**Effects Of Probiotics And Prebiotics On Our Microbiota**

If your gut microbiota is disturbed, can probiotics and prebiotics help?

Probiotics and prebiotics may help normalize a gut microbiota disturbed by antibiotics or other stressors and in doing so, improve your health.

**What are probiotics?**

Probiotics are live microorganisms that when taken in sufficient amounts can provide health benefits. Sometimes - but not always - they are similar to microbes that normally colonize our bodies.

Do probiotics improve our gut microbiota?

- As live microbes, probiotics can influence the microbes that colonize our body.
- Although few in number compared to our gut microbes, probiotics can grow, metabolize and interact with resident microbes. Rarely do probiotics permanently colonize.
- Probiotics may exert effects on the microbiota as they travel through the less densely colonized regions of our GI tract (stomach and small intestine).
- Probiotics may use similar mechanisms as our colonizing microbes to improve health. For example, the ability of probiotics to influence our immune system can impact our colonizing microbiota and our health.

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**What are prebiotics?**

Simply put, they are food for beneficial microbes that live on or in us. They are metabolized by the ‘good’ gut microbes, positively impacting the gut environment, with an overall health benefit.

Do prebiotics improve the microbiota?

- Yes! Prebiotics positively impact the composition and/or activity of our resident microbiota.
- Prebiotics may increase levels of beneficial bacteria.
- Prebiotics may increase microbe-derived metabolites or signaling molecules that are important for health.