

# The role of the microbiome in health and disease



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In healthy bodies, gut microbiota perform a number of key functions relating to metabolism, immunity and protection. When the microbiome becomes imbalanced, this is known as 'dysbiosis' and can lead to implications in the pathophysiology of GI disorders and other metabolic conditions.

Find out more by exploring the links below:

## Neurological

Could the microbiome be harnessed as a clinically useful biomarker of neurological disease onset, phenotypic variability and disease activity? This review explores the evidence:

<https://onlinelibrary.wiley.com/doi/abs/10.1002/ana.24901>

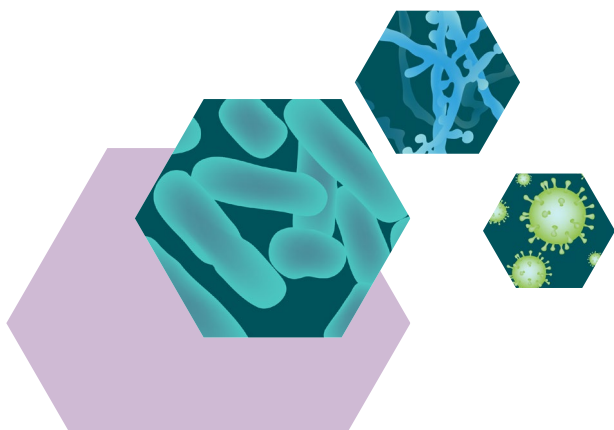
## Immunological

The association between the composition of the intestinal microbiota and the development of allergic disease or asthma is less consistent in older children than in neonates, suggesting that early-life microbial exposure plays an important role:

<https://www.sciencedirect.com/science/article/pii/S0091674918314313>

Abundant data support the notion that the intestine is a critical organ for the appropriate immune balance and for the prevention of non-intestinal autoimmune diseases:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5857604/>



## Metabolic

A review of the current evidence surrounding the gut microbiome and microbial metabolites in relation to obesity and associated metabolic disorders:

<https://link.springer.com/article/10.1007/s13679-019-00352-2>

## Gastrointestinal

Specific bacteria are associated with the microbiomes of patients with IBS:

<https://www.sciencedirect.com/science/article/abs/pii/S0016508519346499>

Recent advances in our understanding of the gut microbiota have revealed that the unfavourable alteration of the gut microbiota, i.e., dysbiosis, is strongly associated with the pathogenesis of IBD:

<https://link.springer.com/article/10.1007/s12328-017-0813-5>

