

Gut Microbiota Glossary

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- Gut microbiota** The community of microbes that lives in an individual's gastrointestinal tract. The term encompasses members of Bacteria, Archaea, Eukarya, and their viruses.
- Gut microbiome** The aggregate collection of genomes and genes present in a gut microbiota.
- Gnotobiotics** From the Greek gnosis (known/knowledge) and bios (life). Animals reared under sterile (germ-free) conditions are classified as gnotobiotic, as are animals that are raised under germ-free conditions for a period of their lives and then colonized with various collections of microbes.
- Metagenomics** Culture-independent studies of the structures and functions of microbial communities. Some limit the term to DNA- and RNA-level analyses, whereas others extend it to include proteins and metabolites. High-throughput screening of expression libraries, generated from cloned microbial community DNA fragments, is defined as functional metagenomics.
- Pathobiont** As opposed to a pathogen, refers to a member of a microbiota that under certain conditions of disturbance to the host and/or microbiota can use pathology.
- Dysbiosis** Concept coined by Metchnikoff to describe a state of microbial imbalance in the gut. Refers to a change in the structural and/or functional configuration of the microbiota that produces a disruption in the homeostasis between a host and the microbial community it harbors.
- Prebiotic** Food ingredient that supports the growth and expression of a beneficial biological property or properties of one or more resident gut symbionts.
- Probiotic** A live microorganism that when ingested provides benefit to the host, either directly through interactions with host cells or indirectly through effects on members of the microbiota.