


Getting To Know Your Gut Microbiota

An overview of the fascinating world of gut bacteria

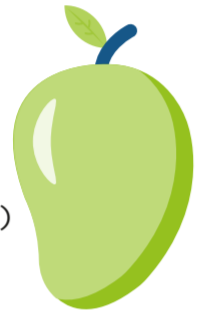


In an individual weighing 70Kg, the gut microbiota




weighs about **200g**

the equivalent of a medium-sized **mango.**⁽¹⁾



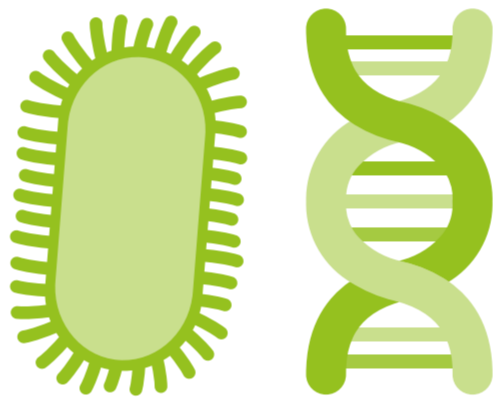
The human genome consists of about

23,000 genes



whereas your microbiome encodes over

3 million genes.⁽³⁾



The gut is a **door** to your body.



Your gut microbiota plays a part in the intestine's role as a barrier helping the


immune system



fight pathogens.

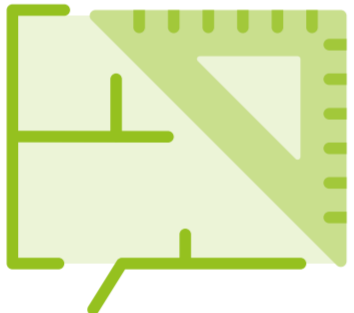
The whole digestive tract is

7 to 10m long.




Its surface is as big as a studio apartment

30-40m².⁽²⁾




95% of your bacteria is located in the

large intestine,



which is one of the most densely populated


microbial ecosystems



on Earth.⁽⁴⁾

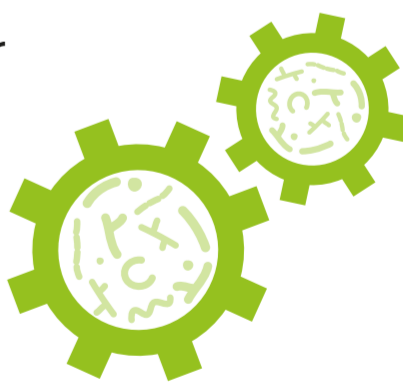
Although the composition of gut microbiota is as

personal as a fingerprint,

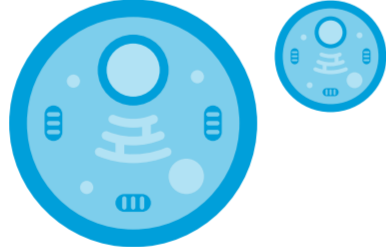


it provides essential functions for

digestion & protection against infection.⁽⁵⁾

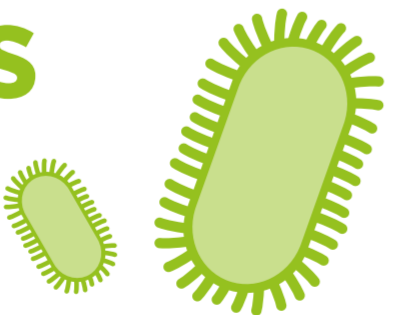


Human cells



and

bacteria cells



are present in comparable numbers in your body.⁽¹⁾

(1) Sender R, Fuchs S, Milo R. Revised estimates for the number of human and bacteria cells in the body. PLoS Biol. 2016; 14(8):e1002533. doi: 10.1371/journal.pbio.1002533.

(2) Helander HF, Fändriks L. Surface area of the digestive tract – revisited. Scand J Gastroenterol. 2014; 49(6):681-9. doi: 10.3109/00365521.

(3) Valdes AM, Walter J, Segal E, Spector TD. Role of the gut microbiota in nutrition and health. BMJ. 2018; 361:k2179. doi: 10.1136/bmj.k2179.

(4) Marchesi J, Shanahan F. The normal intestinal microbiota. Curr Opin Infect Dis. 2007; 20:508-13. doi: 10.1097/QCO.0b013e3282a56a99.

(5) Turnbaugh PJ, Hamady M, Yatsunenko T, Cantarel BL, Duncan A, Ley RE, et al. A core gut microbiome in obese and lean twins. Nature. 2009; 457(7228):480-4. doi: 10.1038/nature07540.