

# Facts, Figures & Tips on Fibers & Gut Microbiota

## FIBERS & GUT MICROBIOTA: DYNAMICS IN ADULTHOOD

### FOCUS



#### DIVERSITY:

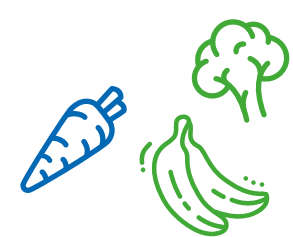
A SIGN AND A DRIVER FOR HEALTH



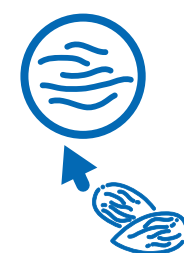
**AS ADULTS, OUR GUT MICROBIOTA IS VERY DIVERSE**

Adults host about  
**150 DIFFERENT SPECIES**  
of bacteria.

Humans' intestinal microbiomes altogether count  
**MORE THAN 5,000 SPECIES**



**A diet rich and diverse in fibers can directly impact this diversity!**



Pasoli et al., 2019; Zhernakova et al, 2016  
Sonnenburg 2016; Makki 2018



#### DYSBIOSIS:

WHEN MICROBIOTA'S APPARENT STABILITY GETS DISBALANCED

When reaching adulthood, our gut microbiota stabilises but is still susceptible to perturbations in its composition.

**THIS STATE IS CALLED 'DYSBIOSIS'.** Contributing factors are:



**ANTIBIOTICS**



**PSYCHOLOGICAL & PHYSICAL STRESS**

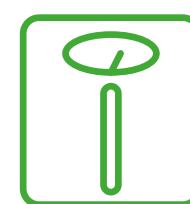


**UNSUITABLE FIBER-DEPRIVED DIETS**

**THIS IMBALANCE** is suspected to be linked to several pathologies such as:



**DIABETES**

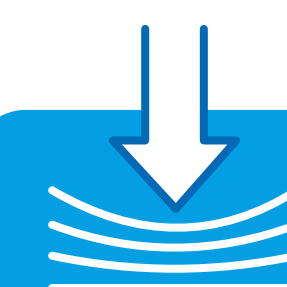


**OBESITY & OTHER METABOLIC DISORDERS...**



**ALLERGIES**

Franzosa et al., 2015; Petersen, Round, 2014; Carding, 2015  
Hawrelak et al., 2004; Makki et al., 2018; Dore et al., 2017



#### RESILIENCE:

BACK TO STABILITY

But no worries! In healthy subjects, dysbiosis is transient, and the microbiota usually goes back to its original state.

**IT'S THE RESILIENCE OF THE MICROBIOTA.**

⋮



This return to normal can take more or less time (days for some, weeks for others) after the end of the event associated to the modification.

Lozupone et al., 2012; Sommer et al., 2017



**ALL ACTORS OF OUR OWN HEALTH**

We need to protect our gut microbiota to **KEEP IT DIVERSE AND RICH.**

A well balanced and diversified fiber-rich diet may be a start!

