

## Microbiome Information for: Functional constipation / chronic idiopathic constipation

### 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 *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 Functional constipation / chronic idiopathic constipation

*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
Bacteroidia	class	High	200643	Pseudobutyrvibrio	genus	High	46205
Enterobacteriaceae	family	High	543	Roseburia	genus	Low	841
Erysipelotrichaceae	family	High	128827	Ruminiclostridium	genus	High	1508657
Ruminococcaceae	family	High	541000	Ruminococcus	genus	High	1263
Acidaminococcus	genus	Low	904	[Ruminococcus] torques	species	Low	33039
Alistipes	genus	High	239759	Alistipes finegoldii	species	Low	214856
Bifidobacterium	genus	High	1678	Bacteroides caccae	species	Low	47678
Coprococcus	genus	Low	33042	Bacteroides ovatus	species	High	28116
Epulopiscium	genus	High	2383	Bifidobacterium longum	species	High	216816
Fusicatenibacter	genus	Low	1407607	Escherichia coli	species	High	562
Klebsiella	genus	High	570	Lactococcus lactis	species	Low	1358
Lachnospira	genus	High	28050	Methanobrevibacter smithii	species	High	2173
Lactobacillus	genus	Low	1578	Parabacteroides gordonii	species	Low	574930
Lactococcus	genus	High	1357	Phocaeicola coprophilus	species	High	387090
Megamonas	genus	High	158846	Prevotella copri	species	Low	165179
Oscillospira	genus	High	119852	Prevotella stercorea	species	Low	363265
Parabacteroides	genus	High	375288	Roseburia intestinalis	species	High	166486
Prevotella	genus	Low	838	Staphylococcus aureus	species	High	1280

## 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.

aspartame (sweetner)

bacillus coagulans (probiotics) 10 BCFU/day

bifidobacterium bifidum (probiotics) 1 BCFU/day

chicory (prebiotic) 1800 mg/day

extra virgin olive oil

gynostemma pentaphyllum (Jiaogulan)

high fiber diet

Human milk oligosaccharides (prebiotic, Holigos, Stachyose) 2

gram/day

jerusalem artichoke (prebiotic) 40 gram/day

lactobacillus rhamnosus

gg lactobacillus,rhamnosus,propionibacterium freudenreichii,bif (probiotics)

lactobacillus rhamnosus

gg lactobacillus,rhamnosus,propionibacterium freudenreichii,bifidobacterium breve (probiotics)

lactulose

levan

low carbohydrate diet

oats

partially hydrolysed guar gum,fructo-oligosaccharides (prebiotic)

partially hydrolyzed guar gum 6 gram/day

quercetin, resveratrol

refined wheat breads

resistant starch

rifaximin (antibiotic) 1600 mg/day

risperidone,(prescription)

saccharomyces cerevisiae (probiotics)

soy 25 gram/day

ymbioflor 2 e.coli probiotics

vitamin B3,niacin 3000 mg/day

Vitamin B9,folic acid 5 mg/day

whole grain diet

## Retail Probiotics

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

blackmore (au) / probiotics+ bowel support  
 perfect pass / perfect pass probiotic bacillus spore  
 natren / bifido factor  
 speer labs / emuaid first defense  
 global health trax / threelac  
 spain (es) / axiboulardi  
 naturopathica (au)/ gastrohealth probiotic daily care  
 bio-botanical research / proflo4r restorative probiotic  
 nature's instincts / ultra spore probiotic  
 gnc / ultra probiotic complex  
 natren / healthy trinity probiotic  
 Genesis Bifidobacterium Complex BB Probiotic  
 cytoplant(uk) /dentavital bifidophilus  
 symbiopharm / symbioflo 2  
 Swiss BioEnergetics / Full Spectrum Probiotic Defence  
 vitamin angels / just thrive  
 Sun Wave Pharma/Bio Sun Instant  
 nature's way (au) / adult vita gummies daily probiotic 80s  
 genestra brands@ hm  
 align / align  
 organic 3 / primal soil  
 customprobiotics.com / B. Bifidum Probiotic Powder  
 BIO-BOTANICAL RESEARCH / Megacidin  
 reserveage nutrition / beautiflora  
 shin biofermin (jp) /s  
 philips / colon health  
 Ombre / Endless Energy  
 Jetson / FIT  
 optibac / for every day  
 source naturals / duraflo  
 Bromatech (IT) / Bifiselle  
 wakamoto (jp) / wakamoto pharmaceutical intestinal drug  
 custom probiotics / five strain bifidobacteria  
 thome / bacillus coagulansvet 60 caps  
 spain (es) / profaes4 viajeros  
 enviromedica terraflora sbo probiotic  
 schiff / digestive advantage  
 klair labs / ther-biotic factor 4  
 daiichi sankyo healthcare (jp) / panlacmin tablet  
 spain (es) / ultralevura  
 Nutricology/Securil  
 Bromatech (IT) / Serobiome  
 corebiotic  
 blackmores (au) / probiotics+ immune defence  
 Metabolics / Bifidobacterium Bifidum Powder  
 ISCON Elegance/ Ochek Capsule 10  
 Nutrition Essentials / Probiotic (900 BCFU)  
 mwsb / candida yeast support  
 microbiome labs/ megasporebiotic  
 klair labs / biospora  
 custom probiotics / b. lactis & b. bifidum probiotic powder  
 spain (es) / profaes4 edad escolar  
 naturopathica (au) / gastrohealth probiotics

**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	lactobacillus casei (probiotics)
amoxicillin (antibiotic)s[CFS]	lactobacillus paracasei (probiotics)
ampicillin (antibiotic)s[CFS]	lactobacillus plantarum (probiotics)
benzylpenicillin sodium (antibiotic)	lactobacillus reuteri (probiotics)
berberine	lactobacillus rhamnosus gg (probiotics)
cefotaxime sodium salt (antibiotic)	lactobacillus salivarius (probiotics)
ceftazidime (antibiotic)s	meropenem
ceftriaxone (antibiotic)s	meropenem (antibiotic)s
chloramphenicol (antibiotic)s	minocycline (antibiotic)s[CFS]
cinnamon (oil. spice)	oregano (organum vulgare, oil)
ciprofloxacin (antibiotic)s[CFS]	piperacillin-tazobactam (antibiotic)s
clindamycin (antibiotic)s[CFS]	syzygium aromaticum (clove)
Curcumin	thyme (thymol, thyme oil)
erythromycin (antibiotic)s[CFS]	tigecycline (antibiotic)s
fluoroquinolone (antibiotic)s	tobramycin (antibiotic)s
foeniculum vulgare,fennel	trimethoprim (antibiotic)s
garlic (allium sativum)	triphala
gentamicin (antibiotic)s	vancomycin (antibiotic)[CFS]
imipenem (antibiotic)s	walnuts
	xylan (prebiotic)

## Sample of Literature Used

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

[Inhibitory Effect of \*Lactococcus lactis\* subsp. \*lactis\* HFY14 on Diphenoxylate-Induced Constipation in Mice by Regulating the VIP-cAMP-PKA-AQP3 Signaling Pathway.](#)

Drug design, development and therapy , Volume: 15 2021

Authors Tan Q,Hu J,Zhou Y,Wan Y,Zhang C,Liu X,Long X,Tan F,Zhao X

[Gut Microbiota Composition Changes in Constipated Women of Reproductive Age.](#)

Frontiers in cellular and infection microbiology , Volume: 10 2020

Authors Li H,Chen J,Ren X,Yang C,Liu S,Bai X,Shan S,Dong X

[Acupoint Massage Therapy Alters the Composition of Gut Microbiome in Functional Constipation Patients.](#)

Evidence-based complementary and alternative medicine : eCAM , Volume: 2021 2021

Authors Chen H,Tan PS,Li CP,Chen BZ,Xu YQ,He YQ,Ke X

[Potential role of fecal microbiota in patients with constipation.](#)

Therapeutic advances in gastroenterology , Volume: 13 2020

Authors Tian Y,Zuo L,Guo Q,Li J,Hu Z,Zhao K,Li C,Li X,Zhou J,Zhou Y,Li XA

[Analysis of Gut Microbiome and Metabolite Characteristics in Patients with Slow Transit Constipation.](#)

Digestive diseases and sciences , 2020 Aug 7

Authors Tian H,Chen Q,Yang B,Qin H,Li N

[Characterization of gut contractility and microbiota in patients with severe chronic constipation.](#)

PloS one , Volume: 15 Issue: 7 2020

Authors Yarullina DR,Shafiqullin MU,Sakulin KA,Arzamastseva AA,Shaidullof IF,Markelova MI,Grigoryeva TV,Karpukhin OY,Sitdikova GF

[High \*Oscillospira\* abundance indicates constipation and low BMI in the Guangdong Gut Microbiome Project.](#)

Scientific reports , Volume: 10 Issue: 1 2020 Jun 9

Authors Chen YR,Zheng HM,Zhang GX,Chen FL,Chen LD,Yang ZC

[The composition of intestinal microbiota and its association with functional constipation of the elderly patients.](#)

Future microbiology , Volume: 15 2020 Feb

Authors Guo M,Yao J,Yang F,Liu W,Bai H,Ma J,Ma X,Zhang J,Fang Y,Miao Y,Sun J,Zhang Y,Zhao H

[Gut Environment and Dietary Habits in Healthy Japanese Adults and their Association with Bowel Movement.](#)

Digestion , 2019 Aug 21

Authors Tanabe A,Adachi K,Yamaguchi Y,Izawa S,Yamamoto S,Hijikata Y,Ebi M,Funaki Y,Ogasawara N,Goto C,Sasaki M,Kasugai K

[Gut Microbiota and Chronic Constipation: A Review and Update.](#)

Frontiers in medicine , Volume: 6 2019

Authors Ohkusa T,Koido S,Nishikawa Y,Sato N

[Unveiling the gut microbiota composition and functionality associated with constipation through metagenomic analyses.](#)

Scientific reports , Volume: 7 Issue: 1 2017 Aug 29

Authors Mancabelli L,Milani C,Lugli GA,Turroni F,Mangifesta M,Viappiani A,Ticinesi A,Nouvenne A,Meschi T,van Sinderen D,Ventura M

[Characterization of Microbiota in Children with Chronic Functional Constipation.](#)

PloS one , Volume: 11 Issue: 10 2016

Authors de Meij TG,de Groot EF,Eck A,Budding AE,Kneepkens CM,Benninga MA,van Bodegraven AA,Savelkoul PH

[Irritable Bowel Syndrome, Particularly the Constipation-Predominant Form, Involves an Increase in \*Methanobrevibacter smithii\*, Which Is Associated with Higher Methane Production.](#)

Gut and liver , Volume: 10 Issue: 6 2016 Nov 15

Authors Ghoshal U,Shukla R,Srivastava D,Ghoshal UC

[Effects of probiotic \*Enterococcus faecium\* NCIMB 11181 administration on swine fecal microbiota diversity and composition using barcoded pyrosequencing](#)

Animal Feed Science and Technology , Volume: 201 2015 Mar

Authors Edward Alain B.Pajarillo,Dae-Kyung Kang,Chan-Soo Park,Hyeun Bum Kim,Marilen P Balolong

[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

[Cinnamon oil solid self-microemulsion mediates chronic mild stress-induced depression in mice by modulating monoamine neurotransmitters, corticosterone, inflammation cytokines, and intestinal flora.](#)

- Heliyon** , Volume: 9 Issue: 6 2023 Jun  
Authors Ma T,Tang B,Wang Y,Shen M,Ping Y,Wang L,Su J  
[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  
[Preparation and characterization of curcumin/chitosan conjugate as an efficient photodynamic antibacterial agent.](#)
- Carbohydrate polymers** , Volume: 313 2023 Aug 1  
Authors Zhao L,Ding X,Khan IM,Yue L,Zhang Y,Wang Z  
[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  
[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  
[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  
[Curcumin  \$\beta\$ -D-Glucuronide Modulates an Autoimmune Model of Multiple Sclerosis with Altered Gut Microbiota in the Ileum and Feces.](#)
- Frontiers in cellular and infection microbiology** , Volume: 11 2021  
Authors Khadka S,Omura S,Sato F,Nishio K,Takeya H,Tsunoda I  
[Supplementation of chicory root powder as an alternative to antibiotic growth promoter on gut pH, gut microflora and gut histomorphometry of male broilers.](#)
- PloS one** , Volume: 16 Issue: 12 2021  
Authors Gurrarn S,V CP,K VL,M V L N R,M V,Bora S  
[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  
[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 free radicals from doxycycline hyclate and minocycline hydrochloride under blue light irradiation on the deactivation of \*Staphylococcus aureus\*, including a methicillin-resistant strain.](#)
- Journal of photochemistry and photobiology. B, Biology** , Volume: 226 2022 Jan  
Authors Yuann JP,Lee SY,He S,Wong TW,Yang MJ,Cheng CW,Huang ST,Liang JY  
[Antimicrobial, immunological and biochemical effects of florfenicol and garlic \(\*Allium sativum\*\) on rabbits infected with \*Escherichia coli\* serotype O55: H7.](#)
- Veterinary research communications** , 2021 Nov 10  
Authors Farag VM,El-Shafei RA,Elkenany RM,Ali HS,Eladl AH  
[Effect of organic acids-essential oils blend and oat fiber combination on broiler chicken growth performance, blood parameters, and intestinal health.](#)
- Animal nutrition (Zhongguo xu mu shou yi xue hui)** , Volume: 7 Issue: 4 2021 Dec  
Authors Adewole DI,Oladokun S,Santin E  
[Combined effect of carvacrol, thymol and nisin against \*Staphylococcus aureus\* and \*Salmonella\* Enteritidis.](#)
- Anais da Academia Brasileira de Ciencias** , Volume: 93 Issue: suppl 4 2021  
Authors Heckler C,Sant`anna V,Brandelli A,Malheiros PS  
[Cinnamaldehyde Promotes the Intestinal Barrier Functions and Reshapes Gut Microbiome in Early Weaned Rats.](#)
- Frontiers in nutrition** , Volume: 8 2021  
Authors Qi L,Mao H,Lu X,Shi T,Wang J  
[Bifidobacterium catabolism of human milk oligosaccharides overrides endogenous competitive exclusion driving colonization and protection.](#)
- Gut microbes** , Volume: 13 Issue: 1 2021 Jan-Dec  
Authors Heiss BE,Ehrlich AM,Maldonado-Gomez MX,Taft DH,Larke JA,Goodson ML,Slupsky CM,Tancredi DJ,Raybould HE,Mills DA  
[Supplementation with \*Lactiplantibacillus plantarum\* IMC 510 Modifies Microbiota Composition and Prevents Body Weight Gain Induced by Cafeteria Diet in Rats.](#)
- International journal of molecular sciences** , Volume: 22 Issue: 20 2021 Oct 16

Authors Micioni Di Bonaventura MV,Coman MM,Tomassoni D,Micioni Di Bonaventura E,Botticelli L,Gabrielli MG,Rossolini GM,Di Pilato V,Cecchini C,Amedei A,Silvi S,Verdenelli MC,Cifani C

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

**Nature** , Volume: 599 Issue: 7883 2021 Nov

Authors Maier L,Goemans CV,Wirbel J,Kuhn M,Eberl C,Pruteanu M,Müller P,Garcia-Santamarina S,Cacace E,Zhang B,Gekeler C,Banerjee T,Anderson EE,Milanesi 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

[Systematic Review of the Effects of Oat Intake on Gastrointestinal Health.](#)

**The Journal of nutrition** , 2021 Sep 6

Authors Valido E,Stoyanov J,Bertolo A,Hertig-Godeschalk A,Zeh RM,Flueck JL,Minder B,Stojic S,Metzger B,Bussler W,Muka T,Kern H,Glisic M

[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

[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

[Gut Microbial SNPs Induced by High-Fiber Diet Dominate Nutrition Metabolism and Environmental Adaption of \*Faecalibacterium prausnitzii\* in Obese Children.](#)

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

Authors Li H,Zhao L,Zhang M

[Lactobacillus paracasei modulates the gut microbiota and improves inflammation in type 2 diabetic rats.](#)

**Food & function** , 2021 Jun 11

Authors Zeng Z,Guo X,Zhang J,Yuan Q,Chen S

[Effect of \*Lacticaseibacillus paracasei\* Strain Shirota on Improvement in Depressive Symptoms, and Its Association with Abundance of Actinobacteria in Gut Microbiota.](#)

**Microorganisms** , Volume: 9 Issue: 5 2021 May 10

Authors Otaka M,Kikuchi-Hayakawa H,Ogura J,Ishikawa H,Yomogida Y,Ota M,Hidese S,Ishida I,Aida M,Matsuda K,Kawai M,Yoshida S,Kunugi H

[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

[Effects of Bacillus Coagulans on growth performance, antioxidant capacity, immunity function, and gut health in broilers.](#)

**Poultry science** , Volume: 100 Issue: 6 2021 Mar 27

Authors Zhang B,Zhang H,Yu Y,Zhang R,Wu Y,Yue M,Yang C

[Clearance of Clostridioides difficile Colonization Is Associated with Antibiotic-Specific Bacterial Changes.](#)

**mSphere** , Volume: 6 Issue: 3 2021 May 5

Authors Lesniak NA,Schubert AM,Sinani H,Schloss PD

[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

[Beverages containing Lactobacillus paracasei LC-37 improved functional dyspepsia through regulation of the intestinal microbiota and their metabolites.](#)

**Journal of dairy science** , 2021 Mar 10

Authors Sun E,Zhang X,Zhao Y,Li J,Sun J,Mu Z,Wang R

[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

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

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

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

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

Black garlic melanoidins prevent obesity, reduce serum LPS levels and modulate the gut microbiota composition in high-fat diet-induced obese C57BL/6J mice.

**Food & function** , Volume: 11 Issue: 11 2020 Nov 18

Authors Wu J,Liu Y,Dou Z,Wu T,Liu R,Sui W,Jin Y,Zhang M

Bifidobacterium bifidum TMC3115 ameliorates milk protein allergy in by affecting gut microbiota: A randomized double-blind control trial.

**Journal of food biochemistry** , Volume: 44 Issue: 11 2020 Nov

Authors Jing W,Liu Q,Wang W

Synergistic Effect of Berberine-Based Chinese Medicine Assembled Nanostructures on Diarrhea-Predominant Irritable Bowel Syndrome In Vivo.

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

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

Modulatory Effects of Triphala and Manjistha Dietary Supplementation on Human Gut Microbiota: A Double-Blind, Randomized, Placebo-Controlled Pilot Study.

**Journal of alternative and complementary medicine (New York, N.Y.)** , 2020 Sep 18

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

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

Increased Faecalibacterium abundance is associated with clinical improvement in patients receiving rifaximin treatment.

**Beneficial microbes** , Volume: 11 Issue: 6 2020 Oct 12

Authors Ponziani FR,Scalaferrri F,De Siena M,Mangiola F,Matteo MV,Pecere S,Petito V,Sterbini FP,Lopetuso LR,Masucci L,Cammarota G,Sanguinetti M,Gasbarrini A

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

Characterizing the gut microbiota in females with infertility and preliminary results of a water-soluble dietary fiber intervention study.

**Journal of clinical biochemistry and nutrition** , Volume: 67 Issue: 1 2020 Jul

Authors Komiya S,Naito Y,Okada H,Matsuo Y,Hirota K,Takagi T,Mizushima K,Inoue R,Abe A,Morimoto Y

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

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

Antioxidant, Anti-Inflammatory, and Microbial-Modulating Activities of Essential Oils: Implications in Colonic Pathophysiology.**International journal of molecular sciences** , Volume: 21 Issue: 11 2020 Jun 10

Authors Spisni E,Petrocelli G,Imbesi V,Spigarelli R,Azzinnari D,Donati Sarti M,Campieri M,Valerii MC

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

Prebiotic Effects of Partially Hydrolyzed Guar Gum on the Composition and Function of the Human Microbiota-Results from the PAGODA Trial.**Nutrients** , Volume: 12 Issue: 5 2020 Apr 28

Authors Reider SJ,Moosmang S,Tragust J,Trgovac-Greif L,Tragust S,Perschy L,Przywiecki N,Sturm S,Tilg H,Stuppner H,Rattei T,Moschen AR

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

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

Conserved and variable responses of the gut microbiome to resistant starch type 2**Nutrition research (New York, N.Y.)** , Volume: 77 2020 Feb 22

Authors Bendiks ZA,Knudsen KEB,Keenan MJ,Marco ML

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

Prebiotic activity of garlic (<i>Allium sativum</i>) extract on <i>Lactobacillus acidophilus</i>.**Veterinary world** , Volume: 12 Issue: 12 2019 Dec

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

Impact of Vancomycin-Induced Changes in the Intestinal Microbiota on the Pharmacokinetics of Simvastatin.**Clinical and translational science** , 2020 Feb 14

Authors Sunwoo J, Ji SC, Kim AH, Yu KS, Cho JY, Jang JJ, Lee S

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

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

Bacillus coagulans R11 maintained intestinal villus health and decreased intestinal injury in lead-exposed mice by regulating the intestinal microbiota and influenced the function of faecal microRNAs.**Environmental pollution (Barking, Essex : 1987)** , Volume: 255 Issue: Pt 2 2019 Sep 13

Authors Xing SC,Huang CB,Mi JD,Wu YB,Liao XD

Effect of Repeated Consumption of Partially Hydrolyzed Guar Gum on Fecal Characteristics and Gut Microbiota: A Randomized, Double-Blind, Placebo-Controlled, and Parallel-Group Clinical Trial.**Nutrients** , Volume: 11 Issue: 9 2019 Sep 10

Authors Yasukawa Z,Inoue R,Ozeki M,Okubo T,Takagi T,Honda A,Naito Y

Prevotella Abundance Predicts Weight Loss Success in Healthy, Overweight Adults Consuming a Whole-Grain Diet Ad Libitum: A Post Hoc Analysis of a 6-Wk Randomized Controlled Trial.**The Journal of nutrition** , 2019 Aug 28

Authors Christensen L,Vuholm S,Roager HM,Nielsen DS,Krych L,Kristensen M,Astrup A,Hjorth MF

Effects of Lactobacillus plantarum on the intestinal morphology, intestinal barrier function and microbiota composition of suckling piglets.

**Journal of animal physiology and animal nutrition** , 2019 Sep 9

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

[Lactobacillus reuteri DSM 17938 feeding of healthy newborn mice regulates immune responses while modulating gut microbiota and boosting beneficial metabolites.](#)

**American journal of physiology. Gastrointestinal and liver physiology** , 2019 Sep 4

Authors Liu Y,Tian X,He B,Hoang TK,Taylor CM,Blanchard E,Freeborn J,Park S,Luo M,Couturier J,Tran DQ,Roos S,Wu G,Rhoads JM

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

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

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

[Immunomodulatory and Prebiotic Effects of 2'-Fucosyllactose in Suckling Rats.](#)

**Frontiers in immunology** , Volume: 10 2019

Authors Azagra-Boronat I,Massot-Cladera M,Mayneris-Perxachs J,Knipping K,Van `t Land B,Tims S,Stahl B,Garssen J,Franch À,Castell M,Rodríguez-Lagunas MU,Pérez-Cano FJ

[Study on the ability of partially hydrolyzed guar gum to modulate the gut microbiota and relieve constipation.](#)

**Journal of food biochemistry** , Volume: 43 Issue: 2 2019 Feb

Authors Fu X,Li R,Zhang T,Li M,Mou H

[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

[Additional Effect of Dietary Fiber in Patients with Type 2 Diabetes Mellitus Using Metformin and Sulfonylurea: An Open-Label, Pilot Trial.](#)

**Diabetes & metabolism journal** , 2019 Apr 23

Authors Lee SE,Choi Y,Jun JE,Lee YB,Jin SM,Hur KY,Ko GP,Lee MK

[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

[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

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

**International journal of microbiology** , Volume: 2018 2018

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

[Antimicrobial activity of spices essential oils and its effectiveness on mature biofilms of human pathogens.](#)

**Natural product research** , 2018 Oct 13

Authors Condò C, Anacarso I, Sabia C, Iseppi R, Anfelli I, Forti L, de Niederhäusern S, Bondi M, Messi P

[Metagenomic Insights into the Degradation of Resistant Starch by Human Gut Microbiota.](#)

**Applied and environmental microbiology** , Volume: 84 Issue: 23 2018 Dec 1

Authors Vital M, Howe A, Bergeron N, Krauss RM, Jansson JK, Tiedje JM

[\[Microbiological profiles of pathogens causing nosocomial bacteremia in 2011, 2013 and 2016\].](#)

**Sheng wu gong cheng xue bao = Chinese journal of biotechnology** , Volume: 34 Issue: 8 2018 Aug 25

Authors Wang X,Zhao C,Li H,Chen H,Jin L,Wang Z,Liao K,Zeng J,Xu X,Jin Y,Su D,Liu W,Hu Z,Cao B,Chu Y,Zhang R,Luo Y,Hu B,Wang H

[Bifidobacterium bifidum TMC3115 Can Characteristically Influence Glucose and Lipid Profile and Intestinal Microbiota in the Middle-Aged and Elderly.](#)

**Probiotics and antimicrobial proteins** , 2018 Jul 5

Authors Wang K,Yu X,Li Y,Guo Y,Ge L,Pu F,Ma X,Cui W,Marrota F,He F,Li M

Beneficial effects of the commercial lactic acid bacteria product, Vigis 101, on gastric mucosa and intestinal bacterial flora in rats.

**Journal of microbiology, immunology, and infection = Wei mian yu gan ran za zhi** , 2018 Jun 23

Authors Kao L,Liu TH,Tsai TY,Pan TM

Effects of garlic polysaccharide on alcoholic liver fibrosis and intestinal microflora in mice.

**Pharmaceutical biology** , Volume: 56 Issue: 1 2018 Dec

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

Anti-inflammatory and antibacterial evaluation of Thymus sipyleus Boiss. subsp. sipyleus var. sipyleus essential oil against rhinosinusitis pathogens.

**Microbial pathogenesis** , Volume: 122 2018 Sep

Authors Demirci F,Karaca N,Tekin M,Demirci B

Changes in metabolism and microbiota after 24-week risperidone treatment in drug naïve, normal weight patients with first episode schizophrenia.

**Schizophrenia research** , 2018 May 30

Authors Yuan X,Zhang P,Wang Y,Liu Y,Li X,Kumar BU,Hei G,Lv L,Huang XF,Fan X,Song X

Niacin alters the ruminal microbial composition of cattle under high-concentrate condition.

**Animal nutrition (Zhongguo xu mu shou yi xue hui)** , Volume: 3 Issue: 2 2017 Jun

Authors Luo D,Gao Y,Lu Y,Qu M,Xiong X,Xu L,Zhao X,Pan K,Ouyang K

Walnut Consumption Alters the Gastrointestinal Microbiota, Microbially Derived Secondary Bile Acids, and Health Markers in Healthy Adults: A Randomized Controlled Trial.

**The Journal of nutrition** , Volume: 148 Issue: 6 2018 Jun 1

Authors Holscher HD,Guetterman HM,Swanson KS,An R,Matthan NR,Lichtenstein AH,Novotny JA,Baer DJ

Role of *Lactobacillus reuteri* in Human Health and Diseases.

**Frontiers in microbiology** , Volume: 9 2018

Authors Mu Q,Tavella VJ,Luo XM

Lactobacillus plantarum MTCC 9510 supplementation protects from chronic unpredictable and sleep deprivation-induced behaviour, biochemical and selected gut microbial aberrations in mice.

**Journal of applied microbiology** , Volume: 125 Issue: 1 2018 Jul

Authors Dhaliwal J,Singh DP,Singh S,Pinnaka AK,Boparai RK,Bishnoi M,Kondepudi KK,Chopra K

Prebiotic Potential of Herbal Medicines Used in Digestive Health and Disease.

**Journal of alternative and complementary medicine (New York, N.Y.)** , Volume: 24 Issue: 7 2018 Jul

Authors Peterson CT,Sharma V,Uchitel S,Denniston K,Chopra D,Mills PJ,Peterson SN

Extensive impact of non-antibiotic drugs on human gut bacteria.

**Nature** , Volume: 555 Issue: 7698 2018 Mar 29

Authors Maier L,Pruteanu M,Kuhn M,Zeller G,Telzerow A,Anderson EE,Brochado AR,Fernandez KC,Dose H,Mori H,Patil KR,Bork P,Typas A

A Walnut-Enriched Diet Affects Gut Microbiome in Healthy Caucasian Subjects: A Randomized, Controlled Trial.

**Nutrients** , Volume: 10 Issue: 2 2018 Feb 22

Authors Bamberger C,Rossmeyer A,Lechner K,Wu L,Waldmann E,Fischer S,Stark RG,Altenhofer J,Henze K,Parhofer KG

Potential of Lactobacillus plantarum ZDY2013 and Bifidobacterium bifidum WBIN03 in relieving colitis by gut microbiota, immune, and anti-oxidative stress.

**Canadian journal of microbiology** , 2018 Feb 5

Authors Wang Y,Guo Y,Chen H,Wei H,Wan C

Ceftriaxone promotes the emergence of AmpC-overproducing Enterobacteriaceae in gut microbiota from hospitalized patients.

**European journal of clinical microbiology & infectious diseases : official publication of the European Society of Clinical Microbiology** , Volume: 37 Issue: 3 2018 Mar

Authors de Lastours V,Goulenok T,Guérin F,Jacquier H,Eyma C,Chau F,Cattoir V,Fantin B

Influence of a diet enriched with virgin olive oil or butter on mouse gut microbiota and its correlation to physiological and biochemical parameters related to metabolic syndrome.

**PloS one** , Volume: 13 Issue: 1 2018

Authors Prieto I,Hidalgo M,Segarra AB,Martínez-Rodríguez AM,Cobo A,Ramírez M,Abriouel H,Gálvez A,Martínez-Cañamero M

Update of incidence and antimicrobial susceptibility trends of Escherichia coli and Klebsiella pneumoniae isolates from Chinese intra-abdominal infection patients.

**BMC infectious diseases** , Volume: 17 Issue: 1 2017 Dec 18

Authors Zhang H,Yang Q,Liao K,Ni Y,Yu Y,Hu B,Sun Z,Huang W,Wang Y,Wu A,Feng X,Luo Y,Chu Y,Chen S,Cao B,Su J,Duan Q,Zhang S,Shao H,Kong H,Gui B,Hu Z,Badal R,Xu Y

Effect of Probiotics on Pharmacokinetics of Orally Administered Acetaminophen in Mice.

**Drug metabolism and disposition: the biological fate of chemicals** , Volume: 46 Issue: 2 2018 Feb

Authors Kim JK,Choi MS,Jeong JJ,Lim SM,Kim IS,Yoo HH,Kim DH

[A combination of quercetin and resveratrol reduces obesity in high-fat diet-fed rats by modulation of gut microbiota.](#)

**Food & function** , Volume: 8 Issue: 12 2017 Dec 13

Authors Zhao L,Zhang Q,Ma W,Tian F,Shen H,Zhou M

[Lactobacillus plantarum HNU082-derived improvements in the intestinal microbiome prevent the development of hyperlipidaemia.](#)

**Food & function** , Volume: 8 Issue: 12 2017 Dec 13

Authors Shao Y,Huo D,Peng Q,Pan Y,Jiang S,Liu B,Zhang J

[In-vitro antimicrobial activity and identification of bioactive components using GC-MS of commercially available essential oils in Saudi Arabia.](#)

**Journal of food science and technology** , Volume: 54 Issue: 12 2017 Nov

Authors Ashraf SA,Al-Shammari E,Hussain T,Tajuddin S,Panda BP

[Effects of microencapsulated Lactobacillus plantarum LIP-1 on the gut microbiota of hyperlipidaemic rats.](#)

**The British journal of nutrition** , Volume: 118 Issue: 7 2017 Oct

Authors Song JJ,Tian WJ,Kwok LY,Wang YL,Shang YN,Menghe B,Wang JG

[Effects of microencapsulated Lactobacillus plantarum LIP-1 on the gut microbiota of hyperlipidaemic rats.](#)

**The British journal of nutrition** , Volume: 118 Issue: 7 2017 Oct

Authors Song JJ,Tian WJ,Kwok LY,Wang YL,Shang YN,Menghe B,Wang JG

## 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**