



RETHINKING GERMS

HEALTHY LIVING WITH OUR

MICROBES

What is our microbiome?

The microbiome is the genetic material of all the microbes, bacteria, fungi, protozoa and viruses that live on and inside the human body. Our health greatly depends on the health of our microbes!



100:1

The microbial genes in your body outnumber the genes in your own DNA by more than 100 to one and contribute an extra 2,000,000 genes to the 20,000 genes your human genome.



10:1



5lbs.

Your body contains 10 times more bacteria, fungi and other microorganisms than human cells.

Your microbiome can account for up to five pounds of your bodyweight.

Your microbiome is like a fingerprint. It is unique to you!

Your microbiome consists of 10 to 100 trillion microbes and no two people have the exact same mix of microbes. Your microbiome reacts to the world around and within you, and as a result, your microbiome is unique and distinct, like a fingerprint.



Where does our microbiome come from?

BIRTH

We inherit microbes from our mother's birth canal as well as her skin and contact from other care givers.



BREAST MILK

Feeding provides nutrients, vitamins and anti-bodies as well as diverse microbes that provide a healthy beginning to our immune system.



ENVIRONMENT

Throughout our lives we continually encounter microbes from the world around us. Soil and water, the people we meet, our pets, our plants as well as our diet and the variety of foods we eat.



our microbiome and our HEALTH



Science is telling us the microbiome plays a role in digestion, the regulation of our immune system, disease prevention, wound healing, appetite control, brain development, and even our emotions.

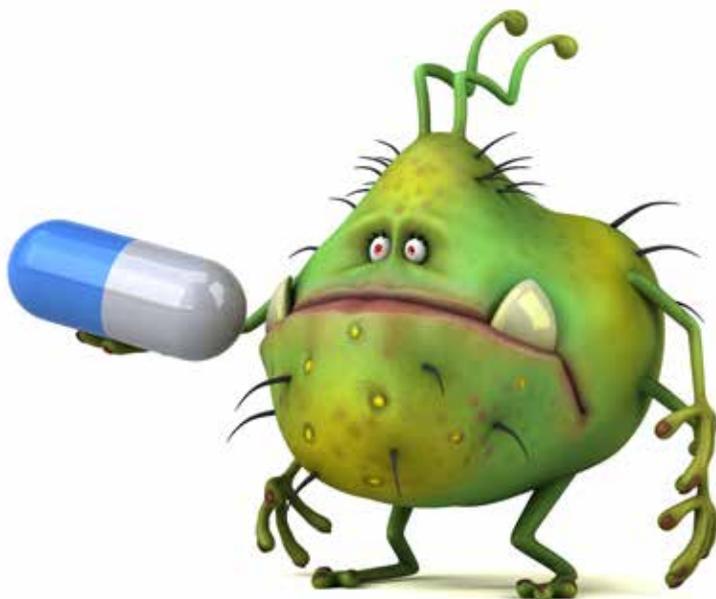
WE ARE WHAT OUR MICROBES EAT.

The food we eat not only feeds us, but also feeds our microbes. Foods that are high in fibre such as veggie, whole wheat, brown rice and other grains are better for our microbes, whereas white flour and foods that are high in sugar don't make it through to the lower intestines where so many microbes work their magic.



WE'VE BEEN CARPET BOMBING OUR MICROBES!

In our quest to eradicate disease and infections, we've also been wiping out the microbes that keep us healthy. We've all heard about how overuse of antibiotics has led to resistant superbugs, such as MRSA, but you may be surprised to know multiple courses of antibiotics in the first year of life can also lead to a higher risk of asthma, and their use is also linked to increased risks of obesity and type 2 diabetes.



DOGS ARE MORE THAN A BEST FRIEND.

Dogs not only make for great companions, but they give also bring microbes into your home – and potentially all the way into your gut. Just don't be afraid to let your dog lick your face!

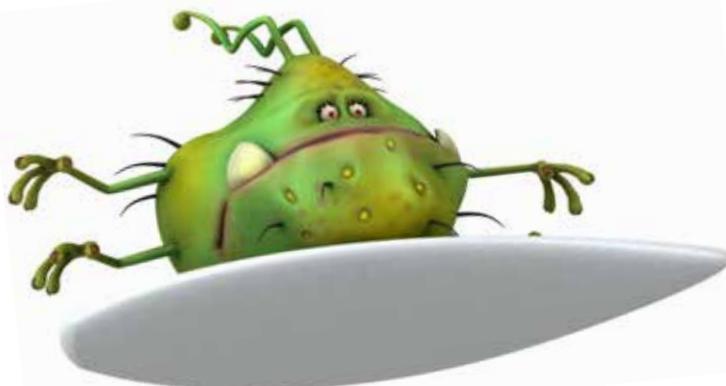


SOAP, WATER AND COMMON SENSE.

Antimicrobial products and sanitizers also kill the good microbes that keep us healthy. It's best not to use antimicrobial products. Soap and water is all you need.

GO OUTSIDE AND PLAY !

With today's diet of TV and video games most of us likely spend more time indoors than the generations before us. Soil and dirt contain many more healthy microbes than dangerous ones. Do our kids get enough play in the dirt like the kids who grew up before the digital age?



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SOURCES:

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American Academy of Microbiology

The Center for Ecogenetics and Environmental Health, UofW

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