

GUT-BRAIN AXIS



Your gut and your brain are in **constant communication** through a **sophisticated signaling system** and without a doubt, **the gut microbiota plays an important role**. Here's what you need to know about the gut-brain axis:

Gut-brain communication
is two-way and dynamic



Gut microbiota can affect the brain in different ways,
including by changing the actions of Enteric Nervous System (ENS) neurons and the vagus nerve (cranial nerve X)



Altering bacteria in the mice's gut
can dramatically change behaviour and cognition



Short-chain fatty acids produced by gut microbiota
influence how brain cells develop and function in mice



Some probiotics show potential
for influencing brain activity in healthy adults



Patients with several brain-related conditions show an altered gut microbiome
and commonly experience gastrointestinal symptoms

