EXPLAINED: Are Hand Sanitizers Safe For You?

Although the US's Food and Drug Administration (FDA) recently announced that certain ingredients (just three) in hand sanitizers are safe to use, almost 28 of them aren't officially approved yet. (U.S Food and Drug Administration, 2019) which brings up an important question, are hand sanitizers safe to use in everyday life?

Read on to understand what is used to make hand sanitizers, how they work and if they really help keep clean.

SOAP OR HAND SANITIZERS

The first rule of being free or at least prevent germs, bacteria and viruses is to always wash your hands with soap and water. (Murphy, 2019)

However, you might not have them around and that's when your pocket-sized hand sanitizer bottle can save you. It is also an effective substitute for those who tend to wash their hands repeatedly making your hands go dry, get cracked skin and suffer from skin damage.

Hand sanitizers also known as 'hand antiseptic' is a chemically formed gel-like product (can also be foam or in a liquid form). It is considered as the easiest way to control the spread of bacteria and infectious diseases.

The best way to use hand sanitizers is to pour enough to cover both and all surfaces of your hands and rub it in thoroughly and let it air dry for at least 30 seconds. (Center for Disease Control and Prevention, 2019)

THE INGREDIENTS

While there are many kinds of hand sanitizers, they can be classified into two major types: alcohol-based and alcohol-free. Alcohol based hand sanitizers tend to have around 60-95% of alcohol content in different forms of ethanol (like vodka), isopropanol (rubbing alcohol) or *n*-propanol. (a chemical combination of rubbing alcohol) (Rogers, 2015)

With a combination of these, alcohol-based hand sanitizers wipe out and dissolve weaker microorganisms, viruses and bacteria. On the other hand, non-alcohol-based products only help disinfect. (ABC News, 2013)

Nowadays, hand sanitizers tend to contain fragrance, which can be both good and bad smells. Good smells make you feel fresh but bad fragrances are added to prevent people from accidentally or purposely drinking it, especially since it contains some levels of alcohol. They also have foaming agents or skin smoothening lotions like glycerol (a chemical combination that is similar to vitamin E) to protect your hands from drying out. (National Geographic, 2016)

QUALITY & QUANTITY

The quality of hand sanitizers can be measured in a variety of ways. It depends on how much hand sanitizer you use, how regularly you use it and what kind of hand rub it is.

Mostly, using alcohol-based hand sanitizers by rubbing on your hands for around 30 seconds and air drying is enough time to kill most germs and viruses. But not all sanitizers can help protect against stronger bacteria or harmful viruses such as a stomach bug called norovirus. They also don't clean properly if your hands are dirty from playing in the mud or gardening. (Center for Disease Control and Prevention, 2019)

SAFE OR NOT?

While they have a combination of different types of alcohol, the FDA has ruled it safe for use as of 2019 with three active ingredients benzalkonium chloride, ethyl alcohol, and isopropyl alcohol. (Infection Control Today, 2019)

W.H.O promotes using alcohol-based hand sanitizers for the sole purpose of its effectiveness in wiping out bacteria more than the chemically formulated non-alcohol-based products. (Rogers, 2015) But alcohol-based products are equally dangerous since they burn easily and drinking it by accident or on purpose could seriously harm and poison someone.

END RESULT

The CDC also states that while sanitizers are easily available, soap and water are more effective at wiping out certain types of germs. They also end up doing a better job of saving the "good" bacteria on your hands that you need. Removing these "good" bacteria could end up making your body an easy target for germs and bad bacteria that could harm your immune system. (Rush, n.d.)

There is no solid proof that alcohol-based hand sanitizers can't block all bad bacteria. Although, 70 percent alcohol content sanitizers are enough to kill these germs, it is always best to stick to washing up with soap and water.

The action of washing and let the germs and bacteria go down the sink is a better option to stay away from diseases. (Schrieber, 2018)

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