Kyoto Encyclopedia of Genes and Genomes derived Suggestions

Review Overview

These suggestions 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 almost 2 million facts with backward chaining to sources of information. The typical sources are studies published on the US National Library of Medicine. Note: That many of the bacteria species used are *NOT* reported on many tests.

These are suggestions that are predicted to independently Decreasing Hydrogen | H2 H2 by impacting the bacteria listed on KEGG: Kyoto Encyclopedia of Genes and Genomes. 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

This is an experimental feature – manual validations is recommended. For background, see this post

There is a separate report for probiotics. That report use the enzymes in probiotic species.

Analysis Provided by Microbiome Prescription

A Microbiome Analysis Company

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Our Facebook Discussion Page

Bacteria being targeted by suggestions.

These bacteria levels were deemed atypical

Bacteria Name	Rank	Shift	Taxonomy ID
Persephonella marina	species		309805
Sulfurihydrogenibium azorense	species		309806
Desulforapulum autotrophicum	species		2296
Streptomyces nodosus	species		40318
Desulfurobacterium thermolithotrophum	species		64160
Desulfocapsa sulfexigens	species		65555
Streptomyces globosus	species		68209
Thioalkalivibrio paradoxus	species		108010
Caldilinea aerophila	species		133453
Thermovibrio ammonificans	species		228745
Desulfovibrio ferrophilus	species		241368
Adlercreutzia equolifaciens	species		446660
Gordonibacter pamelaeae	species		471189
Thiohalobacter thiocyanaticus	species		585455
Neptunomonas concharum	species		1031538
Magnetospira sp. QH-2	species		1288970
Salinivirga cyanobacteriivorans	species		1307839
Labilithrix luteola	species		1391654
Desulfocurvibacter africanus subsp. africanus	subspecies		1511600
Limnochorda pilosa	species		1555112
Sulfurifustis variabilis	species		1675686
Candidatus Velamenicoccus archaeovorus	species		1930593
Thiocapsa sp.	species		2024551
Streptomyces tirandamycinicus	species		2174846
Labrenzia sp. PHM005	species		2590016
Dictyoglomus thermophilum	species		14
Legionella pneumophila	species		446
Legionella longbeachae	species		450
Legionella micdadei	species		451
Legionella spiritensis	species		452
Legionella israelensis	species		454
Legionella jordanis	species		456
Desulfovibrio piger	species		901
Hydrogenobacter thermophilus	species		940
Allochromatium vinosum	species		1049
Prosthecochloris aestuarii	species		1102
Mycobacterium kansasii	species		1768
Mycolicibacterium smegmatis	species		1772
Mycobacterium gordonae	species		1778
Mycobacterium marinum	species		1781
Mycolicibacterium thermoresistibile	species		1797
Mycolicibacterium aichiense	species		1799
Mycolicibacterium chubuense	species		1800
Mycolicibacterium diernhoferi	species		1801
Streptomyces reticuli	species		1926
Streptomyces rimosus	species		1927
Streptomyces scabiei	species		1930
Streptosporangium roseum	species		2001
Thermobispora bispora	species		2006
Desulfomonile tiedjei	species		2358
Legionella cherrii	species		28084
Legionella sainthelensi	species		28087
Thermodesulfovibrio yellowstonii	species		28262
Legionella oakridgensis	species		29423
Rhodothermus marinus	species		29549
Halothermothrix orenii	species		31909
Streptomyces laurentii	species		39478
Mycolicibacterium duvalii	species		39688
Mycobacterium branderi	species		43348
Kutzneria albida	species		43357

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.

The recommended process to obtain a *persistent shift* of the microbiome is:
- **Generate 4 lists from the suggestions with nothing repeated on another list**
- **Emphasize one list each week**
- **After 8 weeks (2 cycles), retest the microbiome to obtains the next set of *course corrections***

This approach allows the microbiome to stablize towards normal.

Pick only as many suggestions that suits you; there is no need to do all of them. Suggestions are based on your specific bacteria and not marketing concepts such as 'healthy choices'.

Avena sativa x Hordeum vulgare {barley,oat}
d-galactose {milk sugar}
fruit
fruit/legume fibre
grapes
Hordeum vulgare {Barley} 60 gram/day
Linum usitatissimum {Flaxseed} 30 mg/day
pectin {pectin}
Polydextrose {polydextrose}
resistant starch
Ulmus rubra {slippery elm}
walnuts 75 gram/day

Retail Probiotics

Over 260 retail probiotics were evaluted with the following deem beneficial with no known adverse risks.

Bromatech (IT) / Lautoselle
Bromatech (IT) / Serobiome

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

Substance to Consider Reducing or Eliminating

These are the most signigicant 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.

bifidobacterium bifidum {B. bifidum}
bifidobacterium longum,lactobacillus helveticus
Bovine Milk Products {Dairy}
Cinnamomum zeylanicum {Ceylon Cinnamon}
Coriandrum sativum {Coriander}
Curcuma amada {Mango ginger}
Curcuma longa {Turmeric}
Diferuloylmethane {Curcumin}
foeniculum vulgare,fennel
Hypericum perforatum {St. John's Wort}
Lacticaseibacillus casei {L. casei}
lactobacillus paracasei,lactobacillus acidophilus,bifidobacterium animalis
Lactobacillus plantarum {L. plantarum}
lactobacillus rhamnosus gg,bifidobacterium animalis lactis ,lactobacillus paracasei {cvs maximum strength probiotic}
Larrea tridentata {Chaparral}
Menta × piperita {peppermint}
Metha family {Mint}
Micromeria fruticosa {White-leaved Savory}
Morinda citrifolia {Noni}
oligosaccharides {oligosaccharides}
origanum vulgare {oregano}
rosmarinus officinalis {rosemary}
ß-(1?4)-linked D-glucosamine and N-acetyl-D-glucosamine {Chitosan}
syzygium aromaticum {clove}
Thymus vulgaris {thyme}
yogurt

Sample of Literature Used

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

Biological Characterization and Essential Oil Profiles of Eastern European Cultivars of Thymus, Satureja, and Monarda.
Molecules (Basel, Switzerland) , Volume: 31 Issue: 2 2026 Jan 19
Authors Pokajewicz K,Chodura M,Lezrag HA,Svydenko L,Nabrdalik M,Moliszewska E,Fatmi S,Hudz N,Wieczorek PP

Curcuma longa debranched starch assisted synthesis of cerium oxide nanoparticles and its antioxidant, anticancer, antimicrobial, and anti-biofilm activities.
Scientific reports , 2026 Jan 19
Authors Sana SS,Mishra V,Vadde R,Sillanpaa M,Alfarraj S,Van Hung P,Kim SC

Nanogel-encapsulated Rosa roxburghii Tratt fruit polyphenols ameliorated ulcerative colitis by regulating gut microbiota and PI3K/Akt and NF-?B pathways.
Food research international (Ottawa, Ont.) , Volume: 226 2026 Feb 28
Authors Long M,Wang H,Zhang F,Ran Y,Li Y,Luo J,Chen Z,Tian Z,Tan S,Liu X

Lactiplantibacillus plantarum Membrane Vesicles (MVs) exhibit immunomodulatory and bactericidal effects against Escherichia coli and Salmonella Typhimurium.
PloS one , Volume: 21 Issue: 1 2026
Authors Lonngi Sosa CD,González Díaz FR,Ramírez Álvarez H,Vargas Ruíz A,Muciño Hernández JL,Higuera Piedrahita RI,de la Cruz Cruz HA,Leal Hernández M,Ramírez-Rico G,Cuéllar Ordaz JA,González Ruíz C

Synergistic Effects of Garlic Extract and Mannan-Oligosaccharide Prebiotic Supplementation on Growth Performance, Carcass Quality, Immunity, Gut Morphology and Microbiome in Broiler Chickens.
Veterinary medicine and science , Volume: 12 Issue: 1 2026 Jan
Authors Khan A,Mushtaq M,Shah M,Khan RU,Alonaizan R,Naz S,Abudabos A,Israr M

Energy-sparing effect of oregano (Origanum vulgare subsp. hirtum) essential oil and its mixtures in broilers: Improved feed efficiency via optimized intestinal health.
Poultry science , Volume: 105 Issue: 3 2025 Dec 29
Authors Li X,Wang S,Zhang L,Li D,Li H,Zhang Q,Jin C,Wang J,Wang J,Han J,Liu F,Jin S,Jin L,Shi D

Comparative analysis of dietary fiber impact on bile acid metabolism and gut microbiota composition in mice.
Npj gut and liver , Volume: 2 Issue: 1 2025
Authors Zöchling A,Séneca J,Pjevac P,Auñon-Lopez A,Zebeli Q,Pignitter M,Duszka K

The addition of encapsulated Bacillus subtilis, Enterococcus faecium, and Lactobacillus plantarum postbiotics, either alone or with inulin, improves slaughter weight, gut function, and microbiota in broilers.
BMC veterinary research , Volume: 21 Issue: 1 2025 Oct 14
Authors Atan Çirpici H,Kirkpinar F

Microencapsulated Lactiplantibacillus plantarum ZGP-Lpl.19 modulates growth and virulence gene expression of Shigella flexneri ATCC 12022 in vitro.
Naunyn-Schmiedeberg's archives of pharmacology , 2025 Oct 3
Authors Ghorbani Z,Shayestehpour M,Shahaboddin ME,Khaledi A,Karimi M,Maleki R,Motallebi M

Lactobacillus plantarum and Lactobacillus brevis alleviate enterotoxigenic Escherichia coli-induced intestinal inflammation and stabilize intestinal microorganisms and serum metabolites in piglets.
Animal nutrition (Zhongguo xu mu shou yi xue hui) , Volume: 22 2025 Sep
Authors Han X,Gao R,Ding S,Yao H,Fang J,Liu G

Mango by-Product-Based High-Fiber Confectionery Attenuates Liver Steatosis and Alters Gut Microbiota in High-Fat Diet-Fed Rats.
Molecular nutrition & food research , 2025 Aug 30
Authors Barbosa Y,Gaytán-Martínez M,de Los Ríos-Arellano EA,Chavez-Santoscoy RA,Hinojosa-Alvarez S,Antunes-Ricardo M,Luzardo-Ocampo I,Ramírez-Jiménez AK

Salivary pH Modulation and Antimicrobial Properties of Oregano-Oil Jelly in Relation to Menstrual and Menopausal Status.
Nutrients , Volume: 17 Issue: 15 2025 Jul 29
Authors Potra Cicalau GI,Ciavoi G,Scrobota I,Venter ID,Ganea MF,Ghitea MC,Ghitea EC,Gîtea MF,Ghitea TC,Nagy C,Pelea DC,Dobjanschi L,Gligor O,Moisa C,Ganea M

Lonicerae flos and turmeric extracts alleviate necrotic enteritis in broilers by modulating gut-liver health and microbiota.
Journal of animal science and biotechnology , Volume: 16 Issue: 1 2025 Aug 8
Authors Liu X,Ji Y,Lv H,Wang Z,Lv Z,Guo Y,Nie W

The potential of cell-free supernatants from Lacticaseibacillus paracasei B1 and Lactiplantibacillus plantarum O24 as antioxidant and antimicrobial agents.
Food chemistry , Volume: 492 Issue: Pt 2 2025 Jul 3

Authors Keska P,Zielinska D,Karbowiak M,Kruk M,Lisiecka U,Stadnik J

Intake of Neutral core Human Milk Oligosaccharides (HMOs) during early life improves long-term bone quality.

The Journal of nutritional biochemistry , 2025 May 20

Authors Bonnet N,Schmidt FN,Baruchet M,Migliavacca E,Ramos-Nieves M,Favre L,Brassart D,Mletzko K,Busse B,Sietse-Jan K,Horcajada MN

Synergistic Biocidal Effects of Curcumin, Chitosan, and Nickel Titanate-Based Nanohybrids for Enhanced Antibacterial and Anticancer Therapies.

ACS applied bio materials , 2025 May 14

Authors Jeyasingh E,Panneerselvam HM,Chandrasekaran K,Moorthy S

Thyme oil-loaded chitosan microparticles: an antibacterial approach against pathogenic bacteria.

3 Biotech , Volume: 15 Issue: 5 2025 May

Authors Thakur A,Sharma K

Electrostatically assembled maghemite nanoparticles-Lactobacillus plantarum: A novel hybrid for enhanced antioxidant, antimicrobial, and antibiofilm efficacy.

Bioresource technology , 2025 Apr 12

Authors Shingade JA,Padalkar NS,Shin JH,Kim YH,Park TJ,Park JP,Patil AR

Curcumin Ameliorated Glucocorticoid-Induced Osteoporosis While Modulating the Gut Microbiota and Serum Metabolome.

Journal of agricultural and food chemistry , 2025 Mar 26

Authors Li S,Zhang Y,Ding S,Chang J,Liu G,Hu S

The Development and Comparative Evaluation of Rosemary Hydroalcoholic Macerate-Based Dermatocosmetic Preparations: A Study on Antioxidant, Antimicrobial, and Anti-Inflammatory Properties.

Gels (Basel, Switzerland) , Volume: 11 Issue: 3 2025 Feb 20

Authors Sahlabgi A,Lupuliasa D,Stanciu G,Lup?or S,Vlaia LL,Rotariu R,Predescu NC,Radulescu C,Olteanu RL,Stanescu SG,Hîncu L,Mititelu M

Comparative Evaluation of Different Mint Species Based on Their In Vitro Antioxidant and Antibacterial Effect.

Plants (Basel, Switzerland) , Volume: 14 Issue: 1 2025 Jan 2

Authors Sfaxi A,Tavaszi-Sárosi S,Flórián K,Patonay K,Radácsi P,Juhász Á

The Molecular Weight of Enzymatically Modified Pectic Oligosaccharides from Apple Pomace as a Determinant for Biological and Prebiotic Activity.

Molecules (Basel, Switzerland) , Volume: 30 Issue: 1 2024 Dec 26

Authors Wilkowska A,Nowak A,Motyl I,Oracz J

Antimicrobial Activity of Origanum vulgare Essential Oil against Staphylococcus aureus and Escherichia coli.

Pharmaceuticals (Basel, Switzerland) , Volume: 17 Issue: 11 2024 Oct 25

Authors Tejada-Muñoz S,Cortez D,Rascón J,Chavez SG,Caetano AC,Díaz-Manchay RJ,Sandoval-Bances J,Huyhua-Gutierrez S,Gonzales L,Chenet SM,Tapia-Limonchi R

Characterization of Exopolysaccharides from Lactiplantibacillus plantarum PC715 and Their Antibiofilm Activity Against Hafnia alvei.

Microorganisms , Volume: 12 Issue: 11 2024 Nov 3

Authors Tan X,Ma B,Wang X,Cui F,Li X,Li J

Correlation between intestinal microbiota and urolithin metabolism in a human walnut dietary intervention.

BMC microbiology , Volume: 24 Issue: 1 2024 Nov 15

Authors Liu H,Birk JW,Provatas AA,Vaziri H,Fan N,Rosenberg DW,Gharaibeh RZ,Jobin C

Thermosensitive Injectable Dual Drug-Loaded Chitosan-Based Hydrogels for Treating Bacterial Endometritis.

ACS biomaterials science & engineering , 2024 Nov 15

Authors Wang X,Wei Z,Wu Z,Li Y,Miao C,Cao Z

Investigating antibacterial and anti-inflammatory properties of synthetic curcuminoids.

Frontiers in medicine , Volume: 11 2024

Authors Veselá K,Kejík Z,Abramenko N,Kaplánek R,Jakubek M,Petrlova J

Effects of Lactobacillus spp. on Helicobacter pylori: A Promising Frontier in the Era of Antibiotic Resistance.

Probiotics and antimicrobial proteins , 2024 Nov 5

Authors Dash D,Mishra V,Panda MK,Pathak SK

Growth assessment of mixed cultures of probiotics and common pathogens.

Anaerobe , 2023 Oct 28

Authors Fredua-Agyeman M,Stapleton P,Gaisford S

Oregano essential oil and Bacillus subtilis role in enhancing broiler's growth, stress indicators, intestinal integrity, and gene expression under high stocking density.

Scientific reports , Volume: 14 Issue: 1 2024 Oct 25

Authors Elbaz AM,El-Sonousy NK,Arafa AS,Sallam MG,Ateya A,Abdelhady AY

Characterization of thyme essential oil microcapsules and potato starch/pectin composite films and their impact on the quality of chilled mutton.
Food chemistry , Volume: 464 Issue: Pt 2 2025 Feb 1
Authors Wang J,Li L,Li Y,Song Q,Hu Y,Wang Q,Lu S

A comprehensive update on the immunoregulatory mechanisms of Akkermansia muciniphila: insights into active ingredients, metabolites, and nutrient-driven modulation.
Critical reviews in food science and nutrition , 2024 Oct 16
Authors Mei L,Wang J,Hao Y,Zeng X,Yang Y,Wu Z,Ji Y

Biocompatible Poly(e-Caprolactone) Nanocapsules Enhance the Bioavailability, Antibacterial, and Immunomodulatory Activities of Curcumin.
International journal of molecular sciences , Volume: 25 Issue: 19 2024 Oct 4
Authors D'Angeli F,Granata G,Romano IR,Distefano A,Lo Furno D,Spila A,Leo M,Miele C,Ramadan D,Ferroni P,Li Volti G,Accardo P,Geraci C,Guadagni F,Genovese C

Potato resistant starch improves type 2 diabetes by regulating inflammation, glucose and lipid metabolism and intestinal microbial environment.
International journal of biological macromolecules , Volume: 281 Issue: Pt 3 2024 Nov
Authors Liu X,Ma Q,Feng Y,Wang F,Wang W,Wang J,Sun J

Lactiplantibacillus plantarum P101 Alleviated Alcohol-Induced Hepatic Lipid Accumulation in Mice via AMPK Signaling Pathway: Gut Microbiota and Metabolomics Analysis.
Probiotics and antimicrobial proteins , 2024 Oct 10
Authors Feng X,Wang M,Wen S,Hu L,Lan Y,Xu H

Candidate-Probiotic Lactobacilli and Their Postbiotics as Health-Benefit Promoters.
Microorganisms , Volume: 12 Issue: 9 2024 Sep 19
Authors Dobreva L,Atanasova N,Donchev P,Krumova E,Abrashev R,Karakirova Y,Mladenova R,Tolchkov V,Ralchev N,Dishliyska V,Danova S

Determinants of raffinose family oligosaccharide use in Bacteroides species.
Journal of bacteriology , Volume: 206 Issue: 10 2024 Oct 24
Authors Basu A,Adams AND,Degnan PH,Vanderpool CK

Isolation and Identification of Human Gut Bacteria Capable of Converting Curcumin to Its Hydrogenated Metabolites.
Journal of agricultural and food chemistry , Volume: 72 Issue: 37 2024 Sep 18
Authors Luo M,Wong S,Thanuphol P,Du H,Han Y,Lin M,Guo X,Bechtel TD,Gibbons JG,Xiao H

Cytotoxicity assessment and antimicrobial effects of cell-free supernatants from probiotic lactic acid bacteria and yeast against multi-drug resistant Escherichia coli.
Letters in applied microbiology , Volume: 77 Issue: 9 2024 Sep 2
Authors Ozma MA,Ghotaslou R,Asgharzadeh M,Abbasi A,Rezaee MA,Kafil HS

Hepatic Steatosis Can Be Partly Generated by the Gut Microbiota-Mitochondria Axis via 2-Oleoyl Glycerol and Reversed by a Combination of Soy Protein, Chia Oil, Curcumin and Nopal.
Nutrients , Volume: 16 Issue: 16 2024 Aug 6
Authors Sánchez-Tapia M,Tobón-Cornejo S,Noriega LG,Vázquez-Manjarrez N,Coutiño-Hernández D,Granados-Portillo O,Román-Calleja BM,Ruíz-Margáin A,Macías-Rodríguez RU,Tovar AR,Torres N

Regulations of Citrus Pectin Oligosaccharide on Cholesterol Metabolism: Insights from Integrative Analysis of Gut Microbiota and Metabolites.
Nutrients , Volume: 16 Issue: 13 2024 Jun 24
Authors Hu H,Zhang P,Liu F,Pan S

Investigating the physicochemical, antimicrobial and antioxidant properties of chitosan film containing zero-valent iron nanoparticles and oregano essence.
Biopolymers , Volume: 115 Issue: 6 2024 Nov
Authors Khodaparast FK,Pirsa S,Toupchi FM,Mohtarami F

Indole-3-Lactic Acid Derived from Lacticaseibacillus paracasei Inhibits Helicobacter pylori Infection via Destruction of Bacteria Cells, Protection of Gastric Mucosa Epithelial Cells, and Alleviation of Inflammation.
Journal of agricultural and food chemistry , Volume: 72 Issue: 28 2024 Jul 17
Authors Yao M,Cao J,Zhang L,Wang K,Lin H,Qin L,Zhang Q,Qu C,Miao J,Xue C

Prebiotic Potential of Goji Berry (Lycium barbarum) in Improving Intestinal Integrity and Inflammatory Profiles via Modification of the Gut Microbiota in High-Fat Diet-Fed Rats.
Journal of medicinal food , Volume: 27 Issue: 8 2024 Aug
Authors Jeong E,Eun S,Chae S,Lee S

Quercetin Alleviates Insulin Resistance and Repairs Intestinal Barrier in db/db Mice by Modulating Gut Microbiota.
Nutrients , Volume: 16 Issue: 12 2024 Jun 14

Authors Yuan M,Sun T,Zhang Y,Guo C,Wang F,Yao Z,Yu L
Turmeric and curcumin as adjuncts in controlling Helicobacter pylori-associated diseases: a narrative review.
Letters in applied microbiology , Volume: 77 Issue: 6 2024 Jun 3
Authors Boyanova L,Medeiros J,Yordanov D,Gergova R,Markovska R
Optimizing Akkermansia muciniphila Isolation and Cultivation: Insights into Gut Microbiota Composition and Potential Growth Promoters in a Chinese Cohort.
Microorganisms , Volume: 12 Issue: 5 2024 Apr 28
Authors Meng X,Xv C,Lv J,Zhang S,Ma C,Pang X
Chemical Composition of Turmeric (Curcuma longa L.) Ethanol Extract and Its Antimicrobial Activities and Free Radical Scavenging Capacities.
Foods (Basel, Switzerland) , Volume: 13 Issue: 10 2024 May 16
Authors Wu H,Liu Z,Zhang Y,Gao B,Li Y,He X,Sun J,Choe U,Chen P,Blaustein RA,Yu L
Associations of plant-based foods, red and processed meat, and dairy with gut microbiome in Finnish adults.
European journal of nutrition , Volume: 63 Issue: 6 2024 Sep
Authors Maukonen M,Koponen KK,Havulinna AS,Kaartinen NE,Niiranen T,Méric G,Pajari AM,Knight R,Salomaa V,Männistö S
Anti-proliferative, antimicrobial, DFT calculations, and molecular docking 3D scaffold based on sodium alginate, chitosan, neomycin sulfate and hydroxyapatite.
International journal of biological macromolecules , Volume: 270 Issue: Pt 1 2024 Jun
Authors Dacrory S
Antimicrobial activity of Cinnamomum zeylanicum essential oil against colistin-resistant gram-negative bacteria.
International journal of environmental health research , 2024 May 2
Authors Ben Selma W,Ferjeni S,Farouk A,Marzouk M,Boukadida J
A consortium of Hordeum vulgare and gut microbiota against non-alcoholic fatty liver disease via data-driven analysis.
Artificial cells, nanomedicine, and biotechnology , Volume: 52 Issue: 1 2024 Dec
Authors Lee SB,Gupta H,Min BH,Ganesan R,Sharma SP,Won SM,Jeong JJ,Cha MG,Kwon GH,Jeong MK,Hyun JY,Eom JA,Park HJ,Yoon SJ,Lee SY,Choi MR,Kim DJ,Oh KK,Suk KT
Enterococcus faecium supplementation prevents enteritis caused by Escherichia coli in goats.
Beneficial microbes , Volume: 14 Issue: 5 2023 Oct 30
Authors Dong J,Jiang Y,Li Z,Liu K,Guo L,Cui L,Wang H,Li J
Obliteration of H. pylori infection through the development of a novel thyme oil laden nanoporous gastric floating microsponge.
Heliyon , Volume: 10 Issue: 8 2024 Apr 30
Authors Jafar M,Ahmad Khan MS,Akbar MJ,AlSaihaty HS,Alasmari SS
Inhibitory effect of some probiotic strains and essential oils on the growth of some foodborne pathogens.
Open veterinary journal , Volume: 14 Issue: 1 2024 Jan
Authors Fathy SS,Awad EI,Abd-El Aal SFA,Abdelfatah EN,Tahoun ABMB
Effect of inulin, galacto-oligosaccharides, and polyphenols on the gut microbiota, with a focus on Akkermansia muciniphila.
Food & function , Volume: 15 Issue: 9 2024 May 7
Authors Tian R,Yu L,Tian F,Zhao J,Chen W,Zhai Q
Responses of intestinal morphology, immunity, antioxidant status and cecal microbiota to the mixture of glycerol monolaurate and cinnamaldehyde in laying hens.
Poultry science , Volume: 103 Issue: 6 2024 Jun
Authors Chen MY,Duan YL,Zhu Y,Wang JH,Hu QB,Guo SS,Ding BY,Zhang ZF,Li LL
Screening competition and cross-feeding interactions during utilization of human milk oligosaccharides by gut microbes.
Microbiome research reports , Volume: 3 Issue: 1 2024
Authors Díaz R,Garrido D
Short-term pectin-enriched smoothie consumption has beneficial effects on the gut microbiota of low-fiber consumers.
FEMS microbes , Volume: 5 2024
Authors Pihelgas S,Ehala-Aleksejev K,Kuldjärv R,Jõeleht A,Kazantseva J,Adamberg K
Adjunctive efficacy of Bifidobacterium animalis subsp. lactis XLTG11 for functional constipation in children.
Brazilian journal of microbiology : [publication of the Brazilian Society for Microbiology] , Volume: 55 Issue: 2 2024 Jun
Authors Chen K,Zhou Z,Nie Y,Cao Y,Yang P,Zhang Y,Xu P,Yu Q,Shen Y,Ma W,Jin S,Liu C
Synergistic antimicrobial interaction of plant essential oils and extracts against foodborne pathogens.
Food science & nutrition , Volume: 12 Issue: 2 2024 Feb
Authors Angane M,Swift S,Huang K,Perera J,Chen X,Butts CA,Quek SY
Bifidobacterium adolescentis - a beneficial microbe.
Beneficial microbes , Volume: 14 Issue: 6 2023 Nov 27

Authors Leser T,Baker A

Anti-Diabetic Potentials of Lactobacillus Strains by Modulating Gut Microbiota Structure and ß-Cells Regeneration in the Pancreatic Islets of Alloxan-Induced Diabetic Rats.

Probiotics and antimicrobial proteins , 2024 Feb 8

Authors Kumar M,Muthurayar T,Karthika S,Gayathri S,Varalakshmi P,Ashokkumar B

Argan: Phytochemical profiling and evaluation of the antioxidant, hypoglycemic, and antibacterial properties of its fruit pulp extracts.

Heliyon , Volume: 10 Issue: 1 2024 Jan 15

Authors Alaoui A,Sahri N,Mahdi I,Fahsi N,El Herradi EH,Sobeh M

Prevalence and Antimicrobial Characteristics of Escherichia coli in Selected Vegetables and Herbs in Bangkok, Thailand.

Journal of food protection , Volume: 87 Issue: 3 2024 Mar

Authors Datta S,Ishikawa M,Chudhakorn S,Charaslertrangsi T

Simulated digestions of free oligosaccharides and mucin-type O-glycans reveal a potential role for Clostridium perfringens.

Scientific reports , Volume: 14 Issue: 1 2024 Jan 18

Authors McDonald AG,Lisacek F

Long-term intake of Lactobacillus helveticus enhances bioavailability of omega-3 fatty acids in the mouse retina.

NPJ biofilms and microbiomes , Volume: 10 Issue: 1 2024 Jan 18

Authors Lapaquette P,Terrat S,Proukhnitzky L,Martine L,Grégoire S,Buteau B,Cabaret S,Rieu A,Bermúdez-Humarán LG,Gabrielle PH,Creuzot-Garcher C,Berdeaux O,Acar N,Bringer MA

Exopolysaccharide secreted by Lactiplantibacillus plantarum Y12 showed inhibitory effect on the pathogenicity of Shigella flexneri in vitro and in vivo.

International journal of biological macromolecules , Volume: 261 Issue: Pt 1 2024 Mar

Authors Song Y,Sun M,Mu G,Tuo Y

Effect of Lactobacillus plantarum ZFM4 in Helicobacter pylori-infected C57BL/6 mice: prevention is better than cure.

Frontiers in cellular and infection microbiology , Volume: 13 2023

Authors Yu YY,Wu LY,Sun X,Gu Q,Zhou QQ

Effects of Metabolites of Lactobacillus casei on Expression and Neutralization of Shiga Toxin by Enterohemorrhagic Escherichia coli.

Probiotics and antimicrobial proteins , 2024 Jan 15

Authors Aditya A,Tabashsum Z,Martinez ZA,Biswas D

Co-administration of the prebiotic 1-kestose and the paraprobiotic Lactiplantibacillus plantarum FM8 in magellanic penguins promotes the activity of intestinal Lactobacillaceae and reduces the plc gene levels encoding Clostridium perfringens toxin.

The Journal of veterinary medical science , Volume: 86 Issue: 2 2024 Feb 8

Authors Fujii T,Kezuka C,Kawaguchi Y,Yamakawa S,Kondo N,Funasaka K,Hirooka Y,Tochio T

Chemoprofiling and antimicrobial activity of medicinal herbs used in the treatment of inflammatory bowel disease.

Cellular and molecular biology (Noisy-le-Grand, France) , Volume: 69 Issue: 13 2023 Dec 10

Authors Alshahrani A,Ali A,Abdelwahab SF

Biological Potential and Bioaccessibility of Encapsulated Curcumin into Cetyltrimethylammonium Bromide Modified Cellulose Nanocrystals.

Pharmaceuticals (Basel, Switzerland) , Volume: 16 Issue: 12 2023 Dec 17

Authors Casanova F,Pereira CF,Ribeiro AB,Castro PM,Freixo R,Martins E,Tavares-Valente D,Fernandes JC,Pintado ME,Ramos ÓL

Effects of Lactobacillus plantarum HW1 on Growth Performance, Intestinal Immune Response, Barrier Function, and Cecal Microflora of Broilers with Necrotic Enteritis.

Animals : an open access journal from MDPI , Volume: 13 Issue: 24 2023 Dec 10

Authors Chen P,Lv H,Liu W,Wang Y,Zhang K,Che C,Zhao J,Liu H

Effects of pomegranate (Punica granatum L.) peel on the growth performance and intestinal microbiota of broilers challenged with Escherichia coli.

Poultry science , Volume: 103 Issue: 2 2024 Feb

Authors Xu P,Wang J,Chen P,Ding H,Wang X,Li S,Fan X,Zhou Z,Shi D,Li Z,Cao S,Xiao Y

The Inhibitory Activity of Lactobacillus plantarum Supernatant against Enterobacteria, Campylobacter, and Tumor Cells.

Bulletin of experimental biology and medicine , Volume: 176 Issue: 1 2023 Nov

Authors Danilova TA,Adzhieva AA,Mezentseva MV,Suetina IA,Danilina GA,Minko AG,Dmitrieva ML,Zhukhovitsky VG

Anti-allergic effects of Ulva-derived polysaccharides, oligosaccharides and residues in a murine model of food allergy.

Heliyon , Volume: 9 Issue: 12 2023 Dec

Authors Ou JY,Wei YJ,Liu FL,Huang CH

Analysis of the antibacterial effects of turmeric on particular bacteria.

Medicine , Volume: 102 Issue: 48 2023 Dec 1

Authors Odo EO,Ikwuegbu JA,Obeagu EI,Chibueze SA,Ochiaka RE

Gut microbiome supplementation as therapy for metabolic syndrome.

World journal of diabetes , Volume: 14 Issue: 10 2023 Oct 15

Authors Antony MA,Chowdhury A,Edem D,Raj R,Nain P,Joglekar M,Verma V,Kant R

Spices as Sustainable Food Preservatives: A Comprehensive Review of Their Antimicrobial Potential.

Pharmaceuticals (Basel, Switzerland) , Volume: 16 Issue: 10 2023 Oct 12

Authors Sulieman AME,Abdallah EM,Alanazi NA,Ed-Dra A,Jamal A,Idriss H,Alshammari AS,Shommo SAM

Thymus Vulgaris Oil Nanoemulsion: Synthesis, Characterization, Antimicrobial and Anticancer Activities.

Molecules (Basel, Switzerland) , Volume: 28 Issue: 19 2023 Oct 2

Authors Doghish AS,Shehabeldine AM,El-Mahdy HA,Hassanin MMH,Al-Askar AA,Marey SA,AbdElgawad H,Hashem AH

Butyrogenic, bifidogenic and slight anti-inflammatory effects of a green kiwifruit powder (Kiwi FFG®) in a human gastrointestinal model simulating mild constipation.

Food research international (Ottawa, Ont.) , Volume: 173 Issue: Pt 2 2023 Nov

Authors Goya-Jorge E,Bondue P,Gonza I,Laforêt F,Antoine C,Boutaleb S,Douny C,Scippo ML,de Ribaucourt JC,Crahay F,Delcenserie V

Antiultraviolet, Antioxidant, and Antimicrobial Properties and Anticancer Potential of Novel Environmentally Friendly Amide-Modified Gallic Acid Derivatives.

Journal of agricultural and food chemistry , 2023 Oct 6

Authors Wang X,Cong J,Zhang L,Han Z,Jiang X,Yu L

Highland barley attenuates high fat and cholesterol diet induced hyperlipidemia in mice revealed by 16S rRNA gene sequencing and untargeted metabolomics.

Life sciences , Volume: 334 2023 Dec 1

Authors Li X,Wang L

Functional proteins in breast milk and their correlation with the development of the infant gut microbiota: a study of mother-infant pairs.

Frontiers in microbiology , Volume: 14 2023

Authors Xi M,Liang D,Yan Y,Duan S,Leng H,Yang H,Shi X,Na X,Yang Y,Yang C,Szeto IM,Zhao A

Carboxymethyl chitosan-TK resistant starch complex ameliorates type 2 diabetes by regulating the gut microbiota.

International journal of biological macromolecules , Volume: 253 Issue: Pt 3 2023 Dec 31

Authors Pan X,Liu P,Zhang YJ,Zhang HK,Wei H,Jiang JY,Hui-Yan,Shang EX,Li WW,Wang Y,Duan JA

Assessment of chemical compositions and antibacterial activity of the essential oil of Mentha piperita in response to salicylic acid.

Natural product research , Volume: 38 Issue: 20 2024 Oct

Authors Afkar S

Mannan oligosaccharides selenium ameliorates intestinal mucosal barrier, and regulate intestinal microbiota to prevent Enterotoxigenic Escherichia coli -induced diarrhea in weaned piglets.

Ecotoxicology and environmental safety , Volume: 264 2023 Oct 1

Authors Zha A,Tu R,Qi M,Wang J,Tan B,Liao P,Wu C,Yin Y

Curcumin-sulfobutyl-ether beta cyclodextrin inclusion complex: preparation, spectral characterization, molecular modeling, and antimicrobial activity.

Journal of biomolecular structure & dynamics , Volume: 42 Issue: 19 2024

Authors Sravani AB,Shenoy K M,Chandrika B,Kumar B H,Kini SG,Pai K SR,Lewis SA

Dietary Flaxseed and Flaxseed Oil Differentially Modulate Aspects of the Microbiota Gut-Brain Axis Following an Acute Lipopolysaccharide Challenge in Male C57Bl/6 Mice.

Nutrients , Volume: 15 Issue: 16 2023 Aug 11

Authors Livingston DBH,Sweet A,Rodrigue A,Kishore L,Loftus J,Ghali F,Mahmoodianfard S,Celton C,Hosseinian F,Power KA

Relationship between Oat Consumption, Gut Microbiota Modulation, and Short-Chain Fatty Acid Synthesis: An Integrative Review.

Nutrients , Volume: 15 Issue: 16 2023 Aug 11

Authors Fabiano GA,Shinn LM,Antunes AEC

Effect of Bacillus subtilis and Oregano Oil on Performance, Gut Microbiome, and Intestinal Morphology in Pullets.

Animals : an open access journal from MDPI , Volume: 13 Issue: 16 2023 Aug 8

Authors Kim HJ,Kim HS,Yun YS,Kang HK

Composition and Anti-Helicobacter pylori Properties of Essential Oils Obtained from Selected Mentha Cultivars.

Molecules (Basel, Switzerland) , Volume: 28 Issue: 15 2023 Jul 27

Authors Piasecki B,Korona-Glowniak I,Kieltyka-Dadasiewicz A,Ludwiczuk A

Green label marinades: A solution to salmonella and campylobacter in chicken products?

Heliyon , Volume: 9 Issue: 7 2023 Jul

Authors Marmion M,Soro AB,Whyte P,Scannell AGM

Physicochemical, Rheological, and Sensory Characteristics of Yogurt Fermented by Lactic Acid Bacteria with Probiotic Potential and Bioprotective Properties.

Foods (Basel, Switzerland) , Volume: 12 Issue: 13 2023 Jun 29

Authors Hoxha R,Evstatieva Y,Nikolova D

Short-Term Dietary Intervention with Whole Oats Protects from Antibiotic-Induced Dysbiosis.

Microbiology spectrum , Volume: 11 Issue: 4 2023 Aug 17

Authors Costa SK,Antosca K,Beekman CN,Peterson RL,Penumutchu S,Belenky P

Antibacterial Activities of Mint (Mentha piperita) Leaf Extracts (Aqueous) Against Two Food Borne infection causing pathogens: Staphylococcus aureus and Escherichia coli.

Mymensingh medical journal : MMJ , Volume: 32 Issue: 3 2023 Jul

Authors Afrin A,Ahmed AU,Zannat KE,Tanzim SM,Saha BC,Joynal JB,Aktar M,Nira NH,Sabrin F,Nahar S,Jahan S,Shimu RN,Hossain MA

Crosstalk between dietary pomegranate and gut microbiota: evidence of health benefits.

Critical reviews in food science and nutrition , 2023 Jun 19

Authors Yin Y,Martínez R,Zhang W,Estévez M

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

The Effect of Increasing Concentrations of Omega-3 Fatty Acids from either Flaxseed Oil or Preformed Docosahexaenoic Acid on Fatty Acid Composition, Plasma Oxylipin, and Immune Response of Laying Hens.

The Journal of nutrition , Volume: 153 Issue: 7 2023 Jul

Authors Li S,Jing M,Mohamed N,Rey-Dubois C,Zhao S,Aukema HM,House JD