

How to Improve Microbiome Health

Dietary Prebiotics

These foods provide nutrient support to maintain a healthy microbiome. Use them as part of a healthy, Mediterranean-style diet that is low in red meat, fast food, processed foods, and sugary and fried foods.

Inulin and fructooligosaccharides	Onion, garlic, leeks, asparagus, bananas, artichoke, dandelion greens, chicory, blue agave, jicama root, yacon root, wheat bran
Polyphenols	Fruits and berries, vegetables, walnuts, wine, tea, coffee, dark chocolate, turmeric
Polyunsaturated fatty acids	Oily fish, flax seeds, walnuts, oils (canola, corn, soybean, safflower)
Other	Barley, oats, seaweed

Dietary Probiotics

These foods contain live probiotics.

Dairy	Yogurt, kefir, cottage cheese (look for products with live cultures), aged cheeses (cheddar, mozzarella, gouda, parmesan, and swiss)
Fermented foods	Pickles brined in salt water (not vinegar), olives, sauerkraut, tempeh, kimchi, miso, natto, poi
Drinks	Kefir, kombucha, non-alcoholic ginger beer, shrubs (vinegar drinks), Indian lassi, Russian beet kvass, apple cider vinegar

Probiotic Capsules

These can supplement a healthy diet. The products below were approved by ConsumerLabs or US Pharmacopeia and contain strands with mental health benefits.

Low cost (\$0.20/day)	TruNature Advanced Digestive Probiotic (Costco), Member's Mark 10 Strain Probiotic (Sam's Club)
Higher cost (\$0.60-\$1.20/day)	Bayer Phillips Colon Health, Dr. Mercola Complete Probiotics, Garden of Life Raw Probiotics Ultimate Care or Once Daily Women's, GNC Probiotic Complex, Jamieson Probiotic 5 Billion, Nature's Way Fortify Daily 30 Billion, PB8, Pure Encapsulations Probiotic GI, Visbiome High Potency Probiotic, Hyperbiotics PRO-Women

Lifestyle

Exercise	Microbiota diversity improves with aerobic exercise
Sleep	Insomnia, poor sleep quality, and jet lag are associated with poor microbiome health
Stress reduction	Both active and early-life stress impair microbiota health, and poor microbiome health worsens stress-related disorders

From the Expert Q&A:
"Probiotics in Psychiatry"
with Ted Dinan, MD, PhD