

How to Improve Microbiome Health	
<b>Dietary Prebiotics</b>	
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.	
<b>Inulin and fructooligosaccharides</b>	Onion, garlic, leeks, asparagus, bananas, artichoke, dandelion greens, chicory, blue agave, jicama root, yacon root, wheat bran
<b>Polyphenols</b>	Fruits and berries, vegetables, walnuts, wine, tea, coffee, dark chocolate, turmeric
<b>Polyunsaturated fatty acids</b>	Oily fish, flax seeds, walnuts, oils (canola, corn, soybean, safflower)
<b>Other</b>	Barley, oats, seaweed
<b>Dietary Probiotics</b>	
These foods contain live probiotics.	
<b>Dairy</b>	Yogurt, kefir, cottage cheese (look for products with live cultures), aged cheeses (cheddar, mozzarella, gouda, parmesan, and swiss)
<b>Fermented foods</b>	Pickles brined in salt water (not vinegar), olives, sauerkraut, tempeh, kimchi, miso, natto, poi
<b>Drinks</b>	Kefir, kombucha, non-alcoholic ginger beer, shrubs (vinegar drinks), Indian lassi, Russian beet kvass, apple cider vinegar
<b>Probiotic Capsules</b>	
These can supplement a healthy diet. The products below were approved by ConsumerLabs or US Pharmacopeia and contain strands with mental health benefits.	
<b>Low cost (\$0.20/day)</b>	TruNature Advanced Digestive Probiotic (Costco), Member's Mark 10 Strain Probiotic (Sam's Club)
<b>Higher cost (\$0.60–\$1.20/day)</b>	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
<b>Lifestyle</b>	
<b>Exercise</b>	Microbiota diversity improves with aerobic exercise
<b>Sleep</b>	Insomnia, poor sleep quality, and jet lag are associated with poor microbiome health
<b>Stress reduction</b>	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