Don't Buy 'Molekule' Air Purifier, or Its Shameless Scaremongering

By Alex Berezow, PhD — May 8, 2019

We're a nation of confused germophobes.

Every time some boring study shows that (surprise!) your toothbrush has bacteria on it, it makes national headlines. People buy antibacterial soap because they're convinced that regular soap isn't good enough. We're afraid to touch public door handles. (Okay, I'll admit to falling into that group, but I also blame my OCD.)

The "confused" part of my descriptor is based on the fact that a substantial number of Americans don't fear actual germs -- the ones that really do harm people. We skip vaccines for measles, convinced that the virus isn't a big deal. We eat raw dairy products and drink unpasteurized juice, forgetting that the reason we pasteurize things is to prevent potentially lethal foodborne illnesses.

In other words, we fear harmless microbes while we ignore the dangerous ones. And yet another product has hit the market, catering to these confused germophobes.

Don't Buy 'Molekule' Air Purifier or Its Shameless Scaremongering

A company called Molekule is trying to sell an air purifier by scaring people on Facebook. (See screenshots below.)
Mold, bacteria, and even viruses?!?! Say it ain't so!

For the sake of argument, let's just assume that their product works as advertised. It makes the air in your house as pure as that of the Swiss Alps. Do you need their product? No, for two reasons.

First, you have an in-built air purifier called the respiratory system. Large particles (bigger than about 6 micrometers) don't make it past the nasal cavity (assuming you breathe with your nose and not with your mouth like a caveman). Microbes are smaller than that, so they can and do make it deeper into your respiratory system.

But fear not! Living within the tiny air sacs in your lungs (called alveoli) are immune cells known as macrophages. These "big eaters" gobble up bacteria, viruses, fungi, and whatever other debris happens to find its way into the lungs. You have so many of these immune warriors fighting on your behalf that, as they die and make their way upward toward the digestive tract, you swallow about 2 million of them per hour. Yum!

Second, what happens once you leave your house? Even if you scrub your home clean of every microbe, you have to leave every once in a while. And the world is full of microbes. Once again, that's why we have an in-built air purifier known as the respiratory system.
Bottom line: If you're a healthy, immunocompetent person, you don't need to purchase an air purifier for your house. Spend your money on something you actually need, like a measles vaccine.

Source URL: https://www.acsh.org/news/2019/05/08/dont-buy-molekule-air-purifier-or-its-shameless-scaremongering-14009