Pulses
ciprofloxacin (antibiotic)s[CFS]	red wine
fat	resistant maltodextrin
gentamicin (antibiotic)s	resistant starch
inulin (prebiotic)	saccharin
lactobacillus plantarum (probiotics)	vegetarians
lupin seeds (anaphylaxis risk, toxic if not prepared properly)	vitamin d
mediterranean diet	walnuts
non-starch polysaccharides	xylan (prebiotic)

## Sample of Literature Used

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

[Using data science for medical decision making case: role of gut microbiome in multiple sclerosis.](#)

**BMC medical informatics and decision making** , Volume: 20 Issue: 1 2020 Oct 12

Authors Hasic Telalovic J,Music A

[Alterations of the gut ecological and functional microenvironment in different stages of multiple sclerosis.](#)

**Proceedings of the National Academy of Sciences of the United States of America** , Volume: 117 Issue: 36 2020 Sep 8

Authors Takewaki D,Suda W,Sato W,Takayasu L,Kumar N,Kimura K,Kaga N,Mizuno T,Miyake S,Hattori M,Yamamura T

[Gut microbiome variation is associated to Multiple Sclerosis phenotypic subtypes.](#)

**Annals of clinical and translational neurology** , Volume: 7 Issue: 4 2020 Apr

Authors Reynders T,Devolder L,Valles-Colomer M,Van Remoortel A,Joossens M,De Keyser J,Nagels G,D`hooghe M,Raes J

[Gut microbiome of treatment-naïve MS patients of different ethnicities early in disease course.](#)

**Scientific reports** , Volume: 9 Issue: 1 2019 Nov 8

Authors Ventura RE,Iizumi T,Battaglia T,Liu M,Perez-Perez GI,Herbert J,Blaser MJ

[The Gut Microbiota in Multiple Sclerosis: An Overview of Clinical Trials.](#)

**Cell transplantation** , 2019 Sep 12

Authors Schepici G,Silvestro S,Bramanti P,Mazzon E

[Update on the Gastrointestinal Microbiome in Systemic Sclerosis.](#)

**Current rheumatology reports** , Volume: 20 Issue: 8 2018 Jun 25

Authors Bellocchi C,Volkman ER

[The influence of interferon  \$\beta\$ -1b on gut microbiota composition in patients with multiple sclerosis.](#)

**Neurología (Barcelona, Spain)** , 2018 Jun 9

Authors Castillo-Álvarez F,Pérez-Matute P,Oteo JA,Marzo-Sola ME

[Microbial and metabolic multi-omic correlations in systemic sclerosis patients.](#)

**Annals of the New York Academy of Sciences** , Volume: 1421 Issue: 1 2018 Jun

Authors Bellocchi C,Fernández-Ochoa Á,Montanelli G,Vigone B,Santaniello A,Milani C,Quirantes-Piné R,Borrás-Linares I,Ventura M,Segura-Carrettero A,Alarcón-Riquelme ME,Beretta L

[Gut bacteria from multiple sclerosis patients modulate human T cells and exacerbate symptoms in mouse models.](#)

**Proceedings of the National Academy of Sciences of the United States of America** , Volume: 114 Issue: 40 2017 Oct 3

Authors Cekanaviciute E,Yoo BB,Runia TF,Debelius JW,Singh S,Nelson CA,Kanner R,Bencosme Y,Lee YK,Hauser SL,Crabtree-Hartman E,Sand IK,Gacias M,Zhu Y,Casaccia P,Cree BAC,Knight R,Mazmanian SK,Baranzini SE

[Gut microbiome in multiple sclerosis: The players involved and the roles they play.](#)

**Gut microbes** , Volume: 8 Issue: 6 2017 Nov 2

Authors Shahi SK,Freedman SN,Mangalam AK

[Alterations of the human gut microbiome in multiple sclerosis.](#)

**Nature communications** , Volume: 7 2016 Jun 28

Authors Jangí S,Gandhi R,Cox LM,Li N,von Glehn F,Yan R,Patel B,Mazzola MA,Liu S,Glanz BL,Cook S,Tankou S,Stuart F,Melo K,Nejad P,Smith K,Topçuoğlu BD,Holden J,Kivisäkk P,Chitnis T,De Jager PL,Quintana FJ,Gerber GK,Bry L,Weiner HL

[Multiple sclerosis patients have a distinct gut microbiota compared to healthy controls.](#)

**Scientific reports** , Volume: 6 2016 Jun 27

Authors Chen J,Chia N,Kalari KR,Yao JZ,Novotna M,Paz Soldan MM,Luckey DH,Marietta EV,Jeraldo PR,Chen X,Weinshenker BG,Rodríguez M,Kantarci OH,Nelson H,Murray JA,Mangalam AK

[Multiple sclerosis patients have a distinct gut microbiota compared to healthy controls.](#)

**Scientific reports** , Volume: 6 2016 Jun 27

Authors Chen J,Chia N,Kalari KR,Yao JZ,Novotna M,Paz Soldan MM,Luckey DH,Marietta EV,Jeraldo PR,Chen X,Weinshenker BG,Rodríguez M,Kantarci OH,Nelson H,Murray JA,Mangalam AK

[\[Multiple Sclerosis and Commensal Gut Flora\].](#)

**Brain and nerve = Shinkei kenkyu no shinpo** , Volume: 68 Issue: 6 2016 Jun

Authors Yamamura T

[Gut microbiota in early pediatric multiple sclerosis: a case-control study.](#)

**European journal of neurology** , Volume: 23 Issue: 8 2016 Aug

Authors Tremlett H,Fadrosch DW,Faruqi AA,Zhu F,Hart J,Roalstad S,Graves J,Lynch S,Waubant E,US Network of Pediatric MS Centers.

[Association of Systemic Sclerosis With a Unique Colonic Microbial Consortium.](#)



**Arthritis & rheumatology (Hoboken, N.J.)** , Volume: 68 Issue: 6 2016 Jun

Authors Volkman ER,Chang YL,Barroso N,Furst DE,Clements PJ,Gorn AH,Roth BE,Conklin JL,Getzug T,Borneman J,McGovern DP,Tong M,Jacobs JP,Braun J

[Dysbiosis in the Gut Microbiota of Patients with Multiple Sclerosis, with a Striking Depletion of Species Belonging to Clostridia XIVa and IV Clusters.](#)

**PloS one** , Volume: 10 Issue: 9 2015

Authors Miyake S,Kim S,Suda W,Oshima K,Nakamura M,Matsuoka T,Chihara N,Tomita A,Sato W,Kim SW,Morita H,Hattori M,Yamamura T

[Dysbiosis in the Gut Microbiota of Patients with Multiple Sclerosis, with a Striking Depletion of Species Belonging to Clostridia XIVa and IV Clusters.](#)

**PloS one** , Volume: 10 Issue: 9 2015

Authors Miyake S,Kim S,Suda W,Oshima K,Nakamura M,Matsuoka T,Chihara N,Tomita A,Sato W,Kim SW,Morita H,Hattori M,Yamamura T

[Gut microbiota in multiple sclerosis: possible influence of immunomodulators.](#)

**Journal of investigative medicine : the official publication of the American Federation for Clinical Research** , Volume: 63 Issue: 5 2015 Jun

Authors Cantarel BL,Waubant E,Chehoud C,Kuczynski J,DeSantis TZ,Warrington J,Venkatesan A,Fraser CM,Mowry EM

[Aerosolization of cyanobacteria as a risk factor for amyotrophic lateral sclerosis.](#)

**Medical hypotheses** , Volume: 80 Issue: 2 2013 Feb

Authors Stommel EW,Field NC,Caller TA

[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,Cadley 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

[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

[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

[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

[Rumen microbial community and milk quality in Holstein lactating cows fed olive oil pomace as part in a sustainable feeding strategy.](#)

**Animal : an international journal of animal bioscience** , Volume: 17 Issue: 6 2023 Jun

Authors Scicutella F,Cucu MA,Mannelli F,Pastorelli R,Daghighi M,Paoli P,Pazzagli L,Turini L,Mantino A,Luti S,Genovese M,Viti C,Buccioni A

[Role of Hydroxytyrosol and Oleuropein in the Prevention of Aging and Related Disorders: Focus on Neurodegeneration, Skeletal Muscle Dysfunction and Gut Microbiota.](#)

**Nutrients** , Volume: 15 Issue: 7 2023 Apr 4

Authors Micheli L,Bertini L,Bonato A,Villanova N,Caruso C,Caruso M,Bernini R,Tirone F

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

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

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

Metformin attenuated sepsis-related liver injury by modulating gut microbiota.

**Emerging microbes & infections** , Volume: 11 Issue: 1 2022 Dec

Authors Liang H,Song H,Zhang X,Song G,Wang Y,Ding X,Duan X,Li L,Sun T,Kan Q

Alterations in the composition of the gut microbiota affect absorption of cholecalciferol in severe osteoporosis.

**Journal of bone and mineral metabolism** , 2022 Feb 1

Authors Cheng J,Zhong WL,Zhao JW,Zhai JH,Chen C,Chao AJ,Ren Z,Zhou L,Wang BM

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

**The Journal of nutrition** , 2022 Jan 31

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

Chitosan Protects Immunosuppressed Mice Against *Cryptosporidium parvum* Infection Through TLR4/STAT1 Signaling Pathways and Gut Microbiota Modulation.

**Frontiers in immunology** , Volume: 12 2021

Authors Rahman SU,Gong H,Mi R,Huang Y,Han X,Chen Z

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

*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

The Association between Vitamin D and Gut Microbiota: A Systematic Review of Human Studies.

**Nutrients** , Volume: 13 Issue: 10 2021 Sep 26

Authors Bellerba F,Muzio V,Gnagnarella P,Facciotti F,Chiocca S,Bossi P,Cortinovis D,Chiaradonna F,Serrano D,Raimondi S,Zerbato B,Palorini R,Canova S,Gaeta A,Gandini S

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

In Vitro Study of Cricket Chitosan`s Potential as a Prebiotic and a Promoter of Probiotic Microorganisms to Control Pathogenic Bacteria in the Human Gut.

**Foods (Basel, Switzerland)** , Volume: 10 Issue: 10 2021 Sep 29

Authors Kipkoech C,Kinyuru JN,Imathiu S,Meyer-Rochow VB,Roos N

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,Lusis AJ

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

**Frontiers in immunology** , Volume: 12 2021

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

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

[Vitamin D and The Gut Microbiota: a Narrative Literature Review.](#)

**Clinical nutrition research , Volume: 10 Issue: 3 2021 Jul**

Authors Tangestani H,Boroujeni HK,Djafarian K,Emamat H,Shab-Bidar S

[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

[Alterations in the gut microbiota contribute to cognitive impairment induced by the ketogenic diet and hypoxia.](#)

**Cell host & microbe , Volume: 29 Issue: 9 2021 Sep 8**

Authors Olson CA,Iñiguez AJ,Yang GE,Fang P,Pronovost GN,Jameson KG,Rendon TK,Paramo J,Barlow JT,Ismagilov RF,Hsiao EY

[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

[Oleuropein Ameliorates Advanced Stage of Type 2 Diabetes in db/db Mice by Regulating Gut Microbiota.](#)

**Nutrients , Volume: 13 Issue: 7 2021 Jun 22**

Authors Zheng S,Wang Y,Fang J,Geng R,Li M,Zhao Y,Kang SG,Huang K,Tong T

[Concentrated Raw Fibers Enhance the Fiber-Degrading Capacity of a Synthetic Human Gut Microbiome.](#)

**International journal of molecular sciences , Volume: 22 Issue: 13 2021 Jun 25**

Authors Steimle A,Neumann M,Grant ET,Turner JD,Desai MS

[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

[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

[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

[A multi-omics approach for understanding the effects of moderate wine consumption on human intestinal health.](#)

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

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

[Lactobacillus Sps in Reducing the Risk of Diabetes in High-Fat Diet-Induced Diabetic Mice by Modulating the Gut Microbiome and Inhibiting Key Digestive Enzymes Associated with Diabetes.](#)

**Biology , Volume: 10 Issue: 4 2021 Apr 20**

Authors Gulnaz A,Nadeem J,Han JH,Lew LC,Son JD,Park YH,Rather IA,Hor YY

[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

[Cholecalciferol Supplementation Does Not Prevent the Development of Metabolic Syndrome or Enhance the Beneficial Effects of Omega-3 Fatty Acids in Obese Mice.](#)

**The Journal of nutrition , 2021 Apr 13**

Authors Valle M,Mitchell PL,Pilon G,St-Pierre P,Varin T,Richard D,Vohl MC,Jacques H,Delvin E,Levy E,Gagnon C,Bazinet L,Marette A

[Potato resistant starch inhibits diet-induced obesity by modifying the composition of intestinal microbiota and their metabolites in obese mice.](#)

**International journal of biological macromolecules , Volume: 180 2021 Mar 9**

Authors Liang D,Zhang L,Chen H,Zhang H,Hu H,Dai X

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

The gut microbiome modulates the protective association between a Mediterranean diet and cardiometabolic disease risk.

**Nature medicine** , Volume: 27 Issue: 2 2021 Feb

Authors Wang DD,Nguyen LH,Li Y,Yan Y,Ma W,Rinott E,Ivey KL,Shai I,Willett WC,Hu FB,Rimm EB,Stampfer MJ,Chan AT,Huttenhower C

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

Pretreatment with chitosan oligosaccharides attenuate experimental severe acute pancreatitis via inhibiting oxidative stress and modulating intestinal homeostasis.

**Acta pharmacologica Sinica** , 2021 Jan 25

Authors Mei QX,Hu JH,Huang ZH,Fan JJ,Huang CL,Lu YY,Wang XP,Zeng Y

Effects of Iron and Zinc Biofortified Foods on Gut Microbiota In Vivo (*Gallus gallus*): A Systematic Review.

**Nutrients** , Volume: 13 Issue: 1 2021 Jan 9

Authors Juste Contin Gomes M,Stampini Duarte Martino H,Tako E

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

Blueberry and cranberry anthocyanin extracts reduce bodyweight and modulate gut microbiota in C57BL/6 J mice fed with a high-fat diet.

**European journal of nutrition** , 2021 Jan 3

Authors Liu J,Hao W,He Z,Kwek E,Zhu H,Ma N,Ma KY,Chen ZY

Algal Oil Rich in n-3 PUFA Alleviates DSS-Induced Colitis via Regulation of Gut Microbiota and Restoration of Intestinal Barrier.

**Frontiers in microbiology** , Volume: 11 2020

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

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

Impact of Mediterranean Diet on Disease Activity and Gut Microbiota Composition of Rheumatoid Arthritis Patients.

**Microorganisms** , Volume: 8 Issue: 12 2020 Dec 14

Authors Picchianti Diamanti A,Panebianco C,Salerno G,Di Rosa R,Salemi S,Sorgi ML,Meneguzzi G,Mariani MB,Rai A,Iacono D,Sesti G,Pazienza V,Laganà B

Active Vitamin D<sub>3</sub> Treatment Attenuated Bacterial Translocation via Improving Intestinal Barriers in Cirrhotic Rats.

**Molecular nutrition & food research** , 2020 Nov 30

Authors Lee PC,Hsieh YC,Huo TI,Yang UC,Lin CH,Li CP,Huang YH,Hou MC,Lin HC,Lee KC

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

*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

Effects of Non-insulin Anti-hyperglycemic Agents on Gut Microbiota: A Systematic Review on Human and Animal Studies.**Frontiers in endocrinology** , Volume: 11 2020

Authors Cao TTB,Wu KC,Hsu JL,Chang CS,Chou C,Lin CY,Liao YM,Lin PC,Yang LY,Lin HW

Gut microbial bile acid metabolite skews macrophage polarization and contributes to high-fat diet-induced colonic inflammation.**Gut microbes** , Volume: 12 Issue: 1 2020 Nov 9

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

A high-fat diet and high-fat and high-cholesterol diet may affect glucose and lipid metabolism differentially through gut microbiota in mice.**Experimental animals** , 2020 Oct 1

Authors Liang H,Jiang F,Cheng R,Luo Y,Wang J,Luo Z,Li M,Shen X,He F

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

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

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

Nuts and their Effect on Gut Microbiota, Gut Function and Symptoms in Adults: A Systematic Review and Meta-Analysis of Randomised Controlled Trials.**Nutrients** , Volume: 12 Issue: 8 2020 Aug 6

Authors Creedon AC,Hung ES,Berry SE,Whelan K

Dietary supplementation with Bacillus subtilis DSM 32315 alters the intestinal microbiota and metabolites in weaned piglets.**Journal of applied microbiology** , 2020 Jul 6

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

Cocoa Polyphenols and Gut Microbiota Interplay: Bioavailability, Prebiotic Effect, and Impact on Human Health.**Nutrients** , Volume: 12 Issue: 7 2020 Jun 27

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

Cocoa Polyphenols and Gut Microbiota Interplay: Bioavailability, Prebiotic Effect, and Impact on Human Health.**Nutrients** , Volume: 12 Issue: 7 2020 Jun 27

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

Green Tea Encourages Growth of *Akkermansia muciniphila*.**Journal of medicinal food** , 2020 Jun 25

Authors Jeong HW,Kim JK,Kim AY,Cho D,Lee JH,Choi JK,Park M,Kim W

Thyroid-Gut-Axis: How Does the Microbiota Influence Thyroid Function?**Nutrients** , Volume: 12 Issue: 6 2020 Jun 12

Authors Knezevic J,Starchl C,Tmava Berisha A,Amrein K

The 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

Cocoa diet modulates gut microbiota composition and improves intestinal health in Zucker diabetic rats.**Food research international (Ottawa, Ont.)** , Volume: 132 2020 Jun

Authors Álvarez-Cilleros D,Ramos S,López-Oliva ME,Escrivá F,Álvarez C,Fernández-Millán E,Martín MÁ

Cultivation of the Next-Generation Probiotic Akkermansia muciniphila, Methods of Its Safe Delivery to the Intestine, and Factors Contributing to Its Growth In Vivo.**Current microbiology** , Volume: 77 Issue: 8 2020 Aug

Authors Ropot AV,Karamzin AM,Sergeyev OV

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

Grape Extract Activates Brown Adipose Tissue Through Pathway Involving the Regulation of Gut Microbiota and Bile Acid.

**Molecular nutrition & food research** , 2020 Apr 5

Authors Han X,Guo J,Yin M,Liu Y,You Y,Zhan J,Huang W

Effect of Berberine on Atherosclerosis and Gut Microbiota Modulation and Their Correlation in High-Fat Diet-Fed ApoE<sup>-/-</sup> Mice.

**Frontiers in pharmacology** , Volume: 11 2020

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

Anti-obesity effects of  $\alpha$ -amylase inhibitor enriched-extract from white common beans (*Phaseolus vulgaris* L.) associated with the modulation of gut microbiota composition in high-fat diet-induced obese rats.

**Food & function** , Volume: 11 Issue: 2 2020 Feb 26

Authors Shi Z,Zhu Y,Teng C,Yao Y,Ren G,Richel A

The effects of high doses of vitamin D on the composition of the gut microbiome of adolescent girls.

**Clinical nutrition ESPEN** , Volume: 35 2020 Feb

Authors Tabatabaeizadeh SA,Fazeli M,Meshkat Z,Khodashenas E,Esmaili H,Mazloun S,Ferns GA,Abdizadeh MF,Ghayour-Mobarhan M

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

The Effect of Various Doses of Oral Vitamin D<sup>3</sup> Supplementation on Gut Microbiota in Healthy Adults: A Randomized, Double-blinded, Dose-response Study.

**Anticancer research** , Volume: 40 Issue: 1 2020 Jan

Authors Charoenngam N,Shirvani A,Kalajian TA,Song A,Holick MF

Carboxymethyl chitosan perturbs inflammation profile and colonic microbiota balance in mice.

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

Authors Liu Y,Zong S,Li J

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

Antagonistic effect of zinc oxide nanoparticle and surfactant on anaerobic digestion: Focusing on the microbial community changes and interactive mechanism.

**Bioresource technology** , Volume: 297 2020 Feb

Authors Zhu K,Zhang L,Mu L,Ma J,Wang X,Li C,Cui Y,Li A

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

Chitosan Ameliorates DSS-Induced Ulcerative Colitis Mice by Enhancing Intestinal Barrier Function and Improving Microflora.

**International journal of molecular sciences** , Volume: 20 Issue: 22 2019 Nov 15

Authors Wang J,Zhang C,Guo C,Li X

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.

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

Dietary cranberry suppressed colonic inflammation and alleviated gut microbiota dysbiosis in dextran sodium sulfate-treated mice.

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

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

Raw Bowl Tea (Tuocha) Polyphenol Prevention of Nonalcoholic Fatty Liver Disease by Regulating Intestinal Function in Mice.

**Biomolecules** , Volume: 9 Issue: 9 2019 Sep 1

Authors Liu B,Zhang J,Sun P,Yi R,Han X,Zhao X

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

**Nutrients** , Volume: 11 Issue: 7 2019 Jul 11

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

Walnuts and Vegetable Oils Differentially Affect the Gut Microbiome and Associations with Cardiovascular Risk Factors (OR29-06-19).

**Current developments in nutrition** , Volume: 3 Issue: Suppl 1 2019 Jun

Authors Tindall A,McLimans C,Petersen K,Kris-Etherton P,Lamendella R

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

*Akkermansia muciniphila* is a promising probiotic.

**Microbial biotechnology** , 2019 Apr 21

Authors Zhang T,Li Q,Cheng L,Buch H,Zhang F

Metformin and gut microbiota: their interactions and their impact on diabetes.

**Hormones (Athens, Greece)** , 2019 Feb 4

Authors Vallianou NG,Stratigou T,Tsagarakis S

Intestinal Morphologic and Microbiota Responses to Dietary <i>Bacillus</i> 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

The Effect of Psyllium Husk on Intestinal Microbiota in Constipated Patients and Healthy Controls.

**International journal of molecular sciences** , Volume: 20 Issue: 2 2019 Jan 20

Authors Jalanka J, Major G, Murray K, Singh G, Nowak A, Kurtz C, Silos-Santiago I, Johnston JM, de Vos WM, Spiller R

Dark chocolate as a stable carrier of microencapsulated *Akkermansia muciniphila* and *Lactobacillus casei*.

**FEMS microbiology letters** , Volume: 366 Issue: 2 2019 Jan 1

Authors Marcial-Coba MS, Saaby L, Knøchel S, Nielsen DS

Arabinoxylan from Argentinian whole wheat flour promote the growth of *Lactobacillus reuteri* and *Bifidobacterium breve*.

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

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

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, Mørkedahl 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

Strategies to promote abundance of <i>Akkermansia muciniphila</i>, an emerging probiotics in the gut, evidence from dietary intervention studies.

**Journal of functional foods** , Volume: 33 2017 Jun

Authors Zhou K

## 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