

# Probiotics Overview

## Why We Need Them

Probiotics are live beneficial microorganisms that help balance the gut microbiome. They are crucial for digestive health, immune function, and the gut-brain connection. Probiotics support a wide range of systems and help prevent dysbiosis (imbalanced gut bacteria), which is linked to inflammation and chronic disease.

## Functions in the Body

### Lactobacillus Strains

- Aid in lactose digestion
- Improve gut barrier integrity
- Reduce IBS symptoms (gas, bloating, diarrhea)
- Support vaginal and urinary tract health

### Bifidobacterium Strains

- Enhance immune system modulation
- Improve bowel regularity and comfort
- Reduce inflammation and support gut lining health
- May assist with mental clarity and mood balance

### Saccharomyces boulardii (Beneficial Yeast)

- Helps prevent antibiotic-associated diarrhea
- Supports recovery from traveler's diarrhea
- Fights harmful microbes like Candida and C. diff

## Daily Recommended Intake (RDI) - (CFU = Colony Forming Units)

Maintenance: 5–20 billion CFU/day

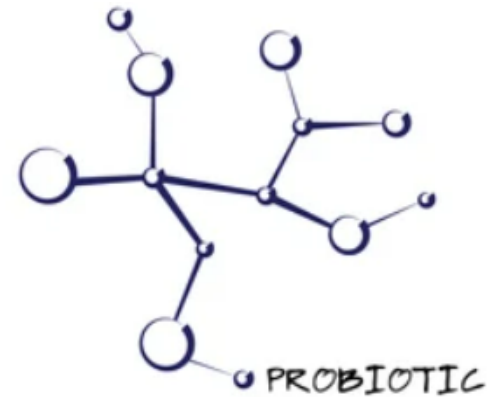
Therapeutic use: 20–50+ billion CFU/day

Antibiotic recovery: 10–20 billion CFU/day (taken 2–3 hrs apart)

RDI varies based on strain and individual needs. Higher doses are often used short-term.

## Benefits of Supplementation

- Restores gut flora balance after illness or antibiotics
- Reduces IBS symptoms (bloating, gas, diarrhea, constipation)
- Boosts immune system resilience
- Enhances nutrient absorption and vitamin synthesis
- Improves mood, stress response, and mental clarity
- May reduce eczema and other skin issues



## Most Bioavailable Form - Capsule or powder with:

- Enteric coating (protects from stomach acid)
- Refrigerated/live cultures (higher viability)
- Multi-strain blends (broader effect)
- Spore-forming probiotics like Bacillus coagulans or Bacillus subtilis survive digestion well and do not require refrigeration.

**Best Food Sources:** Fermented Foods (with live cultures), Yogurt (look for "live and active cultures"), Kefir, Sauerkraut, Kimchi, Miso, Tempeh, Kombucha.

Note: Not all fermented foods contain probiotics—must be unpasteurized or labeled with live cultures.

## When & How to Take It

- Best taken on an empty stomach or 30 minutes before meals
- Cycle strains every 1–3 months for gut diversity
- Pair with prebiotics (like inulin or fiber) to feed beneficial bacteria

## Conclusion

Probiotics are vital for digestive, immune, and mental health. Strain-specific benefits range from managing IBS to improving mood and recovering from antibiotics. Whether from food or supplements, regular probiotic intake can enhance total-body wellness.