

Gut Health Cheat Sheet

Understanding Prebiotics, Probiotics, and Postbiotics



1. Prebiotics: “Food for Your Good Bacteria”

What they are:

Nondigestible fibers that feed your beneficial gut microbes.

How they work:

They travel through your digestive system undigested, then get fermented by bacteria in your colon. This fermentation produces short-chain fatty acids (SCFAs) like butyrate -- which reduce inflammation, fuel your colon cells, and strengthen your gut barrier.

Natural food sources: Garlic, onions, leeks, asparagus, bananas (especially slightly green ones), oats, lentils and beans, cooled potatoes or rice (resistant starch)

Tips:

Start *slowly* to avoid bloating -- add one new fiber-rich food every few days and drink plenty of water.

2. Probiotics: “The Good Bacteria”

What they are:

Live microorganisms that provide a health benefit when taken in adequate amounts.

How they work:

They help restore balance in your gut by crowding out harmful bacteria, supporting your immune system, and producing vitamins and bioactive compounds.

Natural food sources: Yogurt with “live and active cultures,” kefir, sauerkraut, kimchi, miso, tempeh, pickles (look for “raw” or “fermented”)

Supplement tips:

- Choose a clinically studied strain for your specific goal (e.g., *Lactobacillus rhamnosus* GG for antibiotic-associated diarrhea).
- Store according to the label (some require refrigeration).
- Avoid high-dose probiotics if you’re immunocompromised or critically ill -- talk to your doctor first.

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3. Postbiotics: “The After Effect”

What they are:

Inactive microbes and/or their beneficial byproducts -- including SCFAs, peptides, and cell components that still have biological effects.

Why they matter:

They help reduce inflammation, strengthen your gut barrier, and support your immune and nervous systems -- without needing to survive the digestive process.

How to support postbiotic production naturally:

- Eat a diverse, fiber-rich diet (feeds your microbiome so it can make postbiotics).
- Include fermented foods for extra microbial variety.
- Stay hydrated to support healthy digestion.

Supplement note:

Postbiotic products are still being researched -- focus on *food-first* strategies unless guided by a professional.

4. Putting It All Together

| Type | What It Is | What It Does | Food Examples |
|-------------------|---------------------------|--|-------------------------------|
| Prebiotic | Fiber that feeds microbes | Fuels good bacteria & reduces inflammation | Garlic, onion, oats |
| Probiotic | Live good bacteria | Restores balance & supports immunity | Yogurt, kefir, kimchi |
| Postbiotic | Microbial byproducts | Strengthens gut barrier & reduces inflammation | SCFAs from fiber fermentation |

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5. When “More” Isn’t Better

- Too much **fiber or prebiotics** too quickly → bloating, gas, or cramps
- Excessive **probiotics** → imbalance or infection risk (in vulnerable people)
- “Cleanses” or “detoxes” marketed as gut resets → often disrupt your natural microbiome balance

Go slow, stay consistent, and focus on variety over volume.

6. Quick Gut-Friendly Habits

Eat 25–35g of fiber daily (from whole foods)

- ✓ Include at least one fermented food a day
- ✓ Stay hydrated
- ✓ Move your body -- exercise supports gut motility
- ✓ Get quality sleep and manage stress (your gut-brain connection depends on it!)