

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 Increasing Butanoic acid | Butanoate Butyrate Butyric acid C4H8O2 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

892 Lake Samish Rd, Bellingham WA 98229
Email: Research@MicrobiomePrescription.com

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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
Methylocystis parvus	species		134	Brevibacillus laterosporus	species		1465
Azospirillum lipoferum	species		193	Peribacillus simplex	species		1478
Bradyrhizobium japonicum	species		375	Rubrivivax gelatinosus	species		28068
Bradyrhizobium sp.	species		376	Porphyromonas asaccharolytica	species		28123
Citrobacter koseri	species		545	Vibrio nigripulchritudo	species		28173
Citrobacter freundii	species		546	Pectobacterium atrosepticum	species		29471
Escherichia fergusonii	species		564	Beijerinckia indica subsp. indica	subspecies		31994
Shigella sonnei	species		624	Phascolarctobacterium faecium	species		33025
Yersinia intermedia	species		631	Leptothrix cholodnii	species		34029
Edwardsiella tarda	species		636	Citrobacter amalonaticus	species		35703
Vibrio harveyi	species		669	Rhodovulum sulfidophilum	species		35806
Aggregatibacter				Caldibacillus thermoamylovorans	species		35841
actinomycetemcomitans	species		714	Porphyromonas cangingivalis	species		36874
Pasteurella dagmatis	species		754	Methylobacterium mesophilicum	species		39956
Rodentibacter pneumotropicus	species		758	Streptococcus equi subsp.			
Porphyromonas gingivalis	species		837	zooepidemicus	subspecies		40041
Fusobacterium gonidiaformans	species		849	Rubrobacter radiotolerans	species		42256
Fusobacterium mortiferum	species		850	Vreelandella venusta	species		44935
Fusobacterium varium	species		856	Streptococcus cristatus	species		45634
Fusobacterium periodonticum	species		860	Bibersteinia trehalosi	species		47735
Fusobacterium ulcerans	species		861	Serratia fonticola	species		47917
Megasphaera elsdenii	species		907	Brevibacillus agri	species		51101
Nitrobacter hamburgensis	species		912	Thalassovita gelatinovora	species		53501
Rhodospirillum rubrum	species		1085	Brevibacillus choshinensis	species		54911
Streptococcus pyogenes	species		1314	Brevibacillus formosus	species		54913
Streptococcus anginosus	species		1328	Pectobacterium wasabiae	species		55208
Streptococcus canis	species		1329	Brenneria nigrifluens	species		55210
Streptococcus uberis	species		1349	Brenneria rubrifaciens	species		55213
Brevibacillus brevis	species		1393	Edwardsiella ictaluri	species		67780
Paenibacillus polymyxa	species		1406	Citrobacter farmeri	species		67824
Peribacillus psychrosaccharolyticus	species		1407	Citrobacter werkmanii	species		67827

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'.

allium sativum {garlic} 4 gram/day

Amorphophallus konjac {Konjaku flour}

Animal cohabitation {Owning a Pet}

Azadirachta indica {Neem} 120 mg/day

Bifidobacterium animalis {B. animalis}

bifidobacterium lactis,streptococcus thermophilus probiotic

Cichorium intybus {Chicory} 1800 mg/day

Cinnamomum zeylanicum {Ceylon Cinnamon} 6 gram/day

Coffee

Decoction of Four Noble Drugs {Sijunzi Decoction (SJZD)}

Dodecanoic acid {Lauric acid}

Eucalyptus {Gum Tree}

foeniculum vulgare,fennel

gallic acid {gallate}

green tea

Lactocaseibacillus casei {L. casei} 48 BCFU/day

Lactobacillus gasseri {L.gasseri} 10 BCFU/day

lactobacillus paracasei,lactobacillus acidophilus,bifidobacterium animalis

Limosilactobacillus fermentum {L. fermentum} 12 BCFU/day

Menta × piperita {peppermint}

Momordica charantia {Bitter gourd}

Rhus chinensis {galla rhois}

rosmarinus officinalis {rosemary}

Salvia officinalis {Sage}

Secale cereale {Rye}

β-(1?4)-linked D-glucosamine and N-acetyl-D-glucosamine

{Chitosan} 3 gram/day

syzygium aromaticum {clove}

Theobroma cacao {Cacao} 20 gram/day

Thymus vulgaris {thyme}

Trametes versicolor {Turkey tail}

yogurt

Retail Probiotics

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

douglas laboratories / multi probiotic 40 billion
visbiome
Physician Choice /60 Billion Probiotics
Jetson (US) / Immunity Probiotics
spain (es) / vivomixx
reg'activ / immune & vitality
SuperSmart / Lactoxira
Bulk Probiotics / L. Casei Probiotic Powder (Candida Support)
Maple Life Science™ / Lactobacillus fermentum
Wakunaga / 50+
Bromatech (IT) / Citogenex
Bulk Probiotics /L. Gasseri Probiotic Powder (Weight & Fat Loss Support)
nature's bounty / probioti 10
CustomProbiotics.com / L. Gasseri Probiotic Powder
fairvital / microflora basic
BioGaia / Elactia
anabolic laboratories / probiotic complete
Invivo / Bio.Me Femme UT
Bromatech (IT) / Milonet
PharmExtracta (IT) / INatal Sachets
NaturalPharma / Profit Probiotics
SuperSmart / Lactobacillus Gasseri
Pädia GmbH (DE)/Mambiotic Kapseln
HLH BIOPHARMA(DE) / LACTOBACT ® OMNI FOS
spain (es) / lactanza hereditum
ecology_allergycare
Genesis Bifidobacterium Complex BB Probiotic
Good Start® by Gerber® Breastfeeding Comfort Plus Probiotics
Thryve L.PCasei Th1, L.PCasei Th2,L.Ferm IBF1, Lacidoph
renew life men's probiotic - ultimate
ferring / vsl#3
klaire labs / target gb-x
Materna® Opti-Lac® Breast Feeding Support
Lab One / N ° 1 SportBiotic
philips / colon health
solgar / advanced 40+ acidophilus
wakamoto (jp) / wakamoto pharmaceutical intestinal drug
Wakunaga / Daily Probiotic
SuperSmart / Probio Forte
organic 3 / gutpro
Bromatech (IT) / Rotanelle plus
Metabolics / Streptococcus Thermophilus Powder
theramedix / probiotic
VSL Pharmaceuticals / Oxadrop
Winclove Probiotics / Ecologic®825
Bulk Probiotics / L. Fermentum Probiotic Powder
CustomProbiotics.com / L. Casei Probiotic Powder
CustomProbiotics.com / S. Thermophilus Probiotic Powder
Smidge / Sensitive Probiotic

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.

5,6-dihydro-9,10-dimethoxybenzo[g]-1,3-benzodioxolo[5,6-a]quinolizinium {Berberine}
2H-1?6,2-benzothiazol-1,1,3-trione {Saccharin}
α-Amino-3-indolepropionic acid {Tryptophan}
arabinogalactan {arabinogalactan}
bacillus subtilis {B.Subtilis }
d-galactose {milk sugar}
Ferrum {Iron Supplements}
fruit
fruit/legume fibre
grapes
high red meat
Hordeum vulgare {Barley}
Lactiseibacillus rhamnosus {l. rhamnosus}
laminaria digitata {Oarweed}
Linum usitatissimum {Flaxseed}

Malus domestica {apple}
oligosaccharides {oligosaccharides}
Outer Layers of Triticum aestivum {Wheat Bran}
Panax ... {Ginseng}
pectin {pectin}
Poly[β-D-xylopyranose(1->4)] {Xylan}
Polydextrose {polydextrose}
pseudo-cereals {amaranth,quinoa, taro,buckwheat}
Pulses, Beans
red wine
β-glucan {Beta-Glucan}
steviol glycosides {Stevia}
Ulmus rubra {slippery elm}
vegetarians
vitamin d
wheat

Sample of Literature Used

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

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

3 Biotech , Volume: 15 Issue: 5 2025 May

Authors Thakur A,Sharma K

Selenium-enriched green tea extracts: chemical constituents and effects on antioxidant and anti-inflammatory factors and four major intestinal flora in mice with intestinal disorders.

Journal of the science of food and agriculture , 2025 Apr 15

Authors Yang H,Tao H,Xu C,Song J,Teng C,Pan C,Wei S

GC/MS and LC Composition Analysis of Essential Oil and Extracts From Wild Rosemary: Evaluation of Their Antioxidant, Antimicrobial, and Anti-Inflammatory Activities.

Biomedical chromatography : BMC , Volume: 39 Issue: 5 2025 May

Authors Mahboub N,Cherfi I,Laouini SE,Bouafia A,Benaissa A,Alia K,Alharthi F,Al-Essa K,Menaa F

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

The efficacy and underlying mechanisms of berberine in the treatment of recurrent Clostridioides difficile infection.

International journal of antimicrobial agents , Volume: 65 Issue: 5 2025 Feb 20

Authors Wang L,Xu T,Wu S,Zhao C,Huang H

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

Oat Beta-Glucans Modulate the Gut Microbiome, Barrier Function, and Immune Responses in an In Vivo Model of Early-Stage Colorectal Cancer.

International journal of molecular sciences , Volume: 25 Issue: 24 2024 Dec 19

Authors Guzowska M,Dziendzikowska K,Kopiasz L,Gajewska M,Wilczak J,Harasym J,Czerwinska M,Gromadzka-Ostrowska J

Investigating the properties and antibacterial, antioxidant, and cytotoxicity activity of postbiotics derived from Lactisacibacillus casei on various gastrointestinal pathogens in vitro and in food models.

GMS hygiene and infection control , Volume: 19 2024

Authors Asadi Z,Abbasi A,Ghaemi A,Montazeri EA,Akrami S

Microencapsulation of Azadirachta indica oil and Tinospora cordifolia extracts blend for single-use applications.

Heliyon , Volume: 10 Issue: 20 2024 Oct 30

Authors Khan O,Chandra Das S,Bedoura S

Ultrasonic depolymerization of pomegranate peel pectin: Effect of sonication time on antioxidant, α-amylase inhibitory, and prebiotic properties.

Food chemistry: X , Volume: 24 2024 Dec 30

Authors Bachari S,Ghaderi-Ghahfarokhi M,Gavilighi HA,Zarei M

Limosilactobacillus Fermentun ZS09 Can Improve Antibiotic-Induced Motor Dysfunction in Mice by Regulating the Brain-Gut Functions.

Journal of inflammation research , Volume: 17 2024

Authors Yang Y,Zhao Y,Lei H,Tan X

Cell-free supernatant of Lactobacillus gasseri 1A-TV shows a promising activity to eradicate carbapenem-resistant Klebsiella pneumoniae colonization.

Frontiers in cellular and infection microbiology , Volume: 14 2024

Authors Vertillo Aluisio G,Mezzatesta ML,Cafiso V,Scuderi R,Stefani S,Santagati M

Evaluation of the Anti-biofilm Activity of Vitamins Against Acinetobacter baumannii and Klebsiella pneumoniae Recovered From Clinical Specimens: An In Vitro and In Silico Analysis.

Cureus , Volume: 16 Issue: 10 2024 Oct

Authors Ganjo AR

GC-MS Characterization and Bioactivity Study of Eucalyptus globulus Labill. (Myrtaceae) Essential Oils and Their Fractions:

Antibacterial and Antioxidant Properties and Molecular Docking Modeling**Pharmaceuticals (Basel, Switzerland) , Volume: 17 Issue: 11 2024 Nov 19***Authors Ait Benlabchir A,Fikri-Benbrahim K,Moutawalli A,Alanazi MM,Halmoune A,Benkhouili FZ,Oubihi A,Kabra A,Hanoune E,Assila H,Ouaritini ZB***Probiotic-Loaded Bacterial Cellulose as an Alternative to Combat Carbapenem-Resistant Bacterial Infections.****Antibiotics (Basel, Switzerland) , Volume: 13 Issue: 11 2024 Oct 25***Authors Gutiérrez-Fernández J,Cerezo-Collado L,Garcés V,Alarcón-Guijo P,Delgado-López JM,Dominguez-Vera JM***The potency of Cupressus sempervirens and Eucalyptus globulus Essential Oils Against Antibiotic-Resistant Escherichia coli and Mammaliicoccus sciuri from Diseased Animals in Tunisia.****Current microbiology , Volume: 82 Issue: 1 2024 Nov 26***Authors Dhaouadi S,Ghorbel SKB,Bouglita W,Chaari S,Dhifi W,Khrouf R,Cherif A,Elandoulsi RB***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***In-vitro and In-silico evaluation of antimicrobial and antibiofilm effect of Neem oil and Calcium hydroxide nanoparticles against Mutans Streptococci and Enterococcus faecalis isolated from endodontic infections.****Scientific reports , Volume: 14 Issue: 1 2024 Nov 2***Authors Nageeb WM,Adam SH,Hashem N,Abdelsalam N***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***Co-Encapsulation of Coffee and Coffee By-Product Extracts with Probiotic Kluyveromyces lactis.****Foods (Basel, Switzerland) , Volume: 13 Issue: 19 2024 Sep 26***Authors Tavares DG,Souza MAM,Santos TLD,Silva ADAD,Abreu DJM,Duarte WF***Exploring the antimicrobial efficacy of tea tree essential oil and chitosan against oral pathogens to overcome antimicrobial resistance.****Microbial pathogenesis , Volume: 196 2024 Nov***Authors Oliveira MS,Paula MSA,Cardoso MM,Silva NP,Tavares LCD,Gomes TV,Porto DL,Aragão CFS,Fabri RL,Tavares GD,Apolônio ACM***Effect of Lactibacillus rhamnosus IDCC 3201 on irritable bowel syndrome with constipation: a randomized, double-blind, and placebo-controlled trial.****Scientific reports , Volume: 14 Issue: 1 2024 Sep 27***Authors Kwon H,Nam EH,Kim H,Jo H,Bang WY,Lee M,Shin H,Kim D,Kim J,Kim H,Lee J,Jung YH,Yang J,Won DD,Shin M***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***Integration of microbiome, metabolomics and transcriptome for in-depth understanding of berberine attenuates AOM/DSS-induced colitis-associated colorectal cancer.****Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie , Volume: 179 2024 Oct***Authors Wang M,Ma Y,Yu G,Zeng B,Yang W,Huang C,Dong Y,Tang B,Wu Z***Characterization and antioxidant activity of nano-formulated berberine and cyperus rotundus extracts with anti-inflammatory effects in mastitis-induced rats.****Scientific reports , Volume: 14 Issue: 1 2024 Aug 9***Authors Hashem AE,Elmasry IH,Lebda MA,El-Karim DRSG,Hagar M,Ebied SKM,Alotaibi BS,Rizk NI,Ghamry HI,Shukry M,Edres HA***Formulation of Garlic Essential Oil-assisted Silver Nanoparticles and Mechanistic Evaluation of their Antimicrobial Activity against a Spectrum of Pathogenic Microorganisms.****Current topics in medicinal chemistry , Volume: 24 Issue: 22 2024***Authors Sarangi A,Das BS,Panigrahi LL,Arakha M,Bhattacharya D***Berberine hydrochloride alleviates chronic prostatitis/chronic pelvic pain syndrome by modifying gut microbiome signaling.****Asian journal of andrology , 2024 Jul 16***Authors Tian YQ,Ren X,Wang J,Li X,Yin YS,Guo ZH,Qin ZL,Zeng XY***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

Berberine alleviates high-energy and low-protein diet-induced fatty liver hemorrhagic syndrome in laying hens: insights from microbiome and metabolomics.**Poultry science** , Volume: 103 Issue: 8 2024 Aug

Authors Cheng X,Hu Y,Kuang J,Guo X,Cao H,Wu H,Hu G,Zhuang Y

Cell-Free Supernatant of Bacillus subtilis G2B9-Q Improves Intestinal Health and Modulates Immune Response to Promote Mouse Recovery in Clostridium perfringens Infection.**Current microbiology** , Volume: 81 Issue: 8 2024 Jun 27

Authors Xu Z,Feng X,Song Z,Li X,Li K,Li M,Wang X,Liu B,Sun C

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

In vitro fermentation reveals an interplay relationship between oat β -glucan and human gut Bacteroides and their potential role in regulating gut cytokines.**Food & function** , Volume: 15 Issue: 15 2024 Jul 29

Authors Bai J,Wang J,Fan M,Li Y,Huang L,Wang L

Efficacy of Bacillus subtilis probiotic in preventing necrotic enteritis in broilers: a systematic review and meta-analysis.**Avian pathology : journal of the W.V.P.A** , 2024 Jul 3

Authors Ghimire S,Subedi K,Zhang X,Wu C

From whole genomes to probiotic candidates: A study of potential lactobacilli strains selection for vaginitis treatment.**Heliyon** , Volume: 10 Issue: 9 2024 May 15

Authors Lyu J,Gao M,Zhao S,Liu X,Zhao X,Zou Y,Zhong Y,Ge L,Zhang H,Huang L,Fan S,Xiao L,Zhang X

The Antimicrobial Activity of Combination of Vitamin D3 and Omega-3 against Pathogenic Microorganisms.**Combinatorial chemistry & high throughput screening** , 2024 May 14

Authors Al-Najjar MAA,Abdulrazzaq SB,Al-Shaer S,Barakat M,Omar A,Zrieq R,Hasen E,Abu Samak M

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

Adjudicative efficacy of Bifidobacterium animalis subsp. lactis BLA80 in treating acute diarrhea in children: a randomized, double-blinded, placebo-controlled study.**European journal of clinical nutrition** , Volume: 78 Issue: 6 2024 Jun

Authors Chen K,Jin S,Ma Y,Cai L,Xu P,Nie Y,Luo L,Yu Q,Shen Y,Zhou Z,Liu C

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

Evaluation of the antimicrobial activity of Eucalyptus radiata essential oil against Escherichia coli strains isolated from meat products.**Brazilian journal of biology = Revista brasleira de biologia** , Volume: 84 2024

Authors Santos B,Farias JHA,Simões MM,Medeiros MAA,Alves MS,Diniz AF,Soares APO,Cavalcante APTM,Silva BJN,Almeida JCS,Lemos JO,Rocha LES,Santos LC,Azevedo MLG,Vieira SWF,Araújo VE,Oliveira Filho AA

Antibacterial Potential of Essential Oils and Silver Nanoparticles against Multidrug-Resistant Staphylococcus pseudintermedius Isolates.**Pathogens (Basel, Switzerland)** , Volume: 13 Issue: 2 2024 Feb 9

Authors Meroni G,Laterza G,Tsikopoulos A,Tsikopoulos K,Vitalini S,Scaglia B,Iriti M,Bonizzi L,Martino PA,Soggiu A

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

Bacillus subtilis Induces Human Beta Defensin-2 Through its Lipoproteins in Human Intestinal Epithelial Cells.

Probiotics and antimicrobial proteins , 2024 Feb 20

Authors So YJ, Park OJ, Kwon Y, Im J, Lee D, Yun SH, Cho K, Yun CH, Han SH

Antimicrobial and Anti-Biofilm Activities of Coffea arabica L. Against the Clinical Strains Isolated From Diabetic Foot Ulcers.

Cureus , Volume: 16 Issue: 1 2024 Jan

Authors Zubair M

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

Milk to mucus: How B. fragilis colonizes the gut.

Cell host & microbe , Volume: 32 Issue: 2 2024 Feb 14

Authors Olm MR, Mueller NT

Effects of Oat β -Glucan and Inulin on Alleviation of Nonalcoholic Steatohepatitis Aggravated by Circadian Disruption in C57BL/6J Mice.

Journal of agricultural and food chemistry , Volume: 72 Issue: 7 2024 Feb 21

Authors Kei N, Cheung KK, Ma KL, Yau TK, Lauw S, Wong VWS, You L, Cheung PCK

Antibacterial activity of plant-derived compounds and cream formulations against canine skin bacteria.

Veterinary research communications , 2024 Feb 7

Authors Strompfová V, Štempelová L, Wolaschka T

Biofilm-Inhibitory Activity of Wild Mushroom Extracts against Pathogenic Bacteria.

Evidence-based complementary and alternative medicine : eCAM , Volume: 2024 2024

Authors Gebreyohannes G, Sbhatu DB, Nyerere AK, Gebrehiwot AG

Comparison of the effectiveness of red ginseng herbal mouth rinse with chlorhexidine and saline in oral cancer patients: A pilot double-blinded randomized control trial.

Journal of oral and maxillofacial pathology : JOMFP , Volume: 27 Issue: 4 2023 Oct-Dec

Authors Jeddy N, Saravanan R, Natrajan R, Sai Lakshmi LJ, Ashwath V, Singhal I

The pharmaceutical effect of Korean wild ginseng residue extract on the performance, microbiota quality, cytokine expression, and the ginseng saponin content of laying hen.

Poultry science , Volume: 103 Issue: 3 2024 Mar

Authors Tajudeen H, Ha S, Hosseindoust A, Mun J, Park S, Su CP, Kinara E, Kim J

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

Lactic acid fermentation of goji berries (Lycium barbarum) prevents acute alcohol liver injury and modulates gut microbiota and metabolites in mice.

Food & function , Volume: 15 Issue: 3 2024 Feb 5

Authors Duan W, Zhou L, Ren Y, Liu F, Xue Y, Wang FZ, Lu R, Zhang XJ, Shi JS, Xu ZH, Geng Y

Salvia officinalis-Hydroxyapatite Nanocomposites with Antibacterial Properties.

Polymers , Volume: 15 Issue: 23 2023 Nov 22

Authors Ciobanu SC, Predoi D, Chifiriuc MC, Iconaru SL, Predoi MV, Popa M, Rokosz K, Raaen S, Marinasc IC

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

Synthesis of New Derivatives of Berberine Canagliflozin and Study of Their Antibacterial Activity and Mechanism.

Molecules (Basel, Switzerland) , Volume: 29 Issue: 1 2024 Jan 4

Authors Li J, Hou X, Xiao J, Zhu L, Deng Y, Li Z, Zhao Z, Luo Z, Wei H

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

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

To Evaluate and Compare the Antimicrobial Efficacy of Various Disinfecting Agents on K-file against Gram-positive and

Gram-negative Bacteria of Endodontic Origin: An In Vitro Study.**International journal of clinical pediatric dentistry** , Volume: 16 Issue: Suppl 2 2023 Sep

Authors Opi K,Dhinsa K,Tripathi AM,Saha S

Effects of different wheat bran fermentation sources on growth performance, nutrient digestibility, serum antioxidant capacity and fecal microbiota in growing pigs.**Frontiers in veterinary science** , Volume: 10 2023

Authors Liu H,Ren X,Li Y,Cao Q,Yang L,Jiang S,Fu J,Gao J,Yan L,Li J,Yang W

Co-Aggregative Effect of Probiotics Bacteria against Diarrheal Causative Bacteria.**Archives of Razi Institute** , Volume: 78 Issue: 3 2023 Jun

Authors Rashad Hameed S,Abdul Sattar Salman J

The Impact of Berberine Loaded Selenium Nanoparticles on K. pneumoniae and Candida albicans Antibiotics Resistance Isolates.**Archives of Razi Institute** , Volume: 78 Issue: 3 2023 Jun

Authors Hasan MF,Jawad Kadhim M,Al-Awady MJ

Development of Highly Hygienic Textile by Coating with Encapsulated Ginseng Oil.**Polymers** , Volume: 15 Issue: 22 2023 Nov 8

Authors Ryu S,Shim J

Exploring the Bioactive Compounds in Some Apple Vinegar Samples and Their Biological Activities.**Plants (Basel, Switzerland)** , Volume: 12 Issue: 22 2023 Nov 14

Authors El Abdali Y,Saghrouchni H,Kara M,Mssillou I,Aillali A,Jardan YAB,Kafkas NE,El-Assri EM,Nafidi HA,Bourhia M,Almaary KS,Eloutassi N,Bouia A

Antibiofilm potential of gallic acid against Klebsiella pneumoniae and Enterobacter hormaechei: in-vitro and in-silico analysis.**Biofouling** , Volume: 39 Issue: 9-10 2023 Oct-Nov

Authors Rajan PP,Kumar P,Mini M,Jayakumar D,Vaikkathillam P,Asha S,Mohan A,S M

The Effects of Black Tea Consumption on Intestinal Microflora-A Randomized Single-Blind Parallel-Group, Placebo-Controlled Study.**Journal of nutritional science and vitaminology** , Volume: 69 Issue: 5 2023

Authors Tomioka R,Tanaka Y,Suzuki M,Ebihara S

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

Biological activities, therapeutic potential, and pharmacological aspects of blackcurrants (Ribes nigrum L): A comprehensive review.**Food science & nutrition** , Volume: 11 Issue: 10 2023 Oct

Authors Ejaz A,Waliat S,Afzaal M,Saeed F,Ahmad A,Din A,Ateeq H,Asghar A,Shah YA,Rafi A,Khan MR

Antitriazole, 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

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

Evaluation of the Antimicrobial Activity of Chitosan Nanoparticles against Listeria monocytogenes.**Polymers** , Volume: 15 Issue: 18 2023 Sep 14

Authors Pereira S,Costa-Ribeiro A,Teixeira P,Rodríguez-Lorenzo L,Prado M,Cerqueira MA,Garrido-Maestu A

Berberine: An inspiring resource for the treatment of colorectal diseases.**Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie** , Volume: 167 2023 Nov

Authors Cao F,Xia W,Dai S,Wang C,Shi R,Yang Y,Guo C,Xu XL,Luo J

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

In vitro antimicrobial and cytotoxic activity of Neem and Kirata herbal formulation mediated Silver nanoparticles.

Bioinformation , Volume: 18 Issue: 11 2022

Authors R R,Sp SD,B N,S R

Effect of hydrophobic property on antibacterial activities of green tea polysaccharide conjugates against Escherichia coli.

International journal of biological macromolecules , Volume: 253 Issue: Pt 1 2023 Dec 31

Authors Zhou Y,Liu W,Cao W,Cheng Y,Liu Z,Chen X

Bifidobacterium animalis subsp. lactis HN019 has antimicrobial activity against endodontic pathogens in vitro.

Brazilian journal of microbiology : [publication of the Brazilian Society for Microbiology] , 2023 Aug 26

Authors Araujo LDC,da Silva RAB,Silva CMPC,Salvador SLS,Messora MR,Furlaneto FAC,Mastrange MDA,Pucinelli CM,da Silva LAB

Antibacterial activity of Thymus vulgaris (thyme) essential oil against strains of Pseudomonas aeruginosa, Klebsiella pneumoniae and Staphylococcus saprophyticus isolated from meat product.

Brazilian journal of biology = Revista brasleira de biología , Volume: 83 2023

Authors Diniz AF,Santos B,Nóbrega LMMO,Santos VRL,Mariz WS,Cruz PSC,Nóbrega RO,Silva RL,Paula AFR,Santos JRDA,Pessôa HLF,Oliveira-Filho AA

The Effects of Bacillus subtilis QST713 and β -mannanase on growth performance, intestinal barrier function, and the gut microbiota in weaned piglets.

Journal of animal science , Volume: 101 2023 Jan 3

Authors Liu J,Ma X,Zhuo Y,Xu S,Hua L,Li J,Feng B,Fang Z,Jiang X,Che L,Zhu Z,Lin Y,Wu D

Revealing the Potential Impacts of Nutraceuticals Formulated with Freeze-Dried Jabuticaba Peel and Limosilactobacillus fermentum Strains Candidates for Probiotic Use on Human Intestinal Microbiota.

Probiotics and antimicrobial proteins , Volume: 16 Issue: 5 2024 Oct

Authors da Silva JYP,do Nascimento HMA,de Albuquerque TMR,Sampaio KB,Dos Santos Lima M,Monteiro M,Leite IB,da Silva EF,do Nascimento YM,da Silva MS,Tavares JF,de Brito Alves JL,de Oliveira MEG,de Souza EL

Liposomal Epigallocatechin-3-Gallate for the Treatment of Intestinal Dysbiosis in Children with Autism Spectrum Disorder: A Comprehensive Review.

Nutrients , Volume: 15 Issue: 14 2023 Jul 24

Authors de la Rubia Ortí JE,Moneti C,Serrano-Ballesteros P,Castellano G,Bayona-Babiloni R,Carriquí-Suárez AB,Motos-Muñoz M,Proaño B,Benlloch M

Protective Effects of Bacillus subtilis HH2 against Oral Enterotoxigenic Escherichia coli in Beagles.

Veterinary sciences , Volume: 10 Issue: 7 2023 Jul 3

Authors Yang J,Zhang X,Zhou Z,Li C,Luo R,Liu H,Fu H,Zhong Z,Shen L,Cao S,Luo Y,Li D,Peng G

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

Limosilactobacillus fermentum CECT5716: Clinical Potential of a Probiotic Strain Isolated from Human Milk.

Nutrients , Volume: 15 Issue: 9 2023 May 6

Authors Ozen M,Piloquet H,Schaubeck M

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

Harnessing the probiotic properties and immunomodulatory effects of fermented food-derived Limosilactobacillus fermentum strains: implications for environmental enteropathy.

Frontiers in nutrition , Volume: 10 2023

Authors Prakash V,Madhavan A,Veedu AP,Babu P,Jothish A,Nair SS,Suhail A,Prabhakar M,Sain T,Rajan R,Somanathan P,Abhinand K,Nair BG,Pal S

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

Engineered Bacillus subtilis alleviates intestinal oxidative injury through Nrf2-Keap1 pathway in enterotoxigenic Escherichia coli (ETEC) K88-infected piglet.**Journal of Zhejiang University. Science. B** , Volume: 24 Issue: 6 2023 Jun 15

Authors Wen C,Zhang H,Guo Q,Duan Y,Chen S,Han M,Li F,Jin M,Wang Y

Biological control of foodborne pathogens by lactic acid bacteria: A focus on juice processing industries.**Revista Argentina de microbiología** , Volume: 55 Issue: 4 2023 Oct-Dec

Authors Tarifa MC,Agustín MDR,Brugnoni LI

Comparative Evaluation of the Inhibitory Effect of Lactobacillus rhamnosus on Halitosis-Causing Bacteria: An InvitroMicrobiological Study.**Cureus** , Volume: 15 Issue: 5 2023 May

Authors Patil AV,Shetty SS,Padhye AM

Fungal β -glucan-facilitated cross-feeding activities between Bacteroides and Bifidobacterium species.**Communications biology** , Volume: 6 Issue: 1 2023 May 30

Authors Fernandez-Julia P,Black GW,Cheung W,Van Sinderen D,Munoz-Munoz J

Degradation of xylan by human gut Bacteroides xylanisolvens XB1A.**Carbohydrate polymers** , Volume: 315 2023 Sep 1

Authors Zhao T,Yue H,Peng J,Nie Y,Wu L,Li T,Niu W,Li C,Zhang Z,Li M,Ding K