

# WHY IS GUT MICROBIOTA IMPORTANT?

A healthy gut microbiota contains a balanced composition of many classes of bacteria that have health-promoting functions

Helps the body to **digest** certain foods  
e.g. dietary fibre<sup>1,2</sup>

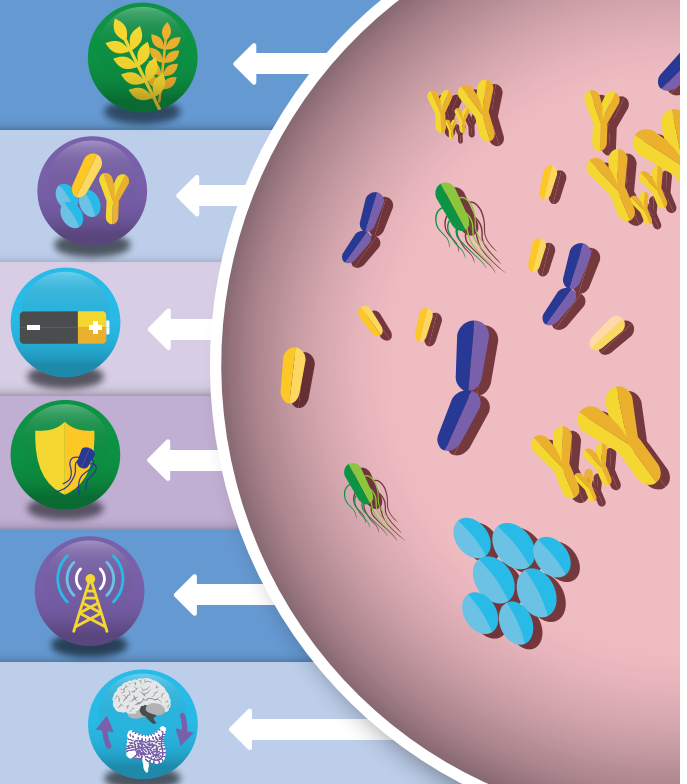
Produces some **vitamins** e.g. B12,  
folate and K<sup>1</sup>

Regulates energy **metabolism**<sup>1,2</sup>

**Defends** against harmful microorganisms<sup>1,2</sup>

Provides **signals** for the development  
and function of the immune system<sup>1,2</sup>

Influences **gut-brain** communication for  
optimal gut and brain functions<sup>1,2</sup>



## IMBALANCES IN GUT MICROBIOTA HAVE BEEN LINKED TO:



**Asthma**  
and **allergy**<sup>2,3</sup>



**Infantile colic** and  
functional **gastrointestinal**  
disorders<sup>3</sup>



**Infections**<sup>2,3</sup>



**Inflammatory**  
**bowel disorders**<sup>3</sup>



**Obesity** and  
**associated metabolic**  
**disturbances**<sup>2,3</sup>



**Aberrant behaviour** and  
**autism spectrum**  
**disorders**<sup>3</sup>

The gut microbiota builds up after birth, the right nutrition plays a crucial role in the creation of a balanced microbiota<sup>4</sup>



1. Shamir R, van Elburg R, Knol J, Dupont C. Gut Health in Early Life: Significance of the Gut Microbiota and Nutrition for Development and Future Health. Essential Knowledge Briefing, Wiley, Chichester (2015). 2. Van de Wiele T et al. *Nature Reviews Rheumatology*, 12:398–411, 2016. 3. Collado MC et al. *Gut Microbes*, 3(4): 352–65, 2012. 4. Lozupone et al. 2012 *Nature*, 489:220–30