## **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 <a href="Kyoto Encyclopedia of Genes and Genomes">KEGG: Kyoto Encyclopedia of Genes and Genomes</a>. 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** 

# **Bacteria being targeted by suggestions.**

These bacteria levels were deemed atypical

Bacteria Name	Rank	Shift Taxonomy ID	Bacteria Name	Rank Shift	Taxonomy
Methylococcus capsulatus	species			_	ID
Methylomonas methanica	species	421	Nitrosococcus watsonii	species	473531
Methylosinus trichosporium	species	426	Mycobacterium dioxanotrophicus	species	482462
Methylotuvimicrobium buryatense	species		Candidatus Methylacidiphilum	species	511746
Methylomonas sp. LW13	species	107637	infernorum		FF2004
Methylocystis heyeri	species	391905	Candidatus Nitrosacidococcus tergens	species	553981
Methylocystis bryophila	species	655015	Candidatus Methylomirabilis oxygeniifera	species	671143
Methylocaldum marinum	species	1432792	Methylomonas koyamae	species	702114
Methylomagnum ishizawai	species	1760988	Methylomonas paludis	<u>.</u>	1173101
Candidatus Methylospira mobilis	species	1808979	<u>.                                      </u>	species	1288494
Methylocystis parvus	species	134	Nitrosospira lacus	species	
Nitrosomonas europaea	species	915	Methylogaea oryzae	species	1295382
Nitrosomonas eutropha	species	916	Nitrosomonas stercoris	species .	1444684
Nitrosococcus oceani	species	<u>122</u> 9	Methylomonas denitrificans	species	1538553
Nitrosospira multiformis	species	i 1231	Candidatus Nitrosoglobus terrae	species	1630141
Mycolicibacterium chubuense	species	1800	Methylovulum psychrotolerans	species	1704499
Mycolicibacterium rhodesiae	species	36814	Candidatus Nitrospira inopinata	species	1715989
Nitrosomonas communis	species	44574	Methylomonas sp. DH-1	species	1727196
Nitrosomonas ureae	species	44577	Nitrosococcus wardiae	species	1814290
Hydrogenophaga pseudoflava	species		Azoarcus sp. DD4	species	2027405
Nitrosococcus halophilus	species		Nocardia tengchongensis	species	2055889
Mycolicibacterium holsaticum	species		Burkholderia sp. JP2-270	species	2217913
Nitrosomonas sp. AL212	species		Burkholderia thailandensis	species	57975
Methylocystis rosea	species		Pseudomonas fluorescens	species	294
Methylocystis sp. SC2	species		Ralstonia pickettii	species	329
Methylocella silvestris	species		Stutzerimonas stutzeri	species	<b>31</b> 6
Methylocella tundrae	species		Shigella boydii	species	621
Nitrosomonas sp. Is79A3	•		Desulfovibrio desulfuricans	species	876
1410301101103 3p. 131 3A3	species	261292	Clostridium pasteurianum	species	1501
Methylotuvimicrobium alcaliphilum	n species	271065	Marinobacter nauticus	species	2743
Methylacidiphilum kamchatkense	species	431057	Rhodococcus opacus	species	37919
			Pandoraea pnomenusa	species	93220
			Variovorax paradoxus	species	34073

### **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'.

Ayurvedic herbal formula {Triphala} 9000 mg/day
Cinnamomum zeylanicum {Ceylon Cinnamon} 6 gram/day
Coriandrum sativum {Coriander}
Diferuloylmethane {Curcumin} 3 gram/day
foeniculum vulgare,fennel
Lacticaseibacillus casei {L casei} 48 BCFU/day
Lactobacillus plantarum {L plantarum} 60 BCFU/day

Nigella sativa {black cumin} 1000 mg/day origanum vulgare {oregano} Pimpinella anisum {Anise} 450 mgm/day rosmarinus officinalis {rosemary} syzygium aromaticum {clove} Thymus vulgaris {thyme} trachyspermum ammi {Ajwain} Zingiber officinale Roscoe {ginger}

#### **Retail Probiotics**

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

theramedix / probiotic

newrhythm / probiotics 20 stains

Lake Avenue Nutrition / Probiotics 10 Strain Blend

Winclove Probiotics / Ecologic®825

ASEA VIA / BIOME

fürstenmed / lacto-bifido

jarrow formula / jarro-dophilus original

HLH BIOPHARMA(DE) / LACTOBACT ® PREMIUM

Krauterhaus / Lactopro

udo's choice / super 8 gold

Advanced Bio-Cultures / Advance Multi Strain Probiotics

elixa / probiotic

bioray / cytoflora

renew life / ultimate flora

up4/ultra

Bioflora (Mx) / BIOFLORA / 30 BILLION 10 strains

bioglan bio (au) / happy probiotic 100

Global Healing Center / FloraTrex

SuperSmart / Lactoxira

douglas laboratories / multi probiotic 40 billion

visbiome

garden of life / primal defense

renew life men's probiotic - ultimate

SuperSmart / Full Spectrum Probiotic Formula

7 AM Ultra Probiotics

quantum wellness / restora flora

vita mirade / ultra-30 probiotics

jarrow formula / ideal bowel support® lp299v®

HLH BIOPHARMA(DE) / LACTOBACT ® 60PLUS

**Next Generation** 

Northwest Natural Products / PB8

jarrow formulas / jarro-dophilus eps

SuperSmart / Probio Forte

seed / female version

jarrow formulas / jarro-dophilus® ultra

Physician Choice /60 Billion Probiotics

1 md / complete probiotics platinum

nature's bounty / probioti 10

SuperSmart / Derma Relief

fairvital / microflora basic

MegaFood / MegaFlora

Invivo / Bio.Me Femme UT

OMNi-BIOTIC®/ TRAVEL

organic 3 / primal gut

Physis / Advance Probiotics

Dr. Mercola / Complete Probiotics

Garden of Life / Dr. Formulated Once Daily Women's

vinco / probiotic eight 65

hyperbiotics / pro-15

nature's way (au) / restore probiotic 100 billion

bioglan bio (au) / happy probiotic 50

HLH BIOPHARMA(DE) / LACTOBACT ® LDL-CONTROL

Immune Defense Daily Chewable Probiotic

seed / male version

solaray / mycrobiome probiotic colon formula

Maple Life Science™ / Lactobacillus plantarum

lifted naturals / mood boosting probiotic

NOW FOODS / Clinical GI Probiotic

**Purica Probiotic Cardio** 

ecology\_allergycare

Floradapt Cardio

HLH BIOPHARMA(DE) / LACTOBACT ® OMNI FOS

PharmExtracta (IT) / INatal Sachets

NaturalPharma / Profit Probiotics

Bio Schwartz / Advance Strength Probiotics (40 BCFU)

UltraFlora® Intensive Care

Wakunaga / Max Probiotic

**UltraFlora® Immune Booster** 

OMNi-BiOTiC®/ 10 AAD

up4/women's

young living/life 9

Bromatech (IT) / Adomelle

goodbelly drink

Bulk Probiotics / L. Casei Probiotic Powder (Candida Support)

Ombre / Heart Health

Symprove<sup>™</sup>

custom probiotics / six strain probiotic powder

Bromatech (IT) / Citogenex

ImmuneBiotech Medical Sweden AB / GutMagnific®

naturopathica (au) / gastrohealth probiotic dairy free 20 bcfu

biospec / probiotic-5

**HMF Metabolic** 

CustomProbiotics.com / L. Plantarum Probiotic Powder

Ombre / Healthy Gut

just for tummies / live bacteria

organic 3 / gutpro

Sash Vitality /Bio-Cultures Probiotics for Adults

SuperSmart / Vaginal Health

naturopathica (au) / gastrohealth probiotic dairy free 50 billion

Probiotic 10 Billion Active Cells Daily Maintenance

Seeking Health / Probiota HistaminX

Thryve Inside/ L.Reu, Rham, Casi; B.Lactis

klaire labs / target gb-x

ferring / vsl#3

Resbiotic / resB® Lung Support

Bulk Probiotics / L. Plantarum Probiotic Powder

spain (es) / 13.1

Ombre / Mood Enhancer

up4/adult

nature's way (au) / restore probiotic bowel & colon health 30s

Realdose

Nature's Lab Intensive GI

ProbioMax® Daily DF

SuperSmart / Lactobacillus Plantarum Postbiotic (Pasturerized)

Floradapt Gut Comfort

optibac / for your cholesterol

Purica Probiotic Intensive GI

Ombre / Ultimate Immunity

zint nutrition / probiotic collagen +

Smidge /Sensitive Probiotic

LiveWell Nutrition / Pro-45

Metabolics / Lactobacillus Plantarum Powder

Nature's Lab Cardio

Jetson (US) / Immunity Probiotics

spain (es) / vivomixx

SuperSmart / Candalb

custom probiotics / four strain lactobacilli

naturopathica (au) /gastrohealth probiotic ultimate daily care 100billion

CustomProbiotics.com / L. Casei Probiotic Powder

Bromatech(IT) / FEMELLE

probiotic pur (de) / realdose nutrition

Wholesome Wellness / Raw Probiotic

bio-k+

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.

N-L-a-aspartyl-L-phenylalanine methyl ester {aspartame}

Ulmus rubra (slippery elm)

### Sample of Literature Used

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

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

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

<u>Characterization of thyme essential oil microcapsules and potato starch/pectin composite films and their impact on the quality of chilled mutton.</u>

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

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

Burn Wound Healing Activity of Hydroxyethylcellulose Gels with Different Water Extracts Obtained from Various Medicinal Plants in Pseudomonas aeruginosa-Infected Rabbits.

International journal of molecular sciences, Volume: 25 Issue: 16 2024 Aug 18

Authors Demyashkin G,Sataieva T,Shevkoplyas L,Kuevda T,Ahrameeva M,Parshenkov M,Mimuni A,Pimkin G,Atiakshin D,Shchekin V,Shegay P,Kaprin A

<u>Unlocking the therapeutic potential of Nigella sativa extract: phytochemical analysis and revealing antimicrobial and antioxidant marvels.</u>

BMC complementary medicine and therapies, Volume: 24 Issue: 1 2024 Jul 12

Authors Rahman AU, Abdullah A, Faisal S, Mansour B, Yahya G

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

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 El.Abd-El Aal SFA.Abdelfatah EN.Tahoun ABMB

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

An Insight into Biochemical Characterization and Explorations of Antioxidant, Antibacterial, Cytotoxic, and Antidiabetic Activities by Trachyspermum ammi Nanosuspensions.

Frontiers in bioscience (Landmark edition), Volume: 28 Issue: 12 2023 Dec 25

Authors Jabeen R,Ali T,Naeem M,Hussain F,Danish S,Alahmadi TA,Samdani MS,Ansari MJ

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

<u>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.</u>

International journal of clinical pediatric dentistry, Volume: 16 Issue: Suppl 2 2023 Sep

Authors Opi K, Dhinsa K, Tripathi AM, Saha 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

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

Pimpinella anisum L. Essential Oil a Valuable Antibacterial and Antifungal Alternative.

Plants (Basel, Switzerland), Volume: 12 Issue: 13 2023 Jun 23

Authors Dumitrescu E, Muselin F, Tîrziu E, Folescu M, Dumitrescu CS, Orboi DM, Cristina RT

<u>Cell-free supernatant of probiotic bacteria exerted antibiofilm and antibacterial activities against Pseudomonas aeruginosa:</u>

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

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

<u>Chemical Constituents, Antioxidant Potential, and Antimicrobial Efficacy of Pimpinella anisum Extracts against Multidrug-</u> Resistant Bacteria.

Microorganisms, Volume: 11 Issue: 4 2023 Apr 14

Authors AlBalawi AN,Elmetwalli A,Baraka DM,Alnagar HA,Alamri ES,Hassan MG

<u>Formulation, In Vitro and In Silico Evaluations of Anise (Pimpinella anisum L.) Essential Oil Emulgel with Improved</u> Antimicrobial Effects.

Gels (Basel, Switzerland), Volume: 9 Issue: 2 2023 Jan 28

Authors Azam F, Algarni MH, Alnasser SM, Alam P, Jawaid T, Kamal M, Khan S, Alam A

Antibacterial Effect of 16 Essential Oils and Modulation of mex Efflux Pumps Gene Expression on Multidrug-Resistant

Pseudomonas aeruginosa Clinical Isolates: Is Cinnamon a Good Fighter?

Antibiotics (Basel, Switzerland), Volume: 12 Issue: 1 2023 Jan 12

Authors Co?eriu RL, Vintila C, Pribac M, Mare AD, Ciurea CN, Toganel RO, Cighir A, Simion A, Man A

Nigella sativa oil protects against cadmium-induced intestinal toxicity via promotion of anti-inflammatory mechanisms, mucin expression and microbiota integrity.

Avicenna journal of phytomedicine, Volume: 12 Issue: 3 2022 May-Jun

Authors Akinrinde AS, Adekanmbi AO, Olojo FO

<u>Thymol screening</u>, <u>phenolic contents</u>, <u>antioxidant and antibacterial activities of Iranian populations of Trachyspermum ammi (L) Sprague (Apiaceae).</u>

Scientific reports , Volume: 12 Issue: 1 2022 Sep 19

Authors Modareskia M,Fattahi M,Mirjalili MH

<u>Phytochemical Analysis and Antioxidant, Antibacterial, and Antifungal Effects of Essential Oil of Black Caraway (Nigella sativa L.) Seeds against Drug-Resistant Clinically Pathogenic Microorganisms.</u>

BioMed research international, Volume: 2022 2022

Authors Zouirech O,Alyousef AA,El Barnossi A,El Moussaoui A,Bourhia M,Salamatullah AM,Ouahmane L,Giesy JP,Aboul-Soud MAM,Lyoussi B,Derwich E

In Vitro Analysis of Extracts of Plant Used in Mexican Traditional Medicine, Which Are Useful to Combat Clostridioides difficile Infection.

Pathogens (Basel, Switzerland), Volume: 11 Issue: 7 2022 Jul 7

Authors Martínez-Alva JE, Espinoza-Simón E, Bayona-Pérez Y, Ruiz-Pérez NC, Ochoa SA, Xicohtencatl-Cortes J, Torres J, Romo-Castillo M

Antimicrobial Activity of Essential Oils Evaluated In Vitro against Escherichia coli and Staphylococcus aureus.

Antibiotics (Basel, Switzerland), Volume: 11 Issue: 7 2022 Jul 20

Authors Galgano M,Capozza P,Pellegrini F,Cordisco M,Sposato A,Sblano S,Camero M,Lanave G,Fracchiolla G,Corrente M,Cirone F,Trotta A,Tempesta M,Buonavoglia D,Pratelli A

Binary Synergistic Combinations of Lavender and Fennel Essential Oils with Amoxicillin.

Planta medica, Volume: 89 Issue: 8 2023 Jul

Authors Karadag AE,Çaskurlu A,Demirci B,Demirci F

Comparative Analysis of the Antimicrobial Activity of Essential Oils and Their Formulated Microemulsions against Foodborne Pathogens and Spoilage Bacteria.

Antibiotics (Basel, Switzerland), Volume: 11 Issue: 4 2022 Mar 25

Authors Campana R,Tiboni M,Maggi F,Cappellacci L,Cianfaglione K,Morshedloo MR,Frangipani E,Casettari L

Changes in Gut Microbiota by the Lactobacillus casei Anchoring the K88 Fimbrial Protein Prevented Newborn Piglets From

Clinical Diarrhea.

Frontiers in cellular and infection microbiology, Volume: 12 2022

Authors Qin D,Bai Y,Li Y,Huang Y,Li L,Wang G,Qu Y,Wang J,Yu LY,Hou X

In vitro evaluation of probiotic properties of lactic acid bacteria isolated from the vagina of yak (Bos grunniens).

PeerJ, Volume: 10 2022

Authors Zhang Q,Pan Y,Wang M,Sun L,Xi Y,Li M,Zeng Q

<u>Lacticaseibacillus casei Strain T21 Attenuates Clostridioides difficile Infection in a Murine Model Through Reduction of Inflammation and Gut Dysbiosis With Decreased Toxin Lethality and Enhanced Mucin Production.</u>

Frontiers in microbiology, Volume: 12 2021.

Authors Panpetch W,Phuengmaung P,Cheibchalard T,Somboonna N,Leelahavanichkul A,Turnwasorn S

Antibacterial efficacy of different combinations of clove, eucalyptus, ginger, and selected antibiotics against clinical isolates of Pseudomonas aeruginosa.

Ayu, Volume: 41 Issue: 2 2020 Apr-Jun

Authors Sagar PK,Sharma P,Singh R

<u>Correction to "ZnO/Curcumin Nanocomposites for the Enhanced Inhibition of Pseudomonas aeruginosa Virulence via LasR-RhIR Quorum Sensing Systems".</u>

Molecular pharmaceutics, 2021 Dec 7

Authors Prateeksha, Rao CV, Das AK, Barik SK, Singh BN

<u>Multidimensional exploration of essential oils generated via eight oregano cultivars: Compositions, chemodiversities, and</u> antibacterial capacities.

Food chemistry, Volume: 374 2022 Apr 16

Authors Hao Y, Kang J, Yang R, Li H, Cui H, Bai H, Tsitsilin A, Li J, Shi L

A Pilot Study of the Effect of Lactobacillus casei Obtained from Long-Lived Elderly on Blood Biochemical, Oxidative, and Inflammatory Markers, and on Gut Microbiota in Young Volunteers.

Nutrients , Volume: 13 Issue: 11 2021 Oct 29

Authors Mei LH, Zheng WX, Zhao ZT, Meng N, Zhang QR, Zhu WJ, Li RD, Liang XL, Li QY

Lactobacillus casei Zhang exerts probiotic effects to antibiotio-treated rats.

Computational and structural biotechnology journal, Volume: 19 2021

Authors Yao G,Cao C,Zhang M,Kwok LY,Zhang H,Zhang W

<u>Lactobacillus casei ATCC 393 and it's metabolites alleviate dextran sulphate sodium-induced ulcerative colitis in mice through the NLRP3-(Caspase-1)/IL-1ß pathway.</u>

Food & function, Volume: 12 Issue: 23 2021 Nov 29

Authors Dou X,Qiao L,Chang J,Yan S,Song X,Chen Y,Xu Q,Xu C

The construction of recombinant Lactobacillus casei expressing hemagglutinin-neuraminidase protein and its immune response in chickens.

Microbial pathogenesis, Volume: 158 2021 Sep

Authors Ju A,Duan A,Zhang Y,Qin Y,Xue L,Ma X,Luan W,Yang S

Facile Synthesis of Natural Anise-Based Nanoemulsions and Their Antimicrobial Activity.

Polymers, Volume: 13 Issue: 12 2021 Jun 19

Authors Abu Ali OA,El-Naggar ME,Abdel-Aziz MS,Saleh DI,Abu-Saied MA,El-Sayed WA

Artificial Sweeteners Negatively Regulate Pathogenic Characteristics of Two Model Gut Bacteria, E. coli and E. faecalis. International journal of molecular sciences, Volume: 22 Issue: 10 2021 May 15

Authors Shil A,Chichger H

<u>Microwave-Assisted Rapid Green Synthesis of Gold Nanoparticles Using Seed Extract of Trachyspermum ammi: ROS</u> Mediated Biofilm Inhibition and Anticancer Activity.

Biomolecules . Volume: 11 Issue: 2 2021 Jan 30

Authors Perveen K, Husain FM, Qais FA, Khan A, Razak S, Afsar T, Alam P, Almajwal AM, Abulmeaty MMA

Antioxidant, Anti-Inflammatory, and Microbial-Modulating Activities of Essential Oils: Implications in Colonic Pathophysiology.

International journal of molecular sciences, Volume: 21 Issue: 11 2020 Jun 10

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

Thymus vulgaris L. Essential Oil Solid Formulation: Chemical Profile and Spasmolytic and Antimicrobial Effects.

Biomolecules, Volume: 10 Issue: 6 2020 Jun 4

Authors Micucci M,Protti M,Aldini R,Frosini M,Corazza I,Marzetti C,Mattioli LB,Tocci G,Chiarini A,Mercolini L,Budriesi R

Thymol Chemotype Origanum vulgare L. Essential Oil as a Potential Selective Bio-Based Herbicide on Monocot Plant Species.

Molecules (Basel, Switzerland), Volume: 25 Issue: 3 2020 Jan 29

Authors Grulová D,Caputo L,Elshafie HS,Baranová B,De Martino L,Sedlák V,Gogalová Z,Porácová J,Camele I,De Feo V Dietary prophage inducers and antimicrobials: toward landscaping the human gut microbiome. Gut microbes, 2020 Jan 13

Authors Boling L, Cuevas DA, Grasis JA, Kang HS, Knowles B, Levi K, Maughan H, McNair K, Rojas MI, Sanchez SE, Smurthwaite C, Rohwer F

<u>Lactobacillus casei ATCC 393 alleviates Enterotoxigenic Escherichia coli K88-induced intestinal barrier dysfunction via TLRs/mast cells pathway.</u>

Life sciences, Volume: 244 2020 Mar 1

Authors Xu C,Yan S,Guo Y,Qiao L,Ma L,Dou X,Zhang B

Curcumin: A natural derivative with antibacterial activity against Clostridium difficile.

Journal of global antimicrobial resistance, Volume: 21 2020 Jun

Authors Mody D, Athamneh AIM, Seleem MN

Immunomodulatory Effects of Lactobacillus plantarum on Inflammatory Response Induced by Klebsiella pneumoniae. Infection and immunity, Volume: 87 Issue: 11 2019 Nov

Authors Vareille-Delarbre M, Miquel S, Garcin S, Bertran T, Balestrino D, Evrard B, Forestier C

Inhibition of Escherichia coli adhesion to human intestinal Caco-2?cells by probiotic candidate Lactobacillus plantarum strain L15.

Microbial pathogenesis, Volume: 136 2019 Nov

Authors Alizadeh Behbahani B, Noshad M, Falah F

Synbiotic-like effect of linoleic acid overproducing Lactobacillus casei with berry phenolic extracts against pathogenesis of enterohemorrhagic Escherichia coli.

Gut pathogens, Volume: 11 2019

Authors Tabashsum Z,Peng M,Bernhardt C,Patel P,Carrion M,Biswas D

Effect of Bay Leaves Essential Oil Concentration on the Properties of Biodegradable Carboxymethyl Cellulose-Based Edible Films.

Materials (Basel, Switzerland), Volume: 12 Issue: 15 2019 Jul 24

Authors Rincón E, Serrano L, Balu AM, Aguilar JJ, Luque R, García A

Orally administered Lactobacillus casei exhibited several probiotic properties in artificially suckling rabbits.

Asian-Australasian journal of animal sciences, Volume: 33 Issue: 8 2020 Aug 1

Authors Shen XM,Cui HX,Xu XR

<u>Linoleic Acids Overproducing Lactobacillus casei Limits Growth, Survival, and Virulence of Salmonella Typhimurium and Enterohaemorrhagic Escherichia coli.</u>

Frontiers in microbiology, Volume: 9 2018

Authors Peng M,Tabashsum Z,Patel P,Bernhardt C,Biswas D

Antimicrobial activity of spices essential oils and its effectiveness on mature biofilms of human pathogens.

Natural product research, 2018 Oct 13

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

Antibacterial activity of traditional spices against lower respiratory tract pathogens: combinatorial effects of Trachyspermum ammi essential oil with conventional antibiotics.

Letters in applied microbiology, Volume: 67 Issue: 5 2018 Nov

Authors Gradinaru AC, Trifan A, Spac A, Brebu M, Miron A, Aprotosoaie AC

Antimicrobial Activity of Five Essential Oils against Bacteria and Fungi Responsible for Urinary Tract Infections.

Molecules (Basel, Switzerland), Volume: 23 Issue: 7 2018 Jul 9

Authors Ebani W, Nardoni S, Bertelloni F, Pistelli L, Mancianti F

<u>Feasibility of a Lactobacillus casei Drink in the Intensive Care Unit for Prevention of Antibiotic Associated Diarrhea and Clostridium difficile.</u>

Nutrients, Volume: 10 Issue: 5 2018 Apr 26

Authors Alberda C.Marcushamer S.Hewer T.Journault N.Kutsogiannis D

Quorum-sensing inhibitor potential of trans-anethole aganist Pseudomonas aeruginosa.

Journal of applied microbiology, Volume: 125 Issue: 3 2018 Sep

Authors Hançer Aydemir D,Çifci G,Aviyente V,Bosgelmez-Tinaz G

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

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

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

Endophytic Detection in Selected European Herbal Plants.

Polish journal of microbiology, Volume: 65 Issue: 3 2016 Aug 26

Authors Goryluk-Salmonowicz A,Piórek M,Rekosz-Burlaga H,Studnicki M,Blaszczyk M

<u>Polysaccharides from Dolichos biflorus Linn and Trachyspermum ammi Linn seeds: isolation, characterization and remarkable antimicrobial activity.</u>

Chemistry Central journal, Volume: 11 Issue: 1 2017 Nov 21

Authors Basu S,Ghosh M,Bhunia RK,Ganguly J,Banik BK

<u>In-vitro antimicrobial activity and identification of bioactive components using GC-MS of commercially available essential oils</u> in Saudi Arabia.

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

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

Study of anticancer and antibacterial activities of Foeniculum vulgare, Justicia adhatoda and Urtica dioica as natural curatives.

Cellular and molecular biology (Noisy-le-Grand, France), Volume: 63 Issue: 9 2017 Sep 30

Authors Batool R,Salahuddin H,Mahmood T,Ismail M

Monitoring <i>in vitro</i> antibacterial efficacy of 26 Indian spices against multidrug resistant urinary tract infecting bacteria.

Integrative medicine research, Volume: 3 Issue: 3 2014 Sep

Authors Rath S, Padhy RN

ANTI-QUORUM SENSING ACTIVITY OF SOME MEDICINAL PLANTS.

African journal of traditional, complementary, and alternative medicines: AJTCAM, Volume: 13 Issue: 5 2016

Authors Al-Haidari RA,Shaaban MI,Ibrahim SRM,Mohamed GA

<u>Lactobacillus casei Zhang and vitamin K2 prevent intestinal tumorigenesis in mice via adiponectin-elevated different signaling pathways.</u>

Oncotarget, Volume: 8 Issue: 15 2017 Apr 11

Authors Zhang Y,Ma C,Zhao J,Xu H,Hou Q,Zhang H

Biological activities of Rosmarinus officinalis L (rosemary) extract as analyzed in microorganisms and cells.

Experimental biology and medicine (Maywood, N.J.), Volume: 242 Issue: 6 2017 Mar

Authors de Oliveira JR, de Jesus D, Figueira LW, de Oliveira FE, Pacheco Soares C, Camargo SE, Jorge AO, de Oliveira LD

Effects of long-term Bacillus subtilis CGMCC 1921 supplementation on performance, egg quality, and fecal and cecal microbiota of laying hens.

Poultry science, Volume: 96 Issue: 5 2017 May 1

Authors Guo JR, Dong XF, Liu S, Tong JM

<u>Gut complex carbohydrates and intestinal microflora in broiler chickens fed with oregano (Origanum vulgare L.) aqueous</u> extract and vitamin E.

Journal of animal physiology and animal nutrition, Volume: 101 Issue: 4 2017 Aug

Authors Scocco P,Forte C,Franciosini MP,Mercati F,Casagrande-Proietti P,Dall'Aglio C,Acuti G,Tardella FM,Trabalza-Marinucci M

In vitro antimicrobial activity of five essential oils on multidrug resistant Gram-negative clinical isolates.

Journal of intercultural ethnopharmacology, Volume: 5 Issue: 3 2016 Jun-Aug

Authors Sakkas H, Gousia P, Economou V, Sakkas V, Petsios S, Papadopoulou C

Survey of the Antibiofilm and Antimicrobial Effects of Zingber officinale (in Vitro Study).

Jundishapur journal of microbiology, Volume: 9 Issue: 2 2016 Feb

Authors Aghazadeh M,Zahedi Bialvaei A,Aghazadeh M,Kabiri F,Saliani N,Yousefi M,Eslami H,Samadi Kafil H

Gas chromatography coupled with mass spectrometric characterization of Curcuma longa: Protection against pathogenic microbes and lipid peroxidation in rat`s tissue homogenate.

Pakistan journal of pharmaceutical sciences, Volume: 29 Issue: 2 2016 Mar

Authors Hassan W,Gul S,Rehman S,Kanwal F,Afridi MS,Fazal H,Shah Z,Rahman A,da Rocha JB

<u>Lactobacillus plantarum NCU116 attenuates cyclophosphamide-induced intestinal mucosal injury, metabolism and</u> intestinal microbiota disorders in mice.

Food & function, Volume: 7 Issue: 3 2016 Mar

Authors Xie JH,Fan ST,Nie SP,Yu Q,Xiong T,Gong D,Xie MY

Evaluation of probiotic properties of Lactobacillus plantarum WLPL04 isolated from human breast milk.

**Journal of dairy science**, Volume: 99 Issue: 3 2016 Mar

Authors Jiang M,Zhang F,Wan C,Xiong Y,Shah NP,Wei H,Tao X

Antibacterial Activity of Probiotic Lactobacillus plantarum HKO1: Effect of Divalent Metal Cations and Food Additives on Production Efficiency of Antibacterial Compounds.

Probiotics and antimicrobial proteins, Volume: 5 Issue: 2 2013 Jun

Authors Sharafi H,Alidost L,Lababpour A,Shahbani Zahiri H,Abbasi H,Vali H,Akbari Noghabi K

CHEMICAL COMPOSITION AND ANTIBACTERIAL ACTIVITY OF SOME MEDICINAL PLANTS FROM LAMIACEAE FAMILY.

Acta poloniae pharmaceutica, Volume: 72 Issue: 4 2015 Jul-Aug

Authors Kozlowska M,Laudy AE,Przybyl J,Ziarno M,Majewska E

Antibacterial activity of cinnamaldehyde and clove oil: effect on selected foodborne pathogens in model food systems and watermelon juice.

Journal of food science and technology, Volume: 52 Issue: 9 2015 Sep

Authors Siddiqua S, Anusha BA, Ashwini LS, Negi PS

Isoeugenol has a non-disruptive detergent-like mechanism of action.

Frontiers in microbiology, Volume: 6 2015

Authors Hyldgaard M, Mygind T, Piotrowska R, Foss M, Meyer RL

In vitro probiotic characteristics of Lactobacillus plantarum ZDY 2013 and its modulatory effect on gut microbiota of mice.

Journal of dairy science, Volume: 98 Issue: 9 2015 Sep

Authors Huang R,Tao X,Wan C,Li S,Xu H,Xu F,Shah NP,Wei H

Antimicrobial Impacts of Essential Oils on Food Borne-Pathogens.

Recent patents on food, nutrition & agriculture, Volume: 7 Issue: 1 2015

Authors Ozogul Y, Kuley E, Ucar Y, Ozogul F

Antimicrobial activity and chemical composition of the essential oils of Portuguese Foeniculum vulgare fruits.

Natural product communications, Volume: 10 Issue: 4 2015 Apr

Authors Mota AS, Martins MR, Arantes S, Lopes VR, Bettencourt E, Pombal S, Gomes AC, Silva LA

Antimicrobial agents from selected medicinal plants in Libya.

Chinese journal of integrative medicine, Volume: 22 Issue: 3 2016 Mar

Authors Muhaisen HM,Ab-Mous MM,Ddeeb FA,Rtemi AA,Taba OM,Parveen M

Effects of sub-lethal concentrations of thyme and oregano essential oils, carvacrol, thymol, citral and trans-2-hexenal on membrane fatty acid composition and volatile molecule profile of Listeria monocytogenes, Escherichia coli and Salmonella enteritidis.

Food chemistry, Volume: 182 2015 Sep 1

Authors Siroli L, Patrignani F, Gardini F, Lanciotti R

Empirical prediction and validation of antibacterial inhibitory effects of various plant essential oils on common pathogenic bacteria.

International journal of food microbiology, Volume: 202 2015 Jun 2

Authors Akdemir Evrendilek G

Probiotic potential of lactobacillus strains isolated from sorghum-based traditional fermented food.

Probiotics and antimicrobial proteins, Volume: 7 Issue: 2 2015 Jun

Authors Rao KP,Chennappa G,Suraj U,Nagaraja H,Raj AP,Sreenivasa MY

Antibacterial potential of hydroalcoholic extracts of triphala components against multidrug-resistant uropathogenic bacteria--a preliminary report.

Indian journal of experimental biology, Volume: 51 Issue: 9 2013 Sep

Authors Bag A,Bhattacharyya SK,Pal NK

Probiotic features of two oral Lactobacillus isolates.

Brazilian journal of microbiology: [publication of the Brazilian Society for Microbiology], Volume: 43 Issue: 1 2012 Jan

Authors Zavisic G,Petricevic S,Radulovic Z,Begovic J,Golic N,Topisirovic L,Strahinic I

<u>Phytochemical Screening and Antimicrobial Activity of Some Medicinal Plants Against Multi-drug Resistant Bacteria from</u> Clinical Isolates.

Indian journal of pharmaceutical sciences, Volume: 74 Issue: 5 2012 Sep.

Authors Dahiya P,Purkayastha S

The antimicrobial activity of essential oils and extracts of some medicinal plants grown in Ash-shoubak region - South of Jordan.

Pakistan journal of pharmaceutical sciences, Volume: 25 Issue: 1 2012 Jan

Authors Abu-Darwish MS,Al-Ramamneh EA,Kyslychenko VS,Karpiuk UV

Synergistic antimicrobial activities of natural essential oils with chitosan films.

Journal of agricultural and food chemistry , Volume: 59 Issue: 23 2011 Dec 14

Authors Wang L,Liu F,Jiang Y,Chai Z,Li P,Cheng Y,Jing H,Leng X

In-vitro antimicrobial activity and synergistic/antagonistic effect of interactions between antibiotics and some spice essential nils

Journal of environmental biology, Volume: 32 Issue: 1 2011 Jan

Authors Toroglu S

Antibacterial activity in spices and local medicinal plants against clinical isolates of Karachi, Pakistan.

Pharmaceutical biology, Volume: 49 Issue: 8 2011 Aug

Authors Ali NH, Faizi S, Kazmi SU

Antibacterial effects of the essential oils of commonly consumed medicinal herbs using an in vitro model.

Molecules (Basel, Switzerland), Volume: 15 Issue: 11 2010 Oct 27

Authors Sokovic M,Glamoclija J,Marin PD,Brkic D,van Griensven LJ

Biodegradable gelatin-chitosan films incorporated with essential oils as antimicrobial agents for fish preservation. Food microbiology, Volume: 27 Issue: 7 2010 Oct

Authors Gómez-Estaca J,López de Lacey A,López-Caballero ME,Gómez-Guillén MC,Montero P

In vitro antimicrobial activity and chemical composition of the essential oil of Foeniculum vulgare Mill.

Revista medico-chirurgicala a Societatii de Medici si Naturalisti din lasi , Volume: 112 Issue: 3 2008 Jul-Sep Authors Aprotosoaie AC, Hancianu M, Poiata A, Tuchilus C, Spac A, Cioana O, Gille E, Stanescu U

Effect of ethnomedicinal plants used in folklore medicine in Jordan as antibiotic resistant inhibitors on Escherichia coli.

BMC complementary and alternative medicine, Volume: 10 2010 Feb 28

Authors Darwish RM,Aburjai TA

The antimicrobial efficacy of plant essential oil combinations and interactions with food ingredients. International journal of food microbiology, Volume: 124 Issue: 1 2008 May 10 Authors Gutierrez J,Barry-Ryan C,Bourke P

Exploring of Antimicrobial Activity of Triphala Mashi-an Ayurvedic Formulation.

Evidence-based complementary and alternative medicine: eCAM, Volume: 5 Issue: 1 2008 Mar Authors Biradar YS, Jagatap S, Khandelwal KR, Singhania SS