

Check your understanding



1 What do good bacteria do and what do harmful bacteria do?

Answer

Good bacteria help us digest food and provide us with some vitamins. There are good bacteria in the environment as well – for example they are responsible for the decomposition of dead organisms, they provide plants with nitrogen, they help us clean our waste water. Harmful bacteria are pathogenic – they make us sick, i.e. the bacteria which cause pneumonia, meningitis, etc.

2 Did putting bifidobacteria into the gut of the germ-free mice improve their behavior?

Answer

It did in some cases. It improved memory in both male and female mice and restored the normal level of anxious behavior of females.

3 Why did we use germ-free mice?

Answer

As a control – to have something to compare our results to.

4 Why did we test the impact of bifidobacteria on mouse behavior?

Answer

Bifidobacteria are the dominant microbes in our gut during the first months after we are born; our behavior patterns are shaped during this period of early life.