

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

Ayurvedic herbal formula {Triphala} 9000 mg/day

Cinnamomum zeylanicum {Ceylon Cinnamon} 6 gram/day

Coriandrum sativum {Coriander}

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

Nigella sativa {black cumin} 1000 mg/day

origanum vulgare {oregano}

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.

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  
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  
elixia / 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 miracle / 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  
Physician Choice / 60 Billion Probiotics  
seed / female version  
jarrow formulas / jarro-dophilus® ultra  
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  
goodbelly drink  
Bulk Probiotics / L. Casei Probiotic Powder (Candida Support)  
Ombre / Heart Health  
Symprove™  
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) / I3.1  
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 (Pasturized)  
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+  
HLH BIOPHARMA(DE) / LACTOBACT ® LDL-CONTROL  
Immune Defense Daily Chewable Probiotic  
Ombre / Healthy Gut  
just for tummies / live bacteria  
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**

**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.

Cola aspartame {Diet Cola}

Ferrum {Iron Supplements}

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

Ulmus rubra {slippery elm}

## Sample of Literature Used

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

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

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The potential of cell-free supernatants from Lacticaseibacillus paracasei B1 and Lactiplantibacillus plantarum O24 as antioxidant and antimicrobial agents.

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

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Synergistic Biocidal Effects of Curcumin, Chitosan, and Nickel Titanate-Based Nanohybrids for Enhanced Antibacterial and Anticancer Therapies.

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

**3 Biotech**, Volume: 15 Issue: 5 2025 May

Authors Thakur A,Sharma K

Electrostatically assembled maghemite nanoparticles-Lactobacillus plantarum: A novel hybrid for enhanced antioxidant, antimicrobial, and antibiofilm efficacy.

**Bioresource technology**, 2025 Apr 12

Authors Shingade JA,Padalkar NS,Shin JH,Kim YH,Park TJ,Park JP,Patil AR

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

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Effect of ozonation on the phytochemicals of black seed oil and its anti-microbial, anti-oxidant, anti-inflammatory, and anti-neoplastic activities in vitro.

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