New Study Shows Only Half of People Infected with Flu Virus Actually Get Sick -- Why?

By Dr. Mercola

It's a common misconception that the only way to avoid getting the flu is to make sure you don’t come into contact with the virus, or if you do to wash it off your hands quickly before you touch your eyes or your mouth and allow the virus to invade your system. As a result, a large number of hand sanitizers and antibacterial soaps are heavily promoted each flu season as your best defense against the flu virus.

Now, washing your hands properly is certainly a good idea to reduce your risk of infection (plain soap and water are all you need to accomplish this, there's no need to use antibacterial varieties).

In fact, Americans actually touch about 300 different surfaces every 30 minutes … but it's rather unrealistic to think that you can avoid ever coming into contact with an infectious virus like the flu. But this needn't send you into panic mode, as just because you're exposed to a virus does not mean you will get sick! The determining factor? The health of your immune system!

You Can be Exposed to the Flu Virus and Not Get Sick

A new study by University of Michigan researchers may help put to rest the myth that you have to avoid the flu virus in order to avoid getting sick, as when they infected 17 healthy people with the flu, only half of them got sick. The other half? They felt perfectly fine.

Interestingly, even if you don't notice the flu your immune system does. The researchers found changes in blood took place 36 hours before flu symptoms showed up, and everyone had an immune response, regardless of whether or not they felt sick. Study author Alfred Hero, professor at the University of Michigan College of Engineering, told MSNBC:

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"Many people might conclude that if you are exposed to a virus and you don't get sick, it's because the virus didn't stick or it was so weak, it just passed right through your system and your system didn't notice. That's not a correct notion … There is an active immune response which accounts for the resistance of certain people getting sick, and that response is just as active as the response we all know and hate, which is being sick with the sniffles, fever, coughing and sneezing. It's just that the responses are different."

There were differences in both gene expression and biological metabolism among those who got sick versus those who didn't, and the differences were related to antioxidants.

In symptomatic participants, the immune response included antiviral and inflammatory responses that may be related to virus-induced oxidative stress. But in the non-symptomatic participants, these responses were tightly regulated. The asymptomatic group also had elevated expression of genes that function in antioxidant responses and cell-mediated responses.

**Your Lifestyle is One of the Greatest Predictors of Whether or Not You'll Get the Flu**

You can greatly lower your risk of coming down with a cold, flu or other illness by modifying your daily lifestyle habits. I haven't missed a day of work due to illness in over 30 years, so I speak from personal experience. I've also seen my health-conscious friends and colleagues enjoy similar benefits. This is clearly not because we have never been exposed to a flu virus … it's a direct result of healthy lifestyle choices.

I like to use the analogy of disease to darkness and health to light. If you shine a light in a dark room it is not dark anymore. Darkness and light simply can't coexist. Similarly if you are healthy you can have massive exposure to infectious agents and you simply will NOT get sick.

Just like light and darkness, it is very difficult, if not impossible in most cases, for a strong immune system and infectious disease to exist together. It is the state of your immune system -- not the bacteria or virus itself -- that determines whether or not you will get sick, even if you come in contact with the germ.

**Where do Flu Shots Come In?**

If a healthy immune system is capable of keeping you flu-free year after year, is it necessary for you to get a flu shot? The choice is yours, but keep these four important factors in mind:

- All vaccines are immune suppressive -- that is, they suppress your immune system, which may not return to normal for weeks to months. This could *increase* your risk of contracting the flu or another infectious disease.
• Flu vaccinations are notoriously ineffective and keep coming up short in study after study when it comes to having any measurable impact on what matters most, which is reducing illness and mortality from the flu.

After the largest flu-vaccination campaign in Canadian history, a Canadian-led study (through the Cochrane Collaboration, a highly respected international network of researchers who analyze the scientific evidence, including the methodology, used in clinical trials) concluded that vaccinating nursing home workers had no effect on confirmed influenza cases among the homes' elderly residents.

• Only about 20 percent of flu-like illnesses are actually caused by influenza type A or B, according to the U.S. Centers for Disease Control and Prevention (CDC). The other 80 percent are caused by more than 200 other bugs that can make you feel just as sick -- respiratory syncytial virus, bocavirus, coronavirus, and rhinovirus, to name a few. The flu shot will do virtually nothing to prevent those latter viruses that cause 80 percent of flu-like symptoms. Only a healthy immune system can do that!

• If you do come down with influenza and have a good immune response, you will likely quickly recover without serious complications, as well as obtain natural immunity to that strain of influenza and to similar ones.

Since vaccines bypass your natural first-line defense (your IgA immune system), they are never 100 percent protective because they provide only temporary, typically inferior immunity compared to that your body would receive from naturally contracting and recovering from a disease.

5 Top Ways to Boost Your Immune Health and Stay Flu-Free

If you want to join the ranks of "those people" who rarely get sick, start with the strategies listed below. This is by no means an exhaustive list, but it does give you a general idea of how to live healthy and avoid getting sick. Other factors, like getting high-quality sleep and avoiding exposure to environmental toxins, are important too, but if you’re looking for a few simple "secrets" to get started on today … start with these …

1. Optimize Your Vitamin D

This takes the number one position for a reason: if you're vitamin-D-deficient, and many are, your immune system will not activate to do its job. Just one example of an important gene that vitamin D up-regulates is your ability to fight infections, including the flu. It produces over 200 antimicrobial peptides, the most important of which is cathelicidin, a naturally occurring broad-spectrum antibiotic.

At least five studies show an inverse association between lower respiratory tract infections and vitamin D levels. That is, the higher your vitamin D level, the lower your risk of contracting colds, flu, and other respiratory tract infections. To find out more,
including your best sources of vitamin D, dosing and what proper levels should be, please watch my free one-hour lecture.

The best way to increase your vitamin D level is by sun exposure but that is difficult for most people in the fall and winter, so next best would be to use a safe tanning bed. Neither of these methods require blood testing as long as you are getting enough exposure to get a tan. The least best way to increase your vitamin D level is by swallowing it, which will require a blood test to confirm your level is correct. Most adults require 8,000 units to reach therapeutic levels and some much more. Although that may sound too high to some, remember you can get up to 20,000 units through sun or tanning bed exposures.

2. Optimize Your Insulin and Leptin Levels by Avoiding Sugar, Fructose

Eating sugar, fructose and grains will increase your insulin level, which is one of the fastest ways to get sick and also experience premature aging. Leptin is another heavyweight hormone associated with disease and the aging process.

Like your insulin levels, if your leptin levels become elevated, your body systems will develop a resistance to this hormone, which will wreak havoc in your body.

My nutrition plan, based on natural whole foods, is your first step toward optimizing your insulin and leptin levels and increasing your chances of living a longer, healthier life. The heart of my program is the elimination, or at the very least, drastic reduction of fructose, grains and sugar in your diet, which is also important for flu prevention because sugar decreases the function of your immune system.

3. Exercise

If you are exercising regularly, just as if your vitamin D levels are optimized, the likelihood of your acquiring the flu or other viral illness decreases quite dramatically, and studies have clearly shown this.

In one such study, staying active cut the risk of having a cold by 50 percent, and cut the severity of symptoms by 31 percent among those who did catch a cold. The researchers noted that each round of exercise may lead to a boost in circulating immune system cells that could help ward off a virus.

It's a well-known fact that exercise improves the circulation of immune cells in your blood. The job of these cells is to neutralize pathogens throughout your body. The better these cells circulate, the more efficient your immune system is at locating and defending against viruses and diseases trying to attack your body.
Since exercise has repeatedly been proven to benefit your immune system over the long haul, it's crucial to treat exercise like a drug that must be properly prescribed, monitored and maintained for you to enjoy the most benefits. Essentially, you need to have a varied, routine that includes high-intensity interval exercises like Peak Fitness.

4. Eat Plenty of Raw Food

One of the most important aspects of a healthy diet that is frequently overlooked is the issue of eating your food uncooked, in its natural raw state.

Unfortunately, as you may be aware, over 90 percent of the food purchased by Americans is processed. And when you're consuming these kinds of denatured and chemically altered foods, it's no surprise we have an epidemic of chronic and degenerative diseases, not to mention way too many cases of colds and flu.

Ideally you'll want to eat as many foods as possible in their unprocessed state; typically organic, biodynamic foods that have been grown locally, and are therefore in season. But even when you choose the best foods available you can destroy most of the nutrition if you cook them. I believe it's really wise to strive to get as much raw food in your diet as possible.

I personally try to eat about 80 percent of my food raw, including raw eggs and organic, naturally raised meats.

5. Learn How to Effectively Cope With Stress

Stress has a major influence on the function of your immune system, which is why you've probably noticed you're more likely to catch a cold or the flu when you're under a lot of stress. This is true for both acute stressful episodes, such as preparing a big project for work, and chronic stress, such as relationship troubles or grief. Both will deteriorate your immune system and leave it less able to fight off infectious agents.

And, in the event you do get sick, emotional stressors can actually make your cold and flu symptoms worse. So be sure you take time in life to de-stress and unwind using stress management tools like exercise, meditation, massage, and solid social support.

Following these guidelines will help you optimize both your health and immune function, and by doing so minimize your risk of the flu and other infectious disease.