

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

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Bacteria being targeted by suggestions.

These bacteria levels were deemed atypical

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

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

Sample of Literature Used

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

The potential of cell-free supernatants from *Lactocaseibacillus 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

Impact of the Probiotic on the Modulation of Vaginal Bacterial and Fungal Microbiota in HPV-Positive Women.

Molecular nutrition & food research , 2025 Jun 11

Authors Xu P,Uma Mageswary M,Nisaa AA,Balasubramaniam SD,Samsudin SB,Rusdi NIBM,Jerip ARA,Oon CE,Bakar MHA,Tan JJ,Roslan FF,Kadir MN,Ismail EHBE,Sany SB,Tan CS,Liong MT

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,Hincu 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,Kejřík 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(ϵ -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 Dobрева 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,Ruiz-Margáin A,Macías-Rodríguez RU,Tovar AR,Torres N

Lactobacillus plantarum Ameliorates Colorectal Cancer by Ameliorating the Intestinal Barrier through the CLA-PPAR- γ Axis.

Journal of agricultural and food chemistry , Volume: 72 Issue: 36 2024 Sep 11

Authors Chen Y, Ma W, Zhao J, Stanton C, Ross RP, Zhang H, Chen W, Yang B

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 Lactocaseibacillus 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,Niranen 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 microspunge.

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,Jõelet 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 β -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,Charaslertrangsri 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

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

Antitumor, 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,Penumutthu 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

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

Antimicrobial and immunoregulatory effects of Lactobacillus delbrueckii 45E against genitourinary pathogens.**Journal of biomedical science** , Volume: 30 Issue: 1 2023 Mar 23

Authors Bnfaga AA,Lee KW,Than LTL,Amin-Nordin S

The Antimicrobial Activity of Curcumin and Xanthohumol on Bacterial Biofilms Developed over Dental Implant Surfaces.**International journal of molecular sciences** , Volume: 24 Issue: 3 2023 Jan 25

Authors Alonso-Español A,Bravo E,Ribeiro-Vidal H,Virto L,Herrera D,Alonso B,Sanz M

Lactocaseibacillus casei T1 attenuates Helicobacter pylori-induced inflammation and gut microbiota disorders in mice.**BMC microbiology** , Volume: 23 Issue: 1 2023 Feb 11

Authors Yu Z,Cao M,Peng J,Wu D,Li S,Wu C,Qing L,Zhang A,Wang W,Huang M,Zhao J

Comparative study between two different morphological structures based on polylactic acid, nanocellulose and magnetite for co-delivery of fluorouracil and curcumin.**International journal of biological macromolecules** , Volume: 230 2023 Mar 1

Authors Bakr EA,Gaber M,Saad DR,Salahuddin N

Cranberry-lingonberry juice affects the gut and urinary microbiome in children - a randomized controlled trial.**APMIS : acta pathologica, microbiologica, et immunologica Scandinavica** , Volume: 131 Issue: 3 2023 Mar

Authors Hakola M,Vehviläinen P,Muotka J,Tejesvi MV,Pokka T,Vähäsarja P,Hanni AM,Renko M,Uhari M,Salo J,Tapiainen T

Curcumin loaded gold nanoparticles-chitosan/sodium alginate nanocomposite for nanotheranostic applications.**Journal of biomaterials science. Polymer edition** , Volume: 34 Issue: 7 2023 May

Authors Kolathupalayam Shanmugam B,Rajendran N,Arumugam K,Rangaraj S,Subramani K,Srinivasan S,Nayagam L,Aicher WK,Venkatachalam R

Heat-Killed Bifidobacterium bifidum B1628 May Alleviate Dextran Sulfate Sodium-Induced Colitis in Mice, and the Anti-

Inflammatory Effect Is Associated with Gut Microbiota Modulation.**Nutrients** , Volume: 14 Issue: 24 2022 Dec 8*Authors Feng C,Zhang W,Zhang T,He Q,Kwok LY,Tan Y,Zhang H***Effects of a Specific Pre- and Probiotic Combination and Parent Stock Vaccination on Performance and Bacterial Communities in Broilers Challenged with a Multidrug-Resistant Escherichia coli.****Antibiotics (Basel, Switzerland)** , Volume: 11 Issue: 12 2022 Nov 26*Authors Fuhrmann L,Zentek J,Vahjen W,Günther R,Saliu EM***Investigation of Immunostimulatory Effects of Heat-Treated Lactiplantibacillus plantarum LM1004 and Its Underlying Molecular Mechanism.****Food science of animal resources** , Volume: 42 Issue: 6 2022 Nov*Authors Bae WY,Jung WH,Shin SL,Kwon S,Sohn M,Kim TR***Explainable Artificial Intelligence in the Early Diagnosis of Gastrointestinal Disease.****Diagnostics (Basel, Switzerland)** , Volume: 12 Issue: 11 2022 Nov 9*Authors Lee KS,Kim ES***Effects of Proteases from Pineapple and Papaya on Protein Digestive Capacity and Gut Microbiota in Healthy C57BL/6 Mice and Dose-Manner Response on Mucosal Permeability in Human Reconstructed Intestinal 3D Tissue Model.****Metabolites** , Volume: 12 Issue: 11 2022 Oct 26*Authors Kostiuhenko O,Kravchenko N,Markus J,Burleigh S,Fedkiv O,Cao L,Letasiova S,Skibo G,Fåk Hållenius F,Prykhodko O*