

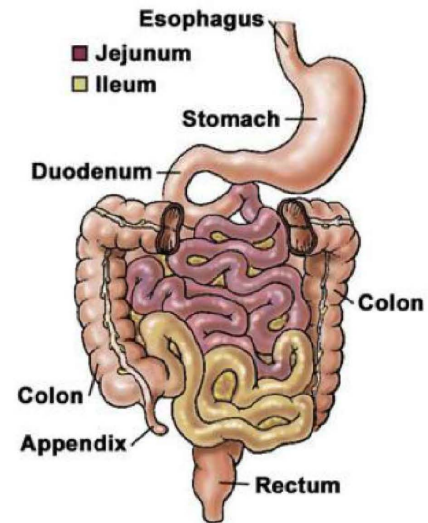
Gastrointestinal Health

Maintaining a balanced composition of gut bacteria keeps the immune system strong and able to prevent respiratory illness and combat infections and harmful bacteria.

Prolonged or intense training can disturb the gut and increase the risk of common gastrointestinal (GI) problems. Additionally, the balance of gut bacteria is disrupted after exposure to new bacteria during travel, illness, stress, fatigue, contaminated water and antibiotic use, which can lead to constipation, diarrhea, vomiting, or abdominal pain/cramping.

Probiotics

Probiotics are living microorganisms in your GI tract. When ingested, they directly increase the concentration of beneficial bacteria in the gut and aid in digestion. This helps to prevent the overgrowth of harmful bacteria, which can cause illness and diarrhea. Many foods are rich in probiotics, however if a greater dose is needed to help prevent or treat GI distress, a probiotic supplement is useful. For greater effectiveness, look for a minimum of 5 to 10 billion colony-forming units (CFU) per serving, which is the number of bacteria per dose.



Benefits of Probiotics

- ▶ Decreases frequency and duration of upper respiratory tract infections (URTI)
- ▶ Combats infections and the common cold
- ▶ Improves digestion
- ▶ Helps fight allergies
- ▶ Improves absorption of vitamins and minerals
- ▶ Treats diarrhea and irritable bowel syndrome (IBS)

Prebiotics

Prebiotics are not live cultures; instead they provide food for the good bacteria that already exist in the colon. Make a habit of including both prebiotics and probiotics in your diet to help strengthen your immune system and prevent illness.

Which Strains to Look For

1. **Lactobacillus acidophilus** - helps enhance immunity, decrease frequency of URTI, treats diarrhea and IBS, enhances calcium absorption, and may reduce lactose intolerance
2. **Lactobacillus rhamnosus gg** - treats traveler's diarrhea, improves immunity and helps fight allergies
3. **Bifidobacterium bifidus** - the most common bacteria in the body, increases immune function, treats diarrhea, fights yeast overgrowths
4. **Lactobacillus casei** - decreases frequency of URTI, increases immunity, fights diarrhea, reduces allergies, found in yogurt and cheddar cheese
5. **Lactobacillus plantarum** - improves digestion, optimizes immune function, decreases frequency of and duration of URTI, contained in foods such as sauerkraut, sourdough, kimchi
6. **Bifidobacterium lactis** - enhances immunity, improves digestion, helps absorption of vitamins and minerals, decrease

PROBIOTIC-RICH FOODS



Athlete Recommendations:

Foods Rich in Probiotics

- *Yogurt, kefir, buttermilk, miso, tempeh, sauerkraut, kimchi, and kombucha*
- *1 cup of kefir has 25 to 30 billion CFU*
- *Tip: a yogurt label showing, "live and active cultures" is required to have a minimum of 100 million CFU/g*

Foods Rich in Prebiotics

- *Garlic, leeks, onion, artichoke, bananas, asparagus, greens, and whole grains*
- *Chicory root (found in cereals, breakfast bars)*

Strategies for GI Recovery

1. **Avoid rich foods including** raw vegetables, oily, sugary, or spicy foods when suffering from GI distress as these foods may worsen symptoms. Foods that are high in Fermentable Oligo-, Di-, Mono-saccharides And Polyols (FODMAPs) may also worsen symptoms.
2. **Consume bland foods** such as saltine crackers*, bananas, rice, applesauce*, eggs, soup broth, tofu, kefir, and plain toast* that are easy to digest.
*Foods with increased FODMAPs, which may not be well tolerated.
3. **Stay hydrated** and use electrolyte beverages if suffering from vomiting or diarrhea.
4. **Practice food safety** by washing hands frequently, drinking bottled water where the water supply may be contaminated and cooking foods thoroughly to avoid exposure to additional harmful bacteria