

Microbiome Information for: Graves' disease

For non-prescribing Medical professionals Review

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

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

These are a *a priori suggestions* that are predicted to independently reduce microbiome dysfunction. Suggestions should *only be done after a review* by a medical professional factoring in patient's conditions, allergies and other issues.

This report may be freely shared by a patient to their medical professionals

Best practise for making microbiome adjustments is to obtain the individuals microbiome. The following are the best microbiome to use with this expert system model. The suggestions below are intended as temporary suggestions until a test result in received.

In the USA

Ombre (<https://www.ombrelab.com/>)

Thome (<https://www.thome.com/products/dp/gut-health-test>)

Worldwide: BiomeSight (<https://biomesight.com>) - Discount Code 'MICRO'

Analysis Provided by Microbiome Prescription

A Microbiome Analysis Company

892 Lake Samish Rd, Bellingham WA 98229

Email: Research@MicrobiomePrescription.com

Bacteria being reported because of atypical values.

These bacteria were reported atypical in studies of Graves' disease

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	Bifidobacterium	genus	High	1678
Bacteroidia	class	High	200643	Blautia	genus	Low	572511
Clostridia	class	Low	186801	Collinsella	genus	High	102106
Coriobacteriia	class	High	84998	Dialister	genus	Low	39948
Erysipelotrichia	class	High	526524	Dorea	genus	Low	189330
Actinomycetaceae	family	Low	2049	Haemophilus	genus	High	724
Coriobacteriaceae	family	High	84107	Lactobacillus	genus	High	1578
Enterobacteriaceae	family	Low	543	Mogibacterium	genus	High	86331
Erysipelotrichaceae	family	High	128827	Oribacterium	genus	High	265975
Lachnospiraceae	family	Low	186803	Parabacteroides	genus	High	375288
Pasteurellaceae	family	High	712	Pediococcus	genus	High	1253
Peptostreptococcaceae	family	Low	186804	Prevotella	genus	High	838
Prevotellaceae	family	High	171552	Roseburia	genus	Low	841
Rikenellaceae	family	Low	171550	Actinomycetales	order	Low	2037
Tannerellaceae	family	High	2005525	Bacteroidales	order	High	171549
Veillonellaceae	family	Low	31977	Coriobacteriales	order	High	84999
Aggregatibacter	genus	High	416916	Erysipelotrichales	order	High	526525
Anaerostipes	genus	Low	207244	Eubacteriales	order	Low	186802
Bacteroides	genus	High	816	Haemophilus parainfluenzae species	High		729

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.

apple		navy bean	
arabinogalactan (prebiotic)	21 gram/day	non-starch polysaccharides	
bacillus subtilis (probiotics)	10 BCFU/day	oligosaccharides (prebiotic)	
Cacao	20 gram/day	pectin	
Conjugated Linoleic Acid		pomegranate	1 gram/day
fat		Pulses	
fructo-oligosaccharides (prebiotic)	15 gram/day	quercetin	2 gram/day
galacto-oligosaccharides (prebiotic)	10 gram/day	raffinose(sugar beet)	
Glucomannan	700 mg/day	red wine	250 ml/day
Human milk oligosaccharides (prebiotic, Holigos, Stachyose)	2 gram/day	resveratrol (grape seed/polyphenols/red wine)	2 gram/day
lactobacillus casei (probiotics)	48 BCFU/day	soy	25 gram/day
Lactobacillus Johnsonii (probiotic)	10 BCFU/day	vitamin d	50000 UI/day
lactobacillus plantarum (probiotics)	60 BCFU/day	wheat bran	
lactulose		whey	60 gram/day
		xylan (prebiotic)	

Retail Probiotics

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

garden of life / primal defense
 renew life men's probiotic - ultimate
 SuperSmart / Full Spectrum Probiotic Formula
 jarro formulas / jarro-dophilus eps
 bioglan bio (au) / happy probiotic 100
 Realdose
 SuperSmart / Lactoxira
 douglas laboratories / multi probiotic 40 billion
 Krauterhaus / Lactopro
 Advanced Bio-Cultures / Advance Multi Strain Probiotics
 elixa / probiotic
 bioray / cytoflora
 renew life / ultimate flora
 up4 / ultra
 organic 3 / primal gut
 Physis / Advance Probiotics
 Dr. Mercola / Complete Probiotics
 Garden of Life / Dr. Formulated Once Daily Women's
 vinco / probiotic eight 65
 fürstenmed / lacto-bifido
 probiotic pur (de) / realdose nutrition
 theramedix / probiotic
 newrhythm / probiotics 20 stains
 Lake Avenue Nutrition / Probiotics 10 Strain Blend
 Windlove Probiotics / Ecologic®825
 ASEA VIA / BIOME
 hyperbiotics / pro-15
 nature's way (au) / restore probiotic 100 billion
 HLH BIOPHARMA(DE) / LACTOBACT® METABOLIC
 jarro formula / jarro-dophilus original
 bioglan bio (au) / happy probiotic 50
 HLH BIOPHARMA(DE) / LACTOBACT® PREMIUM
 udo's choice /super 8 gold
 7 AM Ultra Probiotics
 quantum wellness / restora flora
 vita miracle / ultra-30 probiotics
 HLH BIOPHARMA(DE) / LACTOBACT® 60PLUS
 seed / female version
 jarro formulas / jarro-dophilus® ultra
 1 md / complete probiotics platinum
 Physician Choice /60 Billion Probiotics
 SuperSmart / Probio Forte
 SuperSmart / Derma Relief
 fairvital / microflora basic
 Invivo / Bio.Me Femme UT
 MegaFood / MegaFlora
 Bio Schwartz / Advance Strength Probiotics (40 BCFU)
 OMNI-BIOTIC®/ TRAVEL
 visbiome
 global health trax / threelac
 microbiome labs /hu58
 perfect pass / perfect pass probiotic bacillus spore
 PharmExtracta (IT) / INatal Sachets
 NaturalPharma / Profit Probiotics

Energybalance / ColoBiotica 28 Colon Support
organic 3 / gutpro
enviromedica terraflora sbo probiotic
Jetson (US) / Mood Probiotics
Ombre / Heart Health
Nutrition Essentials / Probiotic (900 BCFU)
OMNI-BIOTIC®/ 10 AAD
up4 /women's
young living/life 9
Bromatech (IT) / Adomelle
nature's bounty / probioti 10
mwsb / candida yeast support
microbiome labs/ megasporebiotic
optibac / bifidobacteria & fibre
klaire labs / biospora
custom probiotics / six strain probiotic powder
Bromatech (IT) / Citogenex
ImmuneBiotech Medical Sweden AB / GutMagnific®
naturopathica (au) / gastrohealth probiotic dairy free 20 bcfu
biospec / probiotic-5
corebiotic
CustomProbiotics.com / L. Plantarum Probiotic Powder
Ombre / Healthy Gut
ISCON Elegance/ Ochek Capsule 10
just for tummies / live bacteria
Reduz melasma / Lactobacillus Johnsonii
jarrow formula / ideal bowel support® Ip299v®
Jetson / FIT
Seeking Health / Probiota HistaminX
optibac / for every day
Prescript-Assist®/SBO Probiotic
Thryve Inside/ L.Reu,Rham,Casi; B.Lactis
microbiome labs / restorflora
zint nutrition / probiotic collagen +
Smidge /Sensitive Probiotic
SuperSmart / Candalb
custom probiotics / four strain lactobacilli
HLH BIOPHARMA(DE) / LACTOBACT ® LDL-CONTROL
powerlabs (au) / ultra blend
aor / probiotic-3
vitamin angels / just thrive
CustomProbiotics.com / L. Casei Probiotic Powder
seed / male version
solaray / mycrobioime probiotic colon formula
lifted naturals / mood boosting probiotic
bio-k+
nature's instincts / ultra spore probiotic
NOW FOODS / Clinical GI Probiotic
ecology_allergycare
bio-botanical research / proflora4r restorative probiotic
HLH BIOPHARMA(DE) / LACTOBACT ® OMNI FOS
optibac / for your cholesterol
jarrow formulas / bifidus balance® + fos
ProbioMax® Daily DF
SuperSmart / Lactobacillus Plantarum Postbiotic (Pasturized)
organic 3 / primal soil
SuperSmart / Bacillus Subtilis
Ombre / Ultimate Immunity

INVIVO THERAPEUTICS / Bio.Me IB +
LiveWell Nutrition / Pro-45
Metabolics / Lactobacillus Plantarum Powder
Jetson (US) / Immunity Probiotics
spain (es) / vivomixx
Ombre / Mood Enhancer
BIO-BOTANICAL RESEARCH / Megacidin
reserveage nutrition / beautiflora
amy meyers / primal earth probiotic
Jetson / Gut Prep
up4 / adult
nature's way (au) / restore probiotic bowel & colon health 30s
Sash Vitality / Bio-Cultures Probiotics for Adults
SuperSmart / Vaginal Health
klaire labs / target gb-x
ferring / vsl#3
Resbiotic / resB® Lung Support
spain (es) / I3.1

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.

aspartame (sweetner)

bile (acid/salts)

Fisetin

Guaiacol (polyphenol)

Hesperidin (polyphenol)

Lactobacillus kefir (NOT KEFIR)

lauric acid(fatty acid in coconut oil,in palm kernel oil,)

mastic gum (prebiotic)

melatonin supplement

polysorbate 80

rare meat

refined wheat breads

saccharomyces cerevisiae (probiotics)

salt (sodium chloride)

sodium butyrate

tea

Tributylin

vitamin B3,niacin

Vitamin C (ascorbic acid)

Vitamin E

walnuts

whole-grain barley

Sample of Literature Used

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

[Alteration of the Intestinal Microbial Flora and the Serum IL-17 Level in Patients with Graves` Disease Complicated with Vitamin D Deficiency.](#)

International archives of allergy and immunology , 2021 Sep 20

Authors Yang M,Li F,Zhang R,Wu Y,Yang Q,Wang F,Yu Z,Liu J,Cha B,Gong Q,Yang B,Sun B,Ding H

[Alterations of Gut Microbiota in Patients With Graves` Disease.](#)

Frontiers in cellular and infection microbiology , Volume: 11 2021

Authors Chang SC,Lin SF,Chen ST,Chang PY,Yeh YM,Lo FS,Lu JJ

[Gut Microbiota May Play a Significant Role in the Pathogenesis of Graves` Disease.](#)

Thyroid : official journal of the American Thyroid Association , Volume: 31 Issue: 5 2021 May

Authors Jiang W,Yu X,Kosik RO,Song Y,Qiao T,Tong J,Liu S,Fan S,Luo Q,Chai L,Lv Z,Li D

[Alteration of the intestinal flora may participate in the development of Graves` disease: a study conducted among the Han population in southwest China.](#)

Endocrine connections , Volume: 8 Issue: 7 2019 Jul

Authors Yang M,Sun B,Li J,Yang B,Xu J,Zhou X,Yu J,Zhang X,Zhang Q,Zhou S,Sun X

[Molecular Alteration Analysis of Human Gut Microbial Composition in Graves` disease Patients.](#)

International journal of biological sciences , Volume: 14 Issue: 11 2018

Authors Ishaq HM,Mohammad IS,Shahzad M,Ma C,Raza MA,Wu X,Guo H,Shi P,Xu J

[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

[Influences of wheat bran fiber on growth performance, nutrient digestibility, and intestinal epithelium functions in Xiangcun pigs.](#)

Heliyon , Volume: 9 Issue: 7 2023 Jul

Authors Liu J,Luo Y,Kong X,Yu B,Zheng P,Huang Z,Mao X,Yu J,Luo J,Yan H,He J

[Bile Acids and Short-Chain Fatty Acids Are Modulated after Onion and Apple Consumption in Obese Zucker Rats.](#)

Nutrients , Volume: 15 Issue: 13 2023 Jul 5

Authors Balderas C,de Ancos B,Sánchez-Moreno C

[Sodium butyrate ameliorates diabetic retinopathy in mice via the regulation of gut microbiota and related short-chain fatty acids.](#)

Journal of translational medicine , Volume: 21 Issue: 1 2023 Jul 7

Authors Huang Y,Wang Z,Ye B,Ma JH,ji S,Sheng W,Ye S,Ou Y,Peng Y,Yang X,Chen J,Tang S

[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

[Gut microbiota-derived metabolites mediate the neuroprotective effect of melatonin in cognitive impairment induced by sleep deprivation.](#)

Microbiome , Volume: 11 Issue: 1 2023 Jan 31

Authors Wang X,Wang Z,Cao J,Dong Y,Chen Y

[Effects of a Saccharomyces cerevisiae fermentation product on fecal characteristics, metabolite concentrations, and microbiota populations of dogs subjected to exercise challenge.](#)

Journal of animal science , 2022 Dec 27

Authors Oba PM,Carroll MQ,Sieja KM,Nogueira JPS,Yang X,Epp TY,Warzecha CM,Varney JL,Fowler JW,Coon CN,Swanson KS

[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

[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

Effects of Dietary Supplementation With *Bacillus subtilis*, as an Alternative to Antibiotics, on Growth Performance, Serum Immunity, and Intestinal Health in Broiler Chickens.

Frontiers in nutrition , Volume: 8 2021

Authors Qiu K,Li CL,Wang J,Qi GH,Gao J,Zhang HJ,Wu SG

The relationship between human milk, a functional nutrient, and microbiota.

Critical reviews in food science and nutrition , 2021 Dec 6

Authors Sakarya E,Sanlier NT,Sanlier N

Fructooligosaccharides Increase in Plasma Concentration of (-)-Epigallocatechin-3-Gallate in Rats.

Journal of agricultural and food chemistry , Volume: 69 Issue: 49 2021 Dec 15

Authors Unno T,Araki Y,Inagaki S,Kobayashi M,Ichitani M,Takahara T,Kinugasa H

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

Bifidobacterium catabolism of human milk oligosaccharides overrides endogenous competitive exclusion driving colonization and protection.

Gut microbes , Volume: 13 Issue: 1 2021 Jan-Dec

Authors Heiss BE,Ehrlich AM,Maldonado-Gomez MX,Taft DH,Larke JA,Goodson ML,Slupsky CM,Tancredi DJ,Raybould HE,Mills DA

Effects of fermented wheat bran and yeast culture on growth performance, immunity and intestinal microflora in growing-finishing pigs.

Journal of animal science , 2021 Oct 23

Authors He W,Gao Y,Guo Z,Yang Z,Wang X,Liu H,Sun H,Shi B

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

Positive Synergistic Effects of Quercetin and Rice Bran on Human Gut Microbiota Reduces *Enterobacteriaceae* Family Abundance and Elevates Propionate in a Bioreactor Model.

Frontiers in microbiology , Volume: 12 2021

Authors Ghimire S,Wongkuna S,Sankaranarayanan R,Ryan EP,Bhat GJ,Scaria J

Positive Synergistic Effects of Quercetin and Rice Bran on Human Gut Microbiota Reduces *Enterobacteriaceae* Family Abundance and Elevates Propionate in a Bioreactor Model.

Frontiers in microbiology , Volume: 12 2021

Authors Ghimire S,Wongkuna S,Sankaranarayanan R,Ryan EP,Bhat GJ,Scaria J

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

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

[Dose-response and functional role of whey permeate as a source of lactose and milk oligosaccharides on intestinal health and growth of nursery pigs.](#)

Journal of animal science , Volume: 99 Issue: 1 2021.Jan 1

Authors Jang KB,Purvis JM,Kim SW

[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

[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

[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

[Vitamin D ameliorates high-fat-diet-induced hepatic injury via inhibiting pyroptosis and alters gut microbiota in rats.](#)

Archives of biochemistry and biophysics , Volume: 705 2021.Jul 15

Authors Zhang X,Shang X,Jin S, Ma Z,Wang H,Ao N,Yang J,Du 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

[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

[Implications of Tributyrin on Gut Microbiota Shifts Related to Performances of Weaning Piglets.](#)

Microorganisms , Volume: 9 Issue: 3 2021.Mar 12

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

[Cloudy Apple Juice Fermented by *Lactobacillus* Prevents Obesity via Modulating Gut Microbiota and Protecting Intestinal Tract Health.](#)

Nutrients , Volume: 13 Issue: 3 2021.Mar 17

Authors Han M,Zhang M,Wang X,Bai X,Yue T,Gao Z

[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

[Effect of Quercetin on Lipids Metabolism Through Modulating the Gut Microbial and AMPK/PPAR Signaling Pathway in Broilers.](#)

Frontiers in cell and developmental biology , Volume: 9 2021

Authors Wang M,Wang B,Wang S,Lu H,Wu H,Ding M,Ying L,Mao Y,Li Y

[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

Dose-response and functional role of whey permeate as a source of lactose and milk oligosaccharides on intestinal health and growth of nursery pigs.

Journal of animal science , Volume: 99 Issue: 1 2021 Jan 1

Authors Jang KB,Purvis JM,Kim SW

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

Dose-response and functional role of whey permeate as a source of lactose and milk oligosaccharides on intestinal health and growth of nursery pigs.

Journal of animal science , 2021 Jan 12

Authors Jang K,Purvis JM,Kim SW

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

Selective Utilization of the Human Milk Oligosaccharides 2'-Fucosyllactose, 3-Fucosyllactose, and Difucosyllactose by Various Probiotic and Pathogenic Bacteria.

Journal of agricultural and food chemistry , Volume: 69 Issue: 1 2021 Jan 13

Authors Salli K,Hirvonen J,Siitonen J,Ahonen I,Angenius H,Maukonen J

Fisetin Regulates Gut Microbiota and Exerts Neuroprotective Effect on Mouse Model of Parkinson's Disease.

Frontiers in neuroscience , Volume: 14 2020

Authors Chen TJ,Feng Y,Liu T,Wu TT,Chen YJ,Li X,Li Q,Wu YC

Microbial Metabolism of Theaflavin-3,3'-digallate and Its Gut Microbiota Composition Modulatory Effects.

Journal of agricultural and food chemistry , Volume: 69 Issue: 1 2021 Jan 13

Authors Liu Z,de Bruijn WJC,Bruins ME,Vincken JP

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

Active Vitamin D₃ 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

Effects of Different Human Milk Oligosaccharides on Growth of *Bifidobacteria* in Monoculture and Co-culture With *Faecalibacterium prausnitzii*.

Frontiers in microbiology , Volume: 11 2020

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

Alginate- and Gelatin-Coated Apple Pieces as Carriers for *Bifidobacterium animalis* subsp. *lactis* DSM 10140.

Frontiers in microbiology , Volume: 11 2020

Authors Campaniello D,Bevilacqua A,Speranza B,Sinigaglia M,Corbo MR

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

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

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

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

Associations of sodium and potassium consumption with the gut microbiota and host metabolites in a population-based study in Chinese adults.

The American journal of clinical nutrition , 2020 Oct 6

Authors Wang Y,Wang H,Howard AG,Tsilimigras MCB,Avery CL,Meyer KA,Sha W,Sun S,Zhang J,Su C,Wang Z,Zhang B,Fodor

AA,Gordon-Larsen P

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

Cultural isolation of spore-forming bacteria in human feces using bile acids.

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

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

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

Lactobacillus johnsonii BS15 Prevents Psychological Stress-Induced Memory Dysfunction in Mice by Modulating the Gut-Brain Axis.

Frontiers in microbiology , Volume: 11 2020

Authors Wang H,Sun Y,Xin J,Zhang T,Sun N,Ni X,Zeng D,Bai Y

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

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

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

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

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

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

Nutrients , Volume: 12 Issue: 5 2020 May 1

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

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

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

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

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

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

[2'-fucosyllactose Supplementation Improves Gut-Brain Signaling and Diet-Induced Obese Phenotype and Changes the Gut Microbiota in High Fat-Fed Mice.](#)**Nutrients , Volume: 12 Issue: 4 2020 Apr 5**

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

[Beneficial effects of flaxseed polysaccharides on metabolic syndrome via gut microbiota in high-fat diet fed mice.](#)**Food research international (Ottawa, Ont.) , Volume: 131 2020 May**

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

[Prebiotic activity of garlic \(*Allium sativum*\) extract on *Lactobacillus acidophilus*.](#)**Veterinary world , Volume: 12 Issue: 12 2019 Dec**

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

[Fisetin regulates gut microbiota to decrease CCR9⁺/CXCR3⁺/CD4⁺ T-lymphocyte count and IL-12 secretion to alleviate premature ovarian failure in mice.](#)**American journal of translational research , Volume: 12 Issue: 1 2020**

Authors Lin J, Nie X, Xiong Y, Gong Z, Chen J, Chen C, Huang Y, Liu T

[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, Esmaeili H, Mazloum 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 D₃ 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

[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

[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

[Immunomodulatory and Prebiotic Effects of 2'-Fucosyllactose in Suckling Rats.](#)**Frontiers in immunology , Volume: 10 2019**

Authors Azagra-Boronat I, Massot-Cladera M, Mayneris-Perxachs J, Knipping K, Van't Land B, Tims S, Stahl B, Garssen J, Franch À, Castell M, Rodríguez-Lagunas MJ, Pérez-Cano FJ

[Supplementation of diet with non-digestible oligosaccharides alters the intestinal microbiota, but not arthritis development, in IL-1 receptor antagonist deficient mice.](#)**PLoS one , Volume: 14 Issue: 7 2019**

Authors Rogier R, Ederveen THA, Wopereis H, Hartog A, Boekhorst J, van Hijum SAFT, Knol J, Garssen J, Walgreen B, Helsen MM, van der Kraan PM, van Lent PLEM, van de Loo FAJ, Abdollahi-Roodsaz S, Koenders MI

[Different duck products protein on rat physiology and gut microbiota.](#)**Journal of proteomics , Volume: 206 2019 Jun 29**

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

[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 Combination of Wheat Peptides and Fucoidan Protects Against Chronic Superficial Gastritis and Regulates Gut Microbiota: A Double-blinded, Placebo-controlled Study \(P06-104-19\).](#)**Current developments in nutrition , Volume: 3 Issue: Suppl 1 2019 Jun**

Authors Kan J, Du J

[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

Dietary Quercetin Increases Colonic Microbial Diversity and Attenuates Colitis Severity in <i>Citrobacter rodentium</i>-Infected Mice.

Frontiers in microbiology , Volume: 10 2019

Authors Lin R,Piao M,Song Y

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

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

Probiotic Lactobacillus johnsonii BS15 Promotes Growth Performance, Intestinal Immunity, and Gut Microbiota in Piglets.

Probiotics and antimicrobial proteins , Volume: 12 Issue: 1 2020 Mar

Authors Xin J, Zeng D, Wang H, Sun N, Zhao Y, Dan Y, Pan K, Jing B, Ni X

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

Simultaneous Supplementation of <i>Bacillus subtilis</i> and Antibiotic Growth Promoters by Stages Improved Intestinal Function of Pullets by Altering Gut Microbiota.

Frontiers in microbiology , Volume: 9 2018

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

Supplemental Bacillus subtilis DSM 32315 manipulates intestinal structure and microbial composition in broiler chickens.

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

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

Effect of a butyrate-fortified milk replacer on gastrointestinal microbiota and products of fermentation in artificially reared dairy calves at weaning.

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

Authors O`Hara E, Kelly A, McCabe MS, Kenny DA, Guan LL, Waters SM

Introducing insoluble wheat bran as a gut microbiota niche in an in vitro dynamic gut model stimulates propionate and butyrate production and induces colon region specific shifts in the luminal and mucosal microbial community.

Environmental microbiology , Volume: 20 Issue: 9 2018 Sep

Authors De Paepe K, Verspreet J, Verbeke K, Raes J, Courtin CM, Van de Wiele T

Pectin Alleviates High Fat (Lard) Diet-Induced Nonalcoholic Fatty Liver Disease in Mice: Possible Role of Short-Chain Fatty Acids and Gut Microbiota Regulated by Pectin.

Journal of agricultural and food chemistry , 2018 Jul 20

Authors Li W, Zhang K, Yang H

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