

Did You Know Your Nose Has Its Own Microbiome

Science has recently found out that your nose is home to many microorganisms, like your gut, like your brain, just like your entire body.

If you breathe through your nose, your nasal cavities are the first line of defense against airborne pathogens. As you breathe in air the molecules swirl around your nasal cavities before going into the lungs. Hairs filter out dust, pollen, spores, viruses, and bacteria. The microbiome of your nasal cavities can protect you from pathogens just like it does throughout your body.

The inspiration for this new study came from the mother of one of the researchers, who was having problems with headaches and chronic rhinosinusitis – a condition that causes pain and swelling in the sinuses and nasal cavity.

“My mother had tried many different treatments, but none worked,” says microbiologist Sarah Lebeer, from the University of Antwerp in Belgium. “I was thinking it’s a pity that I could not advise her some good bacteria or probiotics for the nose. No one had ever really studied it.”

Lebeer and her team analysed nose bacteria from 100 healthy volunteers and 225 people with chronic rhinosinusitis, characterising 30 different families of bacteria in all. One family in particular stood out: lactobacilli.

These bacteria were more abundant in the healthy group of study participants – up to 10 times more abundant in some cases. One particular strain of Lacticaseibacillus identified appeared to have adapted for nasal life, having evolved unique genes to manage the high oxygen levels in the cavity, and using thin tubes called fimbriae to help cling on.

Science Alert

A healthy gut microbiome will eventually result in the entire body having a healthy microbiome. The only way to create and sustain a healthy microbiome is to feed it right. Your microbiome is the most important part of your immune system. For more, check out *How To Heal Your Gut*.