5 Ways to Support Gut Bacteria for Better Immune Health

How often do you pay attention to your gut?

If you're like most people, unless you're experiencing an unwanted symptom like diarrhea or cramps, you may pay very little attention to what is happening along your digestive tract. What about during cold and flu season or anytime you want to strengthen your immune response? Do you consider your gut then?

Turns out, the gastrointestinal (GI) system and in particular the bacteria that live there do so much more than keep our tummies happy and our bowels moving.1 Trillions of bacteria in our digestive systems, known collectively as the gut microbiota, play an essential role in protecting us from various types of immune challenges.[1,2]

To get the most out of this harmonious relationship and to promote immune resilience, here are five ways you can pay attention to your gut and the bugs that live there:

1. Increase dietary fiber

- Diets high in fiber promote diversity and stability of gut bacteria, two important characteristics associated with a healthy, balanced microbiota.[3,4]
- Two main classes of dietary fiber include soluble and insoluble fiber.
- The National Academy of Medicine (NAM) suggests a minimum daily intake of 25 g of fiber for adult women and 38 g for adult men.[5]

Tips to hit your target:

✓ Track your fiber intake for 5-7 days to get a sense of your average daily intake.

✓ Over the following week, gradually increase your fiber intake by 3-5 g per day until you reach the optimal daily intake.

✓ Be mindful of including fiber with every meal. Add berries to your morning yogurt, nuts to your salad at lunch, and fuel up with beans or lentils in a soup for supper.

✓ Ideally, reach your fiber goal with a variety of fruit, whole grains, and vegetables versus relying on a fiber supplement.

✓ Use a fiber supplement when necessary or occasionally to supplement your dietary intake.

Table 1. Dietary sources of soluble and insoluble fiber[6]

Food	Portion	Fiber (g) per portion
Cooked beans (black, kidney, lima, pinto, white)	½ cup	6-8
Pear with skin	1 medium	4.0
Pumpkin seeds, roasted	1 ounce	5.2
Avocado	½ cup	5.0
Raspberries	½ cup	4.2
Sweet potato (baked, with skin)	1 medium	3.8
Barley (cooked)	½ cup	3.3
Quinoa (cooked)	½ cup	2.6

2. Get to know prebiotics[7]

- Although prebiotics are primarily soluble fiber, not all fiber is a prebiotic.
- Prebiotics are nondigestible fibers that can be broken down by bacteria and used to make beneficial compounds that support gut and immune health.
- Prebiotics have a very targeted effect on the microbiota and act as a fuel to stimulate the growth of health-promoting groups of bacteria without promoting the growth of unwanted ones.
- In essence, prebiotics are food for beneficial bacteria.

Tips to increase your prebiotic intake:

✓ Focus on fiber. Prebiotics are a type of dietary fiber and therefore naturally present in a wide range of fiber-rich plants.

✓ Dietary sources include chicory root, dandelion greens, garlic, onions, leeks, asparagus, bananas, burdock root, jicama root, kidney beans, oats, lentils, and barley.

Table 2. Sources of the most common prebiotics[8,9]

Prebiotic	Dietary Sources
Inulin	Chicory root, dandelion greens, garlic, onions, leeks, asparagus, bananas, burdock root, jicama root
Fructo-oligosaccharides (FOS)	Garlic, onions, burdock root, yacon root
Galacto-oligosaccharides (GOS)	Wholegrain bread, kidney beans, oats, lentils
Beta-glucan	Oat, barley, mushrooms, algae
Isomalto-oligosaccharides (IMO)	Sourdough bread, honey, miso, sake, and soy sauce Enzymatically produced from starch and added to foods and supplements
Galactomannan	Guar, commonly used in dairy, bakery, cereal, and meat products
Human milk oligosaccharides (HMO)	Human breastmilk 2'-fucosyllactose is a nature-identical HMO (not from human milk, yet structurally similar) and is available as a supplement
Resistant starch	Unripe (green) bananas, oats, legumes, and various starchy vegetables including potatoes
Xylo-oligosaccharides (XOS)	Bamboo shoots, fruits, vegetables, milk, and honey

3. Fit in fermented foods

- Fermentation occurs when harmless bacteria in the environment break down sugars in the food. The result is a longer shelf life, enhanced flavors, and powerful nutritional properties.
- Although fermented foods are not considered probiotics, they can be a source of a spectrum of microbes and contribute to good health by supporting a balanced and rich microbiota.[10]

Tips to increase your intake of fermented foods:

✓ Foods to include: kefir, sauerkraut, miso, tempeh, kimchi, natto, yogurt, fermented veggies

✓ Use fermented foods as flavor enhancers to add tang and zest to any meal

✓ Fermented foods contain live microbes that may be sensitive to heat; consider adding after the cooking process

✓ Experiment with making your own!

4. Monitor your medications

- Various medications, including antibiotics and laxatives, can have a negative impact on the gut microbiota.[11]
- To ensure an appropriate plan is in place, discuss all medications with your healthcare provider, including prescription drugs, nutraceuticals, and over-the-counter options.

5. Consider a probiotic supplement

- Occasionally, there may be a need for support in addition to what diet can provide alone.
- Not all probiotic supplements are created equal. Ask your healthcare provider about a probiotic supplement to address your specific needs.

Citations

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Metagenics Institute