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 Methane | CH4 CH4 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

Our Facebook Discussion Page

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

Bacteria being targeted by suggestions.

These bacteria levels were deemed atypical

Bacteria Name	Rank	Shift	Taxonomy ID
Methylococcus capsulatus	species		414
Methylomonas methanica	species		421
Methylosinus trichosporium	species		426
Methylotuvimicrobium buryatense	species		95641
Methylomonas sp. LW13	species		107637
Methylocystis heyeri	species		391905
Methylocystis bryophila	species		655015
Methylocaldum marinum	species		1432792
Methylomagnum ishizawai	species		1760988
Candidatus Methylospira mobilis	species		1808979
Methylocystis parvus	species		134
Nitrosomonas europaea	species		915
Nitrosomonas eutropha	species		916
Nitrosococcus oceani	species		1229
Nitrosospira multiformis	species		1231
Mycolicibacterium chubuense	species		1800
Mycolicibacterium rhodesiae	species		36814
Nitrosomonas communis	species		44574
Nitrosomonas ureae	species		44577
Hydrogenophaga pseudoflava	species		47421
Nitrosococcus halophilus	species		133539
Mycolicibacterium holsaticum	species		152142
Nitrosomonas sp. AL212	species		153948
Methylocystis rosea	species		173366
Methylocystis sp. SC2	species		187303
Methylocella silvestris	species		199596
Methylocella tundrae	species		227605
Nitrosomonas sp. Is79A3	species		261292
Methylotuvimicrobium alcaliphilum	species		271065
Methylacidiphilum kamchatkense	species		431057
Nitrosococcus watsonii	species		473531
Mycobacterium dioxanotrophicus	species		482462
Candidatus Methylacidiphilum infernorum	species		511746
Candidatus Nitrosacidococcus tergens	species		553981
Candidatus Methylomirabilis oxygeniifera	species		671143
Methylomonas koyamae	species		702114
Methylomonas paludis	species		1173101
Nitrosospira lacus	species		1288494
Methylogaea oryzae	species		1295382
Nitrosomonas stercoris	species		1444684
Methylomonas denitrificans	species		1538553
Candidatus Nitrosoglobus terrae	species		1630141
Methylovulum psychrotolerans	species		1704499
Candidatus Nitrospira inopinata	species		1715989
Methylomonas sp. DH-1	species		1727196
Nitrosococcus wardiae	species		1814290
Azoarcus sp. DD4	species		2027405
Nocardia tengchongensis	species		2055889
Burkholderia sp. JP2-270	species		2217913
Burkholderia thailandensis	species		57975
Pseudomonas fluorescens	species		294
Ralstonia pickettii	species		329
Stutzerimonas stutzeri	species		316
Shigella boydii	species		621
Desulfovibrio desulfuricans	species		876
Clostridium pasteurianum	species		1501
Marinobacter nauticus	species		2743
Rhodococcus opacus	species		37919
Pandoraea pnomenusa	species		93220
Variovorax paradoxus	species		34073

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

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'.

- bacillus
- bacillus,lactobacillus,streptococcus,saccharomyces probiotic
- Bovine Milk Products {Dairy}
- Cinnamomum zeylanicum {Ceylon Cinnamon} 6 gram/day
- Curcuma amada {Mango ginger}
- Curcuma longa {Turmeric} 3000 mg/day
- Diferuloylmethane {Curcumin} 3 gram/day
- foeniculum vulgare,fennel
- fruit
- fruit/legume fibre
- Lacticaseibacillus casei {L. casei} 48 BCFU/day
- Lactobacillus plantarum {L. plantarum} 60 BCFU/day
- Metha family {Mint}
- Nigella sativa {black cumin} 1000 mg/day
- Ocimum basilicum {Basil}
- origanum vulgare {oregano}
- polyphenols 2 gm/day
- Probiotic Mixture 1 {Japanese Vet Probiotic}
- Probiotic Mixture 2 {Vetafarm Probotic}
- Propolis {Bee glue}
- Saccharomyces cerevisiae var boulardii {S. boulardii} 6 BCFU/day
- syzygium aromaticum {clove} 3 gm/day
- Thymus vulgaris {thyme} 60 mg/kg/day
- yogurt
- Zingiber officinale Roscoe {ginger} 3 g/day

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

Retail Probiotics

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

- Global Healing Center / FloraTrex
- Bioflora (Mx) / BIOFLORA / 30 BILLION 10 strains
- Next Generation
- natviehealthcare.com/Renewbiome Mega
- SuperSmart / Probio Forte
- SuperSmart / Full Spectrum Probiotic Formula
- SuperSmart / Derma Relief
- Advanced Bio-Cultures / Advance Multi Strain Probiotics
- Physician Choice /60 Billion Probiotics
- Garden of Life / Dr. Formulated Once Daily Women's
- Invivo / Bio.Me Femme UT
- Ombre / Healthy Gut
- Krauterhaus / Lactopro
- Dr. Mercola / Complete Probiotics
- Lake Avenue Nutrition / Probiotics 10 Strain Blend
- MegaFood / MegaFlora
- SuperSmart / Lactoxira
- Northwest Natural Products / PB8
- Physis / Advance Probiotics
- OMNi-BiOTiC®/ TRAVEL
- 7 AM Ultra Probiotics
- ASEA VIA / BIOME
- HLH BIOPHARMA(DE) / LACTOBACT ® PREMIUM
- HLH BIOPHARMA(DE) / LACTOBACT ® 60PLUS
- elixa / probiotic
- 1 md / complete probiotics platinum
- renew life / ultimate flora
- garden of life / primal defense
- hyperbiotics / pro-15
- jarrow formula / jarro-dophilus original
- jarrow formula / ideal bowel support® lp299v®
- jarrow formulas / jarro-dophilus® ultra
- newrhythm / probiotics 20 stains
- up4 / ultra
- bioglan bio (au) / happy probiotic 100
- bioglan bio (au) / happy probiotic 50
- nature's way (au) / restore probiotic 100 billion
- Realdose
- Winclove Probiotics / Ecologic®825
- renew life men's probiotic - ultimate
- vita miracle / ultra-30 probiotics
- bioray / cytoflora
- seed / female version
- quantum wellness / restora flora
- nature's bounty / probioti 10
- fairvital / microflora basic
- fürstenmed / lacto-bifido
- jarrow formulas / jarro-dophilus eps
- udo's choice /super 8 gold
- visbiome
- probiotic pur (de) / realdose nutrition
- organic 3 / primal gut
- douglas laboratories / multi probiotic 40 billion
- vinco / probiotic eight 65

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

theramedix / probiotic
biospec / probiotic-5
zint nutrition / probiotic collagen +
just for tummies / live bacteria
organic 3 / yeastbiotic
microbiome labs / restorflora
organic 3 / gutpro
young living/life 9
optibac / for your cholesterol
optibac / saccharomyces boulardii
spain (es) / axiboulardi
spain (es) / ultralevura
spain (es) / l3.1
spain (es) / vivomixx
bio-k+
goodbelly drink
klaire labs / target gb-x
solaray / mycrobiome probiotic colon formula
ferring / vsl#3
nature's instincts / ultra spore probiotic
florastor / florastor
seed / male version
lifted naturals / mood boosting probiotic
custom probiotics / four strain lactobacilli
custom probiotics / six strain probiotic powder
Jetson (US) / Immunity Probiotics
ecology_allergycare
nature's way (au) /restore probiotic bowel & colon health 30s
up4 / adult
up4 /women's
naturopathica (au) /gastrohealth probiotic ultimate daily care 100billion
naturopathica (au) / gastrohealth probiotic dairy free 50 billion
naturopathica (au) / gastrohealth probiotic dairy free 20 bcfu
HLH BIOPHARMA(DE) / LACTOBACT ® OMNI FOS
HLH BIOPHARMA(DE) / LACTOBACT ® LDL-CONTROL
OMNi-BiOTiC®/ 10 AAD
Seeking Health / Probiota HistaminX
CustomProbiotics.com / L. Casei Probiotic Powder
CustomProbiotics.com / L. Plantarum Probiotic Powder
LiveWell Nutrition / Pro-45
Thryve Inside/ L.Reu,Rham,Casi; B.Lactis
Sash Vitality /Bio-Cultures Probiotics for Adults
NaturalPharma / Profit Probiotics
Floradapt Cardio
Floradapt Gut Comfort
HMF Metabolic
Immune Defense Daily Chewable Probiotic
Nature's Lab Cardio
Nature's Lab Intensive GI
Probiotic 10 Billion Active Cells Daily Maintenance
Purica Probiotic Cardio
Purica Probiotic Intensive GI
Symprove™
UltraFlora® Immune Booster
UltraFlora® Intensive Care
Maple Life Science™ / Lactobacillus plantarum
Wakunaga / Max Probiotic
SuperSmart / Saccharomyces Boulardii

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

SuperSmart / Vaginal Health
PharmExtracta (IT) / INatal Sachets
Eden's / 3-in-1 Synbiotic Superblend
Schwabe Pharma Italia / AxiBoulardi
Bromatech / ENTERELLE PLUS
Bromatech(IT) / FEMELLE
imagilin / NutriLots Replenish
ProbioMax® Daily DF
Resbiotic /resB® Lung Support
Ombre / Metabolic Booster
Ombre / Endless Energy
Ombre / Heart Health
Ombre / Ultimate Immunity
NOW FOODS / Clinical GI Probiotic
ImmuneBiotech Medical Sweden AB / GutMagnific®
Bromatech (IT) / Adomelle
Bromatech (IT) / Citogenex
Bromatech (IT) / Enterelle
Smidge /Sensitive Probiotic
Ombre / Mood Enhancer
Wholesome Wellness / Raw Probiotic
Bio Schwartz / Advance Strength Probiotics (40 BCFU)
Metabolics / Lactobacillus Plantarum Powder
SuperSmart / Lactobacillus Plantarum Postbiotic (Pasturerized)
SuperSmart / Candalb
Bioflora (MX) / BIOFLORAMX / 50 BILLION 10 Strains
Bulk Probiotics / Saccharomyces boulardii Probiotic Powder (Digestive Support)
Bulk Probiotics / L. Plantarum Probiotic Powder
Bulk Probiotics / L. Casei Probiotic Powder (Candida Support)

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

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

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.

N-L-a-aspartyl-L-phenylalanine methyl ester {aspartame}	**Ulmus rubra {slippery elm}**

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

Sample of Literature Used

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

Antibacterial efficacy and mechanism of action of VTC3-knockout Saccharomyces cerevisiae against multidrug- resistant pathogenic bacteria.
Frontiers in microbiology , Volume: 17 2026
Authors Yang W,Li M,Zhang Y,Hu K,Lu B,Yuan A,Zhu Z,Li Y

Selective aqueous-based recovery of curcuminoids, ferulic acid and starch from turmeric (Curcuma longa L.) powder and their antibacterial activities.
Natural product research , 2026 Nov 6
Authors Vadariya HA,Mehta NA,Haldar S,Adimurthy S

Curcumin Attenuates Escherichia coli-Induced Enteritis and Macrophage Inflammation in Broilers.
Animals : an open access journal from MDPI , Volume: 16 Issue: 18 2026 Sep 19
Authors Xu H,Tang Y,Zhang S,Wang G

Antibacterial, Phytochemical, and Antioxidant Properties of Propolis Extracts Obtained Using Different Solvents Against Multidrug-Resistant Bacteria.
Pathogens (Basel, Switzerland) , Volume: 15 Issue: 7 2026 Jul 17
Authors Reyna-Fuentes JH,González-Alanis P,Blanco-Martínez Z,Benavides-González F,Urbizu-González AL,Vázquez-Sauceda ML,Mireles-Villanueva MV

Dissolved Oxygen Removal From Aqueous Phase of Prepared Thyme Essential Oil in Water Nanoemulsions and Assessment of Their Physico-Chemical Properties and Antibacterial Activities.
Journal of food science , Volume: 91 Issue: 7 2026 Jul
Authors Ahmadi O,Jafarizadeh-Malmiri H

Alginate Micro-fibers encapsulated with oregano essential oil with improved antibacterial efficacy.
RSC advances , 2026 Jul 17
Authors Orisawayi AO,Hao L,Badruddin IJ,Tiwari S,Bashawri ME,Kumawat N,Venkatraman PD,Butler JA,Britten NS,Koziol KK,Rahatekar SS

Inhibition of Biogenic Amine Production in Tyrosine Decarboxylase Broth Using Supercritical CO(2) Extracts of Oregano, Cumin, Black Pepper, and Red Pepper.
Food science & nutrition , Volume: 14 Issue: 7 2026 Jul
Authors Al Bayati MHM,Cengiz MF,Bouali M,Yerlikaya P

Dietary inclusion of black cumin (Nigella sativa L.) seed meal in broiler chickens: Effects on growth performance, cecal microbiota, and cost efficiency.
Veterinary and animal science , Volume: 34 2026 Dec
Authors Tilahun M,Urge M,Girma M,Ameha N,Gadissa S,Welay K

Pharmacological evaluation of selected medicinal plant extracts against multidrug-resistant Klebsiella pneumoniae: implications for inflammation-associated respiratory infections.
Inflammopharmacology , 2026 Apr 6
Authors Afzal A

Development and characterization of polyherbal formulation from Allium sativum, Cuminum cyminum, Cinnamomum verum, Elettaria cardamomum and Zingiber officinale with therapeutic potential against sinusitis-associated pathogens.
Pakistan journal of pharmaceutical sciences , Volume: 39 Issue: 6 2026 Jun
Authors Rehman MT,Shahid M,Hussain F,Akhtar B

Efficacy of probiotic supplementation in preventing Clostridioides difficile infection: an umbrella review of systematic reviews and meta-analysis.
Frontiers in nutrition , Volume: 13 2026
Authors Chen W,Pan X,Ji J,Wu Z,Lin X

Saccharomyces cerevisiae 48338 Suppresses Antibiotic-Induced Clostridioides difficile Infection in a Murine Model.
Probiotics and antimicrobial proteins , 2026 Mar 6
Authors Kim E,Kim H,Lee M,Kim B,Kim B,Kim H,Kim D,Kang D,Shatta A,Kim JY,Holzapfel WH,Yoon H

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

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

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

Photothermic Release of Curcumin for Antimicrobial Photodynamic Therapy.
ACS omega , Volume: 10 Issue: 48 2025 Dec 9
Authors Trigo-Gutierrez JK,Medaglia S,Aznar E,Martínez-Máñez R,Mima EGO

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

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

Green Synthesis of Copper, Iron and Silver Nanoparticles from Origanum vulgare L. subsp. vulgare; Characterization, In Vitro Enzyme Inhibition, Antimicrobial Activities and In Silico Molecular Docking Studies.
Molecular biotechnology , 2025 Nov 29
Authors Aragan A,Imece A,Yigit A,Basar Y,Ertas M,Samsa CG,Ozturk D,Genç H

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

Comparative Molecular Profiling and Bioactivity Analysis of Algerian Propolis: Antioxidant, Antibacterial Activities, and In Silico NRF2-KEAP1 Pathway Modulation.
Current issues in molecular biology , Volume: 47 Issue: 9 2025 Sep 15
Authors Reguig A,Messai A,Bedaida IK,Pinto DCGA,Bensouici C,Ouamane AT,Silva AMS,Roy JP

Biochemical description of ozonized propolis and its activity against pathogenic microorganisms, cancer cells, and inflammation with molecular docking interaction.
PloS one , Volume: 20 Issue: 9 2025
Authors Al-Rajhi AMH,Alsalamah SA,Qanash H,Bazaid AS,Aldarhami A,Felemban HR,Gattan HS,AlZamil NM,Daws D,Abdelghany TM

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

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

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

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

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.

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

Bioresource technology , 2025 Apr 12
Authors Shingade JA,Padalkar NS,Shin JH,Kim YH,Park TJ,Park JP,Patil AR
Chemical Characterization and Antibiotic-Enhancing Activity of the Essential Oils of Propolis of Melipona quadrifasciata quadrifasciata.
Plants (Basel, Switzerland) , Volume: 14 Issue: 4 2025 Feb 14
Authors Albuquerque ES,Paulo CLR,de Oliveira Borges JA,Gonçalves SA,Alencar GG,Ferreira do Carmo J,de Morais Almeida AI,Santos MLD,Almeida-Bezerra JW,da Silva LE,Oliveira-Tintino CDM,Coutinho HDM
Analysis of Polyphenols from Polygala major Jacq.
Antioxidants (Basel, Switzerland) , Volume: 14 Issue: 2 2025 Jan 27
Authors Yilmazer Keskin S,Avci A,Arif Ali Ali L,Keskin CS
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
Antimicrobial activities of seasonally collected bee products: honey, propolis, royal jelly, venom, and mellitin.
Brazilian journal of biology = Revista brasleira de biologia , Volume: 84 2024
Authors Obeidat M,Haddad MA,Ghnamat SA
Effect of ozonation on the phytochemicals of black seed oil and its anti-microbial, anti-oxidant, anti-inflammatory, and anti-neoplastic activities in vitro.
Scientific reports , Volume: 14 Issue: 1 2024 Dec 11
Authors Al-Rajhi AMH,Abdelghany TM,Almuhayawi MS,Alruhaili MH,Saddiq AA,Baghdadi AM,Al Jaouni SK,Albasri HM,Waznah MS,Alraddadi FA,Selim S
Zingiber officinale Uncovered: Integrating Experimental and Computational Approaches to Antibacterial and Phytochemical Profiling.
Pharmaceuticals (Basel, Switzerland) , Volume: 17 Issue: 11 2024 Nov 19
Authors Sulieman AME,Ibrahim SM,Alshammari M,Abdulaziz F,Idriss H,Alanazi NAH,Abdallah EM,Siddiqui AJ,Shommo SAM,Jamal A,Badraoui R
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
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
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
Dipeptides from Lactiplantibacillus plantarum limit Pseudomonas aeruginosa pathogenesis.
Journal of applied microbiology , Volume: 135 Issue: 11 2024 Nov 4
Authors Narasimulu J,Baburajan N,Saravanan TS,Raorane CJ,Vaidyanathan VK,Ravichandran V,Rajasekharan SK
Eugenol and Basil essential oil as priming agents for enhancing arabidopsis immune response.
Bioscience, biotechnology, and biochemistry , 2024 Nov 5
Authors Hirose S,Horiyama S,Morikami A,Fujiwara K,Tsukagoshi H
Ocimum basilicum seed-mediated green synthesis of silver nanoparticles: characterization and evaluation of biological properties.
Discover nano , Volume: 19 Issue: 1 2024 Oct 28
Authors Fatima S,Shahid H,Zafar S,Arooj I,Ijaz S,Elahi A
Bone Healing via Carvacrol and Curcumin Nanoparticle on 3D Printed Scaffolds.
Small (Weinheim an der Bergstrasse, Germany) , 2024 Oct 27
Authors Dahiya A,Chaudhari VS,Bose 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
Antimicrobial Activity of Honey and Propolis from Alba County, Romania.

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

Antibiotics (Basel, Switzerland) , Volume: 13 Issue: 10 2024 Oct 10
Authors Vica ML,Glevitzky M,Dumitrel GA,Popa M,Glevitzky I,Teodoru CA
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
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
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
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
In Vitro Antimicrobial Potential of Portuguese Propolis Extracts from Gerês against Pathogenic Microorganisms.
Antibiotics (Basel, Switzerland) , Volume: 13 Issue: 7 2024 Jul 16
Authors Oliveira RD,Araújo C,Almeida-Aguiar C
Unlocking the therapeutic potential of Nigella sativa extract: phytochemical analysis and revealing antimicrobial and antioxidant marvels.
BMC complementary medicine and therapies , Volume: 24 Issue: 1 2024 Jul 12
Authors Rahman AU,Abdullah A,Faisal S,Mansour B,Yahya G
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
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
3D printed scaffolds with quercetin and vitamin D3 nanocarriers: In vitro cellular evaluation.
Journal of biomedical materials research. Part A , 2024 Jun 18
Authors Bose S,Chaudhari VS,Kushram P
Multifunctional chitosan-cross linked- curcumin-tannic acid biocomposites disrupt quorum sensing and biofilm formation in pathogenic bacteria.
International journal of biological macromolecules , Volume: 271 Issue: Pt 1 2024 Jun
Authors Khan ZA,Wani MY,Ahmad A,Basha MT,Aly NA,Yakout AA
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
Ginger Polyphenols Reverse Molecular Signature of Amygdala Neuroimmune Signaling and Modulate Microbiome in Male Rats with Neuropathic Pain: Evidence for Microbiota-Gut-Brain Axis.
Antioxidants (Basel, Switzerland) , Volume: 13 Issue: 5 2024 Apr 23
Authors Shen CL,Santos JM,Elmassry MM,Bhakta V,Driver Z,Ji G,Yakhnitsa V,Kiritoshi T,Lovett J,Hamood AN,Sang S,Neugebauer V
Insights into the antioxidant, anti-inflammatory and anti-microbial potential of Nigella sativa essential oil against oral pathogens.
Scientific reports , Volume: 14 Issue: 1 2024 May 24
Authors Bhavikatti SK,Zainuddin SLA,Ramli RB,Nadaf SJ,Dandge PB,Khalate M,Karobari MI
Nanoemulsion of cinnamon oil to combat colistin-resistant Klebsiella pneumoniae and cancer cells.
Microbial pathogenesis , Volume: 192 2024 Jul

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

Authors El-Sherbiny GM,Kalaba MH,Foda AM,M E S,Youssef ASE,A Elsehemy I,Farghal EE,El-Fakharany EM

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

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

Determination of total phenolics, flavonoids, and testing of antioxidant and antibacterial activities of red ginger (Zingiber officinale var. Rubrum).

Journal of advanced veterinary and animal research , Volume: 11 Issue: 1 2024 Mar

Authors Haroen U,Syafwan S,Kurniawan K,Budiansyah A

Influence of Gelatin and Propolis Extract on Honey Gummy Jelly Properties: Optimization Using D-Optimal Mixture Design.

Gels (Basel, Switzerland) , Volume: 10 Issue: 4 2024 Apr 21

Authors Kaewpetch K,Yolsuriyan S,Disayathanoowat T,Phokasem P,Jannu T,Renaldi G,Samakradhamrongthai RS

Functional evaluation of Bacillus licheniformis PF9 for its potential in controlling enterotoxigenic Escherichia coli in weaned piglets.

Translational animal science , Volume: 8 2024

Authors Xu H,Gong J,Lu P,Azevedo P,Li L,Yu H,Yang C

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

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

Anti-Quorum Sensing and Anti-Biofilm Activity of Ginger (Zingiber officinale) Rhizomes against Multidrug-Resistant Clinical Isolates of Pseudomonas aeruginosa.

Avicenna journal of medical biotechnology , Volume: 16 Issue: 1 2024 Jan-Mar

Authors Sagar PK,Sharma P,Singh R

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

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

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

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

Molecular docking, molecular dynamics simulation, and MM/PBSA analysis of ginger phytocompounds as a potential inhibitor of AcrB for treating multidrug-resistant Klebsiella pneumoniae infections.

Journal of biomolecular structure & dynamics , 2024 Jan 2

Authors Sahoo M,Behera DU,Gaur M,Subudhi E

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

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

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
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
Bacillus coagulans prevents the decline in average daily feed intake in young piglets infected with enterotoxigenic Escherichia coli K88 by reducing intestinal injury and regulating the gut microbiota.

Frontiers in cellular and infection microbiology , Volume: 13 2023
Authors Zhang Y,Tian X,Dong Y,Li R,Shen M,Yi D,Wu T,Wang L,Zhao D,Hou Y
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
Microfluidic-based nanoemulsion of Ocimum basilicum extract: Constituents, stability, characterization, and potential biomedical applications for improved antimicrobial and anticancer properties.

Microscopy research and technique , Volume: 87 Issue: 3 2024 Mar
Authors Ahmad I,Al-Dolaimy F,Kzar MH,Kareem AT,Mizal TL,Omran AA,Alazbjee AAA,Obaidur Rab S,Eskandar M,Alawadi AH,Alsalamy A
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
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
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
Effect of ginger essential oil and 6-gingerol on a multispecies biofilm of Listeria monocytogenes, Salmonella Typhimurium, and Pseudomonas aeruginosa.

Brazilian journal of microbiology : [publication of the Brazilian Society for Microbiology] , Volume: 54 Issue: 4 2023 Dec
Authors Dos Santos EAR,Tadielo LE,Schmiedt JA,Possebon FS,Pereira MO,Pereira JG,Dos Santos Bersot L
Antibiotic-Potentiating Effect of Some Bioactive Natural Products against Planktonic Cells, Biofilms, and Virulence Factors of Pseudomonas aeruginosa.

BioMed research international , Volume: 2023 2023
Authors Chimi LY,Bisso BN,Njateng GSS,Dzoyem JP
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 biologia , 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
Probiotic yeast Saccharomyces cerevisiae Az-12 isolated from pomegranate juice presented inhibitory effects against pathogenic bacteria.

Brazilian journal of biology = Revista brasleira de biologia , Volume: 83 2023
Authors Latif AS,Saparbekova AA,Akhmedova ZR,Kaldybekova G,Daugaliyeva ST
Supplementation of ginger root extract into broiler chicken diet: effects on growth performance and immunocompetence.

Poultry science , Volume: 102 Issue: 10 2023 Jul 11
Authors Dosu G,Obanla TO,Zhang S,Sang S,Adetunji AO,Fahrenholz AC,Ferket PR,Nagabhushanam K,Fasina YO
Physicochemical, Rheological, and Sensory Characteristics of Yogurt Fermented by Lactic Acid Bacteria with Probiotic Potential and Bioprotective Properties.

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.

Foods (Basel, Switzerland) , Volume: 12 Issue: 13 2023 Jun 29
Authors Hoxha R,Evstatieva Y,Nikolova D
Assessment of anticancer, antimicrobial, antidiabetic, anti-obesity and antioxidant activity of Ocimum Basilicum seeds essential oil from Palestine.

BMC complementary medicine and therapies , Volume: 23 Issue: 1 2023 Jul 4
Authors Eid AM,Jaradat N,Shraim N,Hawash M,Issa L,Shakhsher M,Nawahda N,Hanbali A,Barahmeh N,Taha B,Mousa A
Cell-free supernatant of probiotic bacteria exerted antibiofilm and antibacterial activities against Pseudomonas aeruginosa: A novel biotic therapy.

Frontiers in pharmacology , Volume: 14 2023
Authors Drumond MM,Tapia-Costa AP,Neumann E,Nunes ÁC,Barbosa JW,Kassuha DE,Mancha-Agresti 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
Phyto-Inhibitory and Antimicrobial Activity of Brown Propolis from Romania.

Antibiotics (Basel, Switzerland) , Volume: 12 Issue: 6 2023 Jun 5
Authors Vica ML,Glevitzky M,Heghedus-Mîndru RC,Dumitrel GA,Heghedus-Mîndru G,Popa M,Faur DM,Bâlici ?,Teodoru CA
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
Dietary Bacillus licheniformis shapes the foregut microbiota, improving nutrient digestibility and intestinal health in broiler chickens.

Frontiers in microbiology , Volume: 14 2023
Authors Han Y,Xu X,Wang J,Cai H,Li D,Zhang H,Yang P,Meng K
Antioxidant and Antimicrobial Properties of Hydrolysed Collagen Nanofibers Loaded with Ginger Essential Oil.

Materials (Basel, Switzerland) , Volume: 16 Issue: 4 2023 Feb 8
Authors Berechet MD,Gaidau C,Nešic A,Constantinescu RR,Simion D,Niculescu O,Stelescu MD,Sandulache I,Râpa M

©2026 Lassesen Consulting, LLC. All Rights Reserved. Not for distribution by any organization without license.