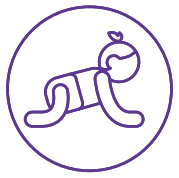


THE IMPORTANCE OF THE FIRST 1.000 DAYS OF LIFE



1 What you should know about the first 1.000 days of life

first **1.000** days of life: period from conception to 2 years of age

3 years for the gut microbiota to build up, diversify and stabilize

at least **80%** of the immune cells are located in our gut

importance of **bidirectional crosstalk**
the gut microbiota participates in the development of the immune system
the immune system is involved in the maturation of the gut microbiota

2 Development of the intestinal immunity

2.a. Development of the gut microbiota

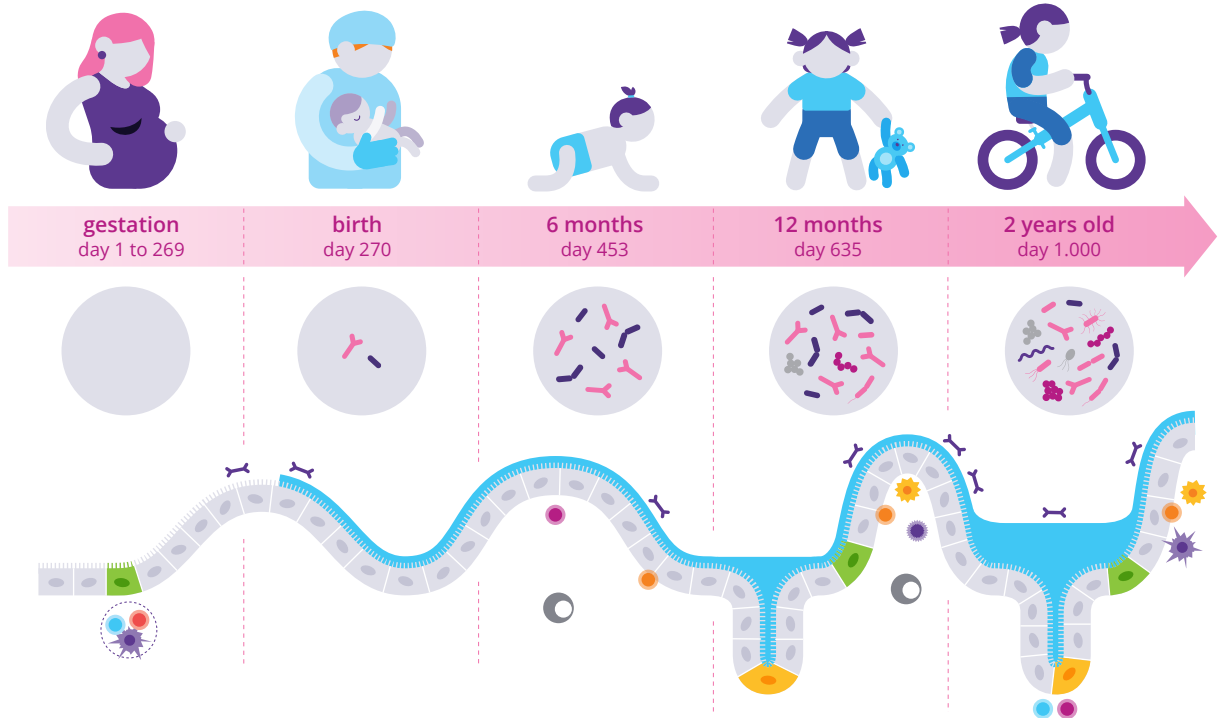
Bacterial colonization starts after birth

commensal bacteria

2.b. Maturation of the immune system

Development of gut's immune structures

immune cells
antibodies



3 Factors shaping microbiota composition & immune system development

drugs	✓	antibiotics acid-reducing drugs (proton pump inhibitors)
delivery	vaginal	caesarean section
gestational age		preterm infants (22 - 36 weeks of gestation)
diet	breastfeeding introduction to solid food diet rich in fibers	formula milk maternal high-fat diet
environment	pets nature farm	

4 Any imbalance in the gut microbiota (dysbiosis) may potentially lead to negative health outcomes in the future

