Mythbusting the Common Cold and Flu

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Abstract

As we have created vaccines for many contagious pathogens in the last 100 years, the flu and cold still lack a "cure." There are many things people do to try to get over the cold and flu from homeopathic remedies to the flu vaccine. While nothing can prevent the cold or flu, there are ways we can mitigate our chances of getting these viruses. By doing what we can to avoid getting these illnesses, we are also helping prevent the spread of the viruses to others. In the end, this is our best course of action until a vaccine that fully prevents these viruses from infecting us is found.

Introduction

Over the last 50 years, humans have achieved things unheard of outside of comic books and science fiction. Whether it is a mobile phone with no cord attached or a watch you can use for communication, we have done it and more. However, even though we constantly develop new gadgets for convenience and quality of life, we have yet to find a vaccine or "cure" for our common cold and flu viruses. When the flu season emerges, people become afraid of physical contact and try what they can to avoid catching the "bug."

Key points ahead:

- How the cold and flu viruses work and how to distinguish between the two.
- What remedies do and do not work.
- Can we prevent a flu or cold?
- Vaccines: What are they and can they give you the flu?
- Vaccines: Should you or should you not get vaccinated?

The Differences between a Cold and the Flu

The common cold, unlike the flu, is much milder with little more than a cough, runny nose, congestion, and a sore throat that goes away after about a week. A cold can be caused by many different viruses, but the symptoms remain the same with slight deviations. While a cold is mild, the flu can be dangerous and much more taxing on the body. Flu symptoms that differ from cold symptoms are fever, muscle fatigue/soreness, and headaches. Other forms of viruses, such as the swine flu, can cause vomiting or diarrhea, which in turn causes dehydration.

Cold

- Cough
- Runny Nose
- Sore throat
- Congestion

Flu

- Fever
- Headaches
- Muscle Fatigue
- Vomiting (Dependent on flu virus contracted)
- Diarrhea (Dependent on flu virus contracted)
- Plus Aforementioned Cold Symptoms

Are There Any Remedies Worth the Money?

There are many remedies out there that claim they can "cure" the flu or cold, or, at the very least, shorten it. Many of these touted are ginseng, garlic, Vitamin D, and Echinacea. However, none have shown a clinical significance in helping reduce symptoms (1). While the flu and cold themselves normally do not last long, advertisements with shorter flu/cold symptoms pull people in. Many claims on the popularly touted power of Vitamin C for a cold or flu are not backed up with evidence. Studies of over 3,000 individuals have shown Vitamin C does not help with your cold or flu.

Airborne

One of the most famous remedies for colds today is Airborne. It has a whopping 1 gram or 1000 milligrams of Vitamin C in each pill. According to its label, that is 1,667% more than your daily needed amounts of Vitamin C. What they fail to tell you is that in such large concentrations, your body's ability to absorb Vitamin C decreases, so half of it gets flushed out of your system. They also leave out that unless you have a deficiency in Vitamin C or are under constant physical stress, such as soldiers, marathon runners, or skiers in extreme cold (3), it has no clinical benefits for your cold. So unless you have a deficiency in Vitamin C or an unhealthy diet that does not provide you with Vitamin C, Airborne is not worth your money.

Zinc and honey

Out of all of the non-traditional treatments for the cold, such as cold medicine and aspirin, zinc as an oral supplement may be a great way to lower how often you get a cold over a year and the severity of the cold in adults. Honey, on the other hand, is beneficial at bedtime for children to help with their coughs (1). Recommended night time doses of honey are 1-2 tablespoons. While studies have shown some benefit with zinc and honey, further research is needed to figure out what it is they are doing to help.

What Preventative Measures Can We Take to Fight the Cold and Flu?

For many the best way to mitigate getting the cold and flu is simple.

- Wash your hands especially around work, public places, and home with children.
- Keep your mouth covered when you cough/sneeze.
- Keeping a healthy diet and exercising always helps keep your body in fighting shape against these viruses.

Vaccines: What Are They and Can They Make You Ill?

One of the things that many people believe about the flu shot is that it can give you the flu. This is a common misconception and is understandable when you do not get much information about it from your doctor or are given a poor explanation. One way that a flu vaccine is created is with parts of flu viruses that research predicts to be the most common for the flu season (2). These "parts" cannot replicate and cause the virus to invade its host

like a full virus can, but these parts of the virus present little keys to our immune systems locks that activate our immune system. Once our immune system is activated, it builds up its defenses for these keys that a full flu virus will have and will be more active in protecting us from getting the flu.

Should You Get the Flu Shot?

For many, the flu shot is a dreadful necessity because their doctor or nurse tells them so. Since there are concerns with the flu shot, what benefit does getting "the shot" have? While the Center for Disease Control (CDC) believes every able body should now get the flu shot, many do not because they are young, healthy, and do not get sick often. The flu shot was standard for the elderly and young children, but the guidelines were changed in 2010 to include everyone six months of age and older (4). This was changed because even a young, healthy adult, who can fight the flu better than older or younger people, cannot stop accidentally spreading the virus to others who are not as healthy or have greater risks of catching the flu due to health issues. So the best reason for a flu shot even when we are young and healthy is to help others who are more susceptible to getting the flu. A study in 2010 was conducted to help prevent newborns six months and younger from getting the flu. In their study, they vaccinated pregnant women with the flu shot and hoped it would help pass resistance to their unborn children. The vaccination prevented 91% more infants from being hospitalized due to the flu than with mothers not vaccinated (5). Just as in the smallpox or polio vaccinations, the more people protected, the harder it is to transmit or contract the flu. This is something I believe we should all do, not only for ourselves but for our family members and loved ones.

Citations

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