



Wash Away Germs

What's the best way to wash your hands?

Description

Many germs are spread by our hands. Often people don't wash their hands well enough to get rid of germs. Get your hands "dirty" with cinnamon and cooking spray. Then test and compare ways of washing your hands.

Age Level: 10 and up



What's the best way to wash your hands?

Materials

- Non-stick cooking spray or liquid cooking oil
- Cinnamon
- Access to a sink
- Soap
- Towel



Note

If you don't have cooking spray, use oil such as vegetable, olive, or corn.

Time

Preparation: 5 min
Activity: 10 min
Cleanup: 5 min

Step 1

Spray both your hands with cooking spray for about 3 seconds. Do this over a sink or newspaper. Rub your hands together to coat both sides of your hands and between all your fingers.



Step 2

Sprinkle cinnamon over your hands. Again, rub both hands together so the cinnamon covers the front and back of your oiled hands and fingers. The cinnamon and oil represent germs typically found on our hands.



Step 3

Over the sink, wash your hands using the following three methods. Reapply cooking spray/oil and cinnamon after the first and second washings. After each washing, look at your hands and take a picture of them with your device, so you can compare the images later. If you see cinnamon still on your hands after any washing method, that way of washing is not getting your hands clean enough!



Step 4

1) Wash by rinsing only with water (no scrubbing or soap) for 5 seconds. 2) Wash by scrubbing with soap and water for 5 seconds, then rinsing with water. 3) Wash by scrubbing with soap and water for 20 seconds, then rinsing with water.

	Soap?	Scrub Time (seconds)
1	No	5
2	Yes	5
3	Yes	20

Step 5

From looking at your hands or comparing the pictures you took, which method do you think worked best to clean your hands?



What's Going on?

Even when your hands look clean, they could be covered in germs—bacteria, viruses, fungi, and protozoa. These are so small we can't see them with our eyes. Germs can spread to other people through sneezing and coughing, and in body fluids like sweat and saliva. Sometimes you can spread germs by touching objects that have germs on them, then touching yourself or other people. If these germs get into your body, some of them can make you sick!



The cinnamon and oil on your hands acted like germs you can't see. These germs can be hard to get off! Wash your hands with soapy water for at least 15 seconds so you get rid of most germs. If you can see dirt on your hands, wash them for at least 40 seconds.

Wash Your Hands!

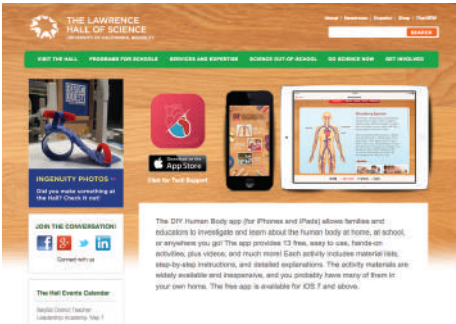
Here's a trick: when you wash your hands, scrub them together with soapy water while you sing the "happy birthday" song. That takes about the time you need to get rid of most germs that might be on your hands.

Always wash your hands: before eating, making or touching food, after using the bathroom, after playing outside, after touching animals or pets, after coughing, sneezing or blowing your nose, and after visiting a sick friend or relative.



Washing your hands well and often will help keep you from getting sick and from spreading germs around that could make others sick.

Learn More



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LawrenceHalofScience.org/do_science_now/diy_human_body

Credits



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