

# 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

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

Lactocaseibacillus 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 3 gram/day

Probiotic Mixture 1 {Japanese Vet Probiotic}

Probiotic Mixture 2 {Vetafarm Probiotic}

rosmarinus officinalis {rosemary}

syzygium aromaticum {clove}

Thymus vulgaris {thyme}

yogurt

Zingiber officinale Roscoe {ginger}

## Retail Probiotics

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

Next Generation  
natviehealthcare.com/Renewbiome Mega  
Invivo / Bio.Me Femme UT  
Krauterhaus / Lactopro  
Dr. Mercola / Complete Probiotics  
Lake Avenue Nutrition / Probiotics 10 Strain Blend  
MegaFood / MegaFlora  
7 AM Ultra Probiotics  
SuperSmart / Probio Forte  
SuperSmart / Full Spectrum Probiotic Formula  
Northwest Natural Products / PBS  
SuperSmart / Lactoxira  
SuperSmart / Derma Relief  
Bioflora (Mx) / BIOFLORA / 30 BILLION 10 strains  
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  
organic 3 / primal gut  
up4 / ultra  
douglas laboratories / multi probiotic 40 billion  
vinco / probiotic eight 65  
theramedix / probiotic  
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  
bioglan bio (au) / happy probiotic 100  
bioglan bio (au) / happy probiotic 50  
nature's way (au) / restore probiotic 100 billion  
ASEA VIA / BIOME  
HLH BIOPHARMA(DE) / LACTOBACT ® PREMIUM  
HLH BIOPHARMA(DE) / LACTOBACT ® 60PLUS  
Winlove Probiotics / Ecologic®825  
OMNI-BIOTIC®/ TRAVEL  
Global Healing Center / FloraTrex  
Physis / Advance Probiotics  
Advanced Bio-Cultures / Advance Multi Strain Probiotics  
Physician Choice /60 Billion Probiotics  
Garden of Life / Dr. Formulated Once Daily Women's  
Wholesome Wellness / Raw Probiotic  
Bio Schwartz / Advance Strength Probiotics (40 BCFU)

Metabolics / Lactobacillus Plantarum Powder  
Sash Vitality / Bio-Cultures Probiotics for Adults  
NaturalPharma / Profit Probiotics  
Thryve Inside/ L.Reu,Rham,Casi; B.Lactis  
Jetson (US) / Immunity Probiotics  
ecology\_allergycare  
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  
Realdose  
nature's way (au) / restore probiotic bowel & colon health 30s  
naturopathica (au) / gastrohealth probiotic ultimate daily care 100billion  
naturopathica (au) / gastrohealth probiotic dairy free 50 billion  
naturopathica (au) / gastrohealth probiotic dairy free 20 bcfu  
biospec / probiotic-5  
zint nutrition / probiotic collagen +  
just for tummies / live bacteria  
up4 / adult  
up4 / women's  
young living / life 9  
optibac / for your cholesterol  
probiotic pur (de) / realdose nutrition  
organic 3 / gutpro  
spain (es) / I3.1  
spain (es) / vivomixx  
bio-k+  
goodbelly drink  
klaire labs / target gb-x  
solaray / microbiome probiotic colon formula  
ferring / vsl#3  
seed / male version  
lifted naturals / mood boosting probiotic  
custom probiotics / four strain lactobacilli  
custom probiotics / six strain probiotic powder  
Bulk Probiotics / L. Plantarum Probiotic Powder  
Bulk Probiotics / L. Casei Probiotic Powder (Candida Support)  
SuperSmart / Lactobacillus Plantarum Postbiotic (Pasturized)  
SuperSmart / Vaginal Health  
PharmExtracta (IT) / INatal Sachets  
Bromatech(IT) / FEMELLE  
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 / Candalb

**LiveWell Nutrition / Pro-45**  
**ProbioMax® Daily DF**  
**Resbiotic / resB® Lung Support**  
**ImmuneBiotech Medical Sweden AB / GutMagnific®**  
**Bromatech (IT) / Adomelle**  
**Bromatech (IT) / Citogenex**  
**Smidge / Sensitive Probiotic**  
**Ombre / Mood Enhancer**  
**Ombre / Healthy Gut**  
**Ombre / Heart Health**  
**Ombre / Ultimate Immunity**  
**NOW FOODS / Clinical GI 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.

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.

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

Biological Characterization and Essential Oil Profiles of Eastern European Cultivars of *Thymus*, *Satureja*, and *Monarda*.

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antimicrobial, and anti-biofilm activities.

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Nanogel-encapsulated *Rosa roxburghii* Tratt fruit polyphenols ameliorated ulcerative colitis by regulating gut microbiota and

PI3K/Akt and NF- $\kappa$ B pathways.

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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.

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Authors Trigo-Gutierrez JK,Medaglia S,Aznar E,Martínez-Mañez R,Mima EGO

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*Poultry science* , Volume: 105 Issue: 3 2025 Dec 29

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*BMC veterinary research* , Volume: 21 Issue: 1 2025 Oct 14

Authors Atan Çirpici H,Kirkpinar F

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

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*Lactobacillus plantarum* and *Lactobacillus brevis* alleviate enterotoxigenic *Escherichia coli*-induced intestinal inflammation and stabilize intestinal microorganisms and serum metabolites in piglets.

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