



HEALTH & WELLNESS

USOPC.ORG
ISSUE
#5



What are they?

Probiotics are live bacterial microorganisms and yeasts beneficial to digestive and immune health.

They were first discovered when a scientist noticed that Bulgarian peasants who regularly ate yogurt lived longer lives than the royalty who did not. This finding led to more research and increased utilization of probiotics for health benefits. (Hill C, Guarner F, Reid G, et al., Nat Rev Gastroenterol Hepatol. 2014;11:506–514).

An IOC consensus statement noted we should consider advising athletes to ingest probiotics such as Lactobacillus on a daily basis.

(Maughan RJ, Burke LM, Dvorak J, et al
IOC consensus statement: dietary supplements and the high-performance athlete
British Journal of Sports Medicine 2018;52:439–455.

How Do They Work?

There are various types and strains of probiotics and each may work differently with unique functions and effects to improve both gastrointestinal and immune function.

(Gogineni, Vijaya K Morrow, Lee E Malesker, Mark a. Probiotics & Health Probiotics : Mechanisms of Action and Clinical Applications Immune modulation. J Probiotic Health. 2013; 1(1) 1–11).

One mechanism for how they work includes the suppression of toxin production via direct interaction with gut microbia. Probiotics may serve as competition in the intestines to help prevent the growth of pathogens which helps prevent disease.

Another possible mechanism suggests that probiotic lactobacilli stimulates the production of infection fighting white blood cells.

Note that most of the previous health benefits noted, such as illness resistance, will not be seen until at least 2 weeks after consistent use.



Benefits

Evidence shows that ingesting probiotics has health benefits beyond just gastrointestinal. These include allergic, metabolic, inflammatory and respiratory advantages. Recent studies have found the probiotic use may provide:

- A reduction in the number of upper respiratory tract infections.
- A reduction in the duration of acute URTI.
- A reduction of sick days from school and work.
- Alleviated symptoms of lactose intolerance.
- Increased bioactivity in uptake of vitamins and minerals.
- Enhanced recovery improved immune function and improved GI tract function.

Where to Find Them

Natural sources of probiotics include:

- Some yogurts and cheeses.
- Other dairy products that contain Lactobacillus milk or kefir.
- Sauerkraut.
- Sourdough bread.
- Kimchi.
- Sour pickles.
- Soy and nut milks.

In the case of lactose intolerances, probiotics may be consumed using dairy-free products or supplements.

The most common beneficial bacteria Lactobacillus species, Bifidobacteria, Saccharomyces boulardii and Bacillus coagulans. These can be found in probiotic dietary supplement products.

Please use extreme caution in the sourcing of probiotic supplements. As with all supplements, they are not regulated by the FDA for purity. Therefore, limit usage to NSF Certified for Sport tested products.

Usage

- Take a daily probiotic dose, preferably in the morning, containing Lactobacillus and/or Bifidobacterium species with live bacteria.
- This is usually recommended over a multistrain version which may result in various effects that oppose each other.
- Reassess results after at least a two-week trial to determine continuation.
- Consume fiber from a variety of sources (such as whole grains, fruits, vegetables, and legumes), as it serves as the "metabolic fuel" for healthy bacteria in the gut.

"It is recommended to have a medical and dietary screening to determine the best product and dosage for the most beneficial effects."

