

FAQ

HUMAN MICROBIOME



YOUR BODY: HUMAN AND MICROBES

WHAT IS THE MICROBIOME?

The human body is home to trillions of microbes. The community of microbes living in intimate association with our bodies, and the genes they contain, make up the **human microbiome**.



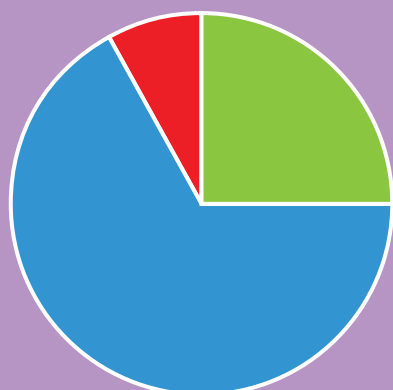
WAIT ... WHAT'S A MICROBE?

A **microbe** is a microscopic organism - this includes viruses, bacteria, and fungi.



Not all microbes make us sick - the microbes in and on our bodies play many essential roles.

WHO'S THERE?



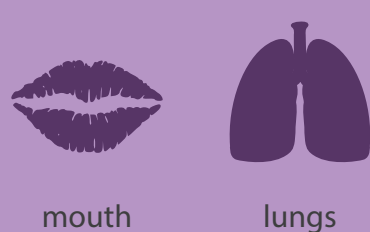
Cells in the human body:



A human body is actually only about 25% human cells. The rest is many thousands of species of bacteria and other microbes.

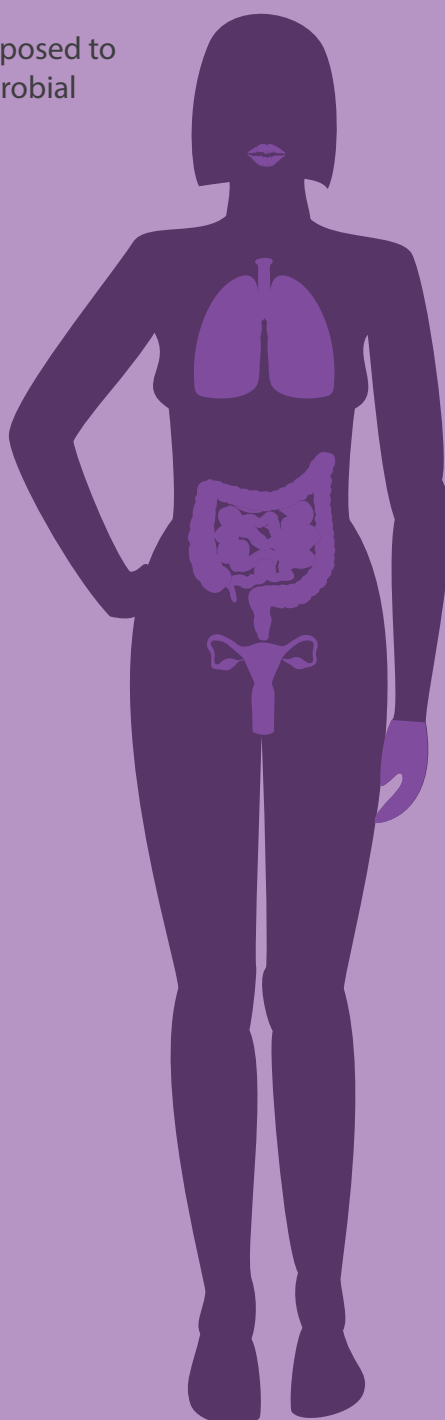
WHERE ARE THEY? WHAT ARE THEY DOING?

Wherever the human body is exposed to the outside world, there is a microbial community.

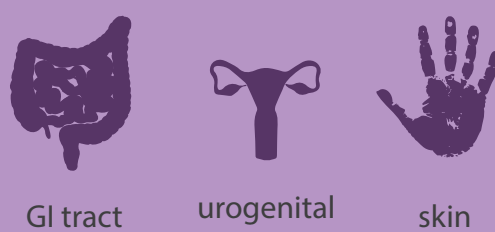


mouth

lungs



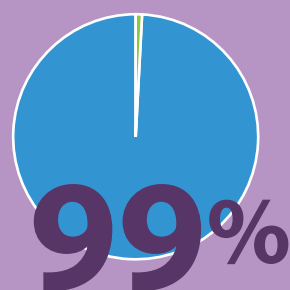
Our microbiome helps us extract energy and nutrients from the food we eat, and crowds out or inhibits pathogens.



GI tract

urogenital tract

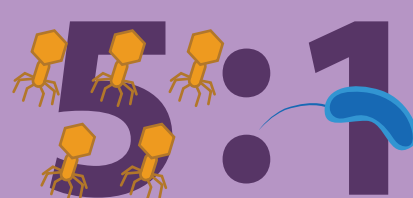
skin



Microbes contribute an extra 2,000,000 genes to the 20,000 gene human genome.



2.5 LBS = WEIGHT
of the microbiome



Viruses outnumber bacteria by about 5:1.



3 PINTS = VOLUME
of the microbiome

HOW DO WE GET OUR MICROBIOME?

BIRTH:

A newborn gets its microbes from:

- ▲ its mother's birth canal
- ▲ skin of its mother and other care-givers



BREAST MILK:

Breast milk has been fine-tuned over millions of years to provide:

- ▲ nutrients, vitamins, and antibodies
- ▲ diverse microbes to populate the baby's gut



ENVIRONMENT:

For the rest of the baby's life, it will continuously encounter new microbes from:

- ▲ soil and water
- ▲ people, pets, plants
- ▲ new and diverse foods



Learn more about your microbiome



AMERICAN
SOCIETY FOR
MICROBIOLOGY

American Academy of Microbiology:

<http://bit.ly/HumanMicrobiome>

