

Gut Microbiome

May 8, 2026 • vajiramandravi.com



Gut Microbiome

Gut Microbiome Latest News

The human gut microbiome is shaped by diverse selective forces that originate from host and environmental factors and it substantially influences health and disease.

About Gut Microbiome

- Gut microbiome, **gut microbiota**, or **gut flora** refers to the **trillions of microbes**, such as bacteria, viruses, fungi, and parasites, that **live in the human gut**.
- **Establishment** of the human gut Microbiome:
 - **Infants inherit their first gut microbes during vaginal delivery or breastfeeding** (chestfeeding).
 - **Later, your diet** and other **environmental exposures** introduce new microbes to your biome.
- The gut microbiota **assists in a range of bodily functions**, including:
 - **harvesting energy from digested food**
 - **protecting against pathogens**

- **regulating immune function**
- **strengthening the biochemical barriers of the gut** and intestine
- **Changes in microbiota composition can affect** these functions.
- **Disease:**
 - While there are beneficial bacteria in the gut, **there are also harmful bacteria that can enter the Gastrointestinal (GI) tract and cause infection.**
 - These infections include **food poisoning** and **other GI diseases** that result in **diarrhea and vomiting.**
 - Research suggests that bacterial populations in the GI system play a role in developing gut conditions, including **inflammatory bowel diseases (IBD)**, such as **Crohn's disease** and **ulcerative colitis.**
 - **Low microbial diversity in the gut** also has **links to obesity and type 2 diabetes.**
 - The status of the gut microbiota also has **links to metabolic syndrome.**
 - **Disturbing the microbiota** with antibiotics can also lead to disease, including infections that become **resistant to antibiotics.**

Source: NAT

Source: <https://vajiramandravi.com/current-affairs/gut-microbiota/>

© Vajiram & Ravi. For personal use only.