

## Kyoto Encyclopedia of Genes and Genomes derived Suggestions

### Review Overview

These suggestions are based on an Expert System (Artificial Intelligence) modelled after the MYCIN Expert System produced at Stanford University School of Medicine in 1972. The system uses almost 2 million facts with backward chaining to sources of information. The typical sources are studies published on the US National Library of Medicine. Note: That many of the bacteria species used are *NOT* reported on many tests.

These are suggestions that are predicted to independently Increasing Butanoic acid | Butanoate Butyrate Butyric acid C4H8O2 by impacting the bacteria listed on [KEGG: Kyoto Encyclopedia of Genes and Genomes](#). Suggestions should *only be done after a review* by a medical professional factoring in patient's conditions, allergies and other issues.

**This report may be freely shared by a patient to their medical professionals**

This is an experimental feature – manual validations is recommended. For background, see this [post](#)

There is a separate report for probiotics. That report use the enzymes in probiotic species.

### Analysis Provided by Microbiome Prescription

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## Bacteria being targeted by suggestions.

These bacteria levels were deemed atypical

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

## Substance to Consider Adding or Taking

These are the most significant substances that are likely to improve the microbiome dysfunction. Dosages are based on the dosages used in clinical studies. For more information see: <https://microbiomeprescription.com/library/dosages>. These are provided as examples only

Colors indicates the type of substance: i.e. probiotics and prebiotics, herbs and spices, etc. There is no further meaning to them.

The recommended process to obtain a *persistent shift* of the microbiome is:

Generate 4 lists from the suggestions with nothing repeated on another list

Emphasize one list each week

After 8 weeks (2 cycles), retest the microbiome to obtains the next set of *course corrections*

This approach allows the microbiome to 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'.

Cichorium intybus {Chicory} 1800 mg/day

Coffee

Cola aspartame {Diet Cola}

Dodecanoic acid {Lauric acid}

Lactocaseibacillus casei {L. casei} 48 BCFU/day

Lactobacillus paracasei, Lactobacillus acidophilus, Bifidobacterium animalis

Limosilactobacillus fermentum {L. fermentum} 12 BCFU/day

Rosmarinus officinalis {Rosemary}

Theobroma cacao {Cacao} 20 gram/day

Yogurt

## Retail Probiotics

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

Wholesome Wellness / Raw Probiotic  
 SuperSmart / Full Spectrum Probiotic Formula  
 vita miracle / ultra-30 probiotics  
 Physician Choice / 60 Billion Probiotics  
 Garden of Life / Dr. Formulated Once Daily Women's  
 natviehealthcare.com/Renewbiome Mega  
 seed / female version  
 nature's way (au) / restore probiotic 100 billion  
 hyperbiotics / pro-15  
 Global Healing Center / FloraTrex  
 Physis / Advance Probiotics  
 Sash Vitality / Bio-Cultures Probiotics for Adults  
 Advanced Bio-Cultures / Advance Multi Strain Probiotics  
 jarro formula / jarro-dophilus original  
 jarro formulas / jarro-dophilus® ultra  
 newrhythm / probiotics 20 stains  
 bioglan bio (au) / happy probiotic 100  
 bioglan bio (au) / happy probiotic 50  
 Windlove Probiotics / Ecologic®825  
 Jetson / FIT  
 Jetson (US) / Immunity Probiotics  
 ecology\_allergycare  
 ASEA VIA / BIOME  
 Pädia GmbH (DE)/Mambiotic Kapseln  
 CustomProbiotics.com / L. Casei Probiotic Powder  
 HLH BIOPHARMA(DE) / LACTOBACT® PREMIUM  
 HLH BIOPHARMA(DE) / LACTOBACT® 60PLUS  
 HLH BIOPHARMA(DE) / LACTOBACT® OMNI FOS  
 OMNI-BIOTIC®/ TRAVEL  
 Thryve Inside/ L.Reu,Rham,Casi; B.Lactis  
 Thryve L.PCasei Th1, L.PCasei Th2,L.Ferm IBF1, L.acidoph  
 7 AM Ultra Probiotics  
 quantum wellness / restora flora  
 reg'activ / immune & vitality  
 nature's bounty / probioti 10  
 fairvital / microflora basic  
 fürstenmed / lacto-bifido  
 jarro formulas / jarro-dophilus eps  
 claire labs / target gb-x  
 udo's choice / super 8 gold  
 spain (es) / lactanza hereditum  
 bio-k+  
 visbiome  
 organic 3 / primal gut  
 up4 / ultra  
 douglas laboratories / multi probiotic 40 billion  
 vinco / probiotic eight 65  
 theramedix / probiotic  
 just for tummies / live bacteria  
 elixa / probiotic  
 1 md / complete probiotics platinum  
 renew life / ultimate flora  
 garden of life / primal defense  
 renew life men's probiotic - ultimate

bioray / cytoflora  
SuperSmart / Derma Relief  
SuperSmart / Lactoxira  
SuperSmart / Vaginal Health  
PharmExtracta (IT) / INatal Sachets  
Northwest Natural Products / PBB  
BioGaia / Elactia  
Good Start® by Gerber® Breastfeeding Comfort Plus Probiotics  
Materna® Opti-Lac® Breast Feeding Support  
Probiotic 10 Billion Active Cells Daily Maintenance  
Maple Life Science™ / Lactobacillus fermentum  
Bioflora (Mx) / BIOFLORA / 30 BILLION 10 strains  
Bulk Probiotics / L. Fermentum Probiotic Powder  
Bulk Probiotics / L. Casei Probiotic Powder (Candida Support)  
Next Generation  
Invivo / Bio.Me Femme UT  
Bromatech (IT) / Citogenex  
Bromatech (IT) / Milonet  
Bromatech (IT) / Rotanelle plus  
NOW FOODS / Clinical GI Probiotic  
Krauterhaus / Lactopro  
Dr. Mercola / Complete Probiotics  
Lake Avenue Nutrition / Probiotics 10 Strain Blend  
MegaFood / MegaFlora  
SuperSmart / Probio Forte

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

## Substance to Consider Reducing or Eliminating

These are the most significant substances have been identified as probably contributing to the microbiome dysfunction.

In some cases blood work may show low levels of some vitamins, etc. listed below. This may be due to *greedy* bacteria reported at a high level above. Viewing bacteria data on the Kyoto Encyclopedia of Genes and Genomes (<https://www.kegg.jp/>) may provide better insight on the course of action to take.

5,6-dihydro-9,10-dimethoxybenzo[g]-1,3-benzodioxolo[5,6-a]quinolizinium {Berberine}  
Avena sativa x Hordeum vulgare {barley,oat}  
fruit  
fruit/legume fibre  
grapes

Hydrastis canadensis {Goldenseal}  
oligosaccharides {oligosaccharides}  
pectin {pectin}  
Poly[ $\beta$ -D-xylopyranose(1- $\rightarrow$ 4)] {Xylan}  
 $\beta$ -glucan {Beta-Glucan}  
wheat

## Sample of Literature Used

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

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**Foods (Basel, Switzerland)** , Volume: 15 Issue: 4 2026 Feb 10

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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.**

**Food research international (Ottawa, Ont.)** , Volume: 226 2026 Feb 28

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**Carbohydrate polymers** , Volume: 369 2025 Dec 1

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*Authors Cintra TMF,Menezes RT,de Carvalho LS,de Miguel Nazario L,Hantao LW,Marcucci MC,Oliveira LD,Meccatti-Domiciano VM*

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

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