

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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[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 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
jarrow formula / jarro-dophilus original
jarrow 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
jarrow formulas / jarro-dophilus eps
klair 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[β -D-xylopyranose(1- \rightarrow 4)] {Xylan}
 β -glucan {Beta-Glucan}
wheat

Sample of Literature Used

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

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Synergistic Effects of Garlic Extract and Mannan-Oligosaccharide Prebiotic Supplementation on Growth Performance, Carcass Quality, Immunity, Gut Morphology and Microbiome in Broiler Chickens.

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Carbohydrate polymers , Volume: 369 2025 Dec 1

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Molecular nutrition & food research , 2025 Aug 30

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Beneficial microbes , Volume: 14 Issue: 5 2023 Oct 30

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