

## Germ Trivia Facts

- One germ can multiply to more than 4 million in just 8 hours
- The number of germs on fingertips can double after using the toilet
- If you wear a ring, there could be over 700 million germs under it. Millions of germs can also hide under watches and bracelets
- Damp hands spread 1000 times more germs than dry hands

## Germ Facts

- A housefly can transport **germs** as far as 15 miles away from the original source of contamination.
- **Germs** can be spread on computer mice and keyboards, chewed pencils, telephones, salad-bar tongs, light switches and door knobs.

## Joke

Why did the germ cross the microscope?



## Joke Answer

To get to the other slide!



[www.maeonline.com](http://www.maeonline.com)



[www.aglab.pfb.com](http://www.aglab.pfb.com)

## AG-Mazing News ~ Links to Agriculture How Well Do You Wash?



### What and Where Are Germs?

A germ is a small microorganism that cannot be seen with the naked eye. Germs can make us sick or spread diseases. Germs like to grow on warm, moist surfaces like your skin. Disease causing germs can easily be transferred to food. Even though you cannot see, smell or taste germs they can be in many different places. Germs can attach themselves to our food. So, fruits and vegetables should be washed before you eat them.



### Why Do You Need to Wash Your Hands?

If asked, "Why do you need to wash your hands?" you would probably answer "because they are dirty." That is a good answer but when you wash you are really trying to remove germs and to prevent the spread of germs. Germs can make you, your family and friends sick. So, you really wash your hands to remove germs and stay healthy.



### When Should You Wash Your Hands?

You should wash your hands whenever they look dirty. But, you should also wash your hands before you eat or drink and after you use the bathroom. Whenever you blow your nose, sneeze or cough you should wash them. After playing with animals or taking out the trash are other times that require you to wash your hands.

## How Well Do You Wash?

Good hand washing means you should wet your hands under warm running water and add soap. Don't just rinse off the soap. Scrub the front and back of your hands and between your fingers for at least 20-30 seconds (the time it takes you to sing Happy Birthday). Then rinse under warm running water and dry with a clean towel. Look - really clean hands and GOOD-BYE to those nasty germs!



## What Do You Remember?



1. What do germs do?



2. Where do germs grow best?



3. Why should you wash your hands?



4. Explain how each of these things contributes to good handwashing:

- running water
- between your fingers
- soap
- singing Happy Birthday



## Soapy Solutions



When was the last time you washed your hands? Was it a quick splash under cold water? Did you use soap? What have you done since you washed? Have you eaten, put your fingers in your mouth, or touched someone else? Do you think your hands were clean? Try this experiment and you'll discover the most effective way to remove bacteria from your hands.

## Materials Needed:

cooking oil      cinnamon      measuring spoons      a sink



## Procedure:

- Rub 1 tablespoon of cooking oil all over your hands until completely coated.
- Sprinkle 1 teaspoon of cinnamon on your hands and rub it around until it's evenly distributed. The cinnamon will be like bacteria. They are all over!
- Then wash your hands with these 3 different methods and look for the amount of cinnamon (pretend bacteria) that remains after each method.

## To control the test:

- For each method rub your hands briskly for 20 seconds and record the results
- Wash your hands thoroughly before each different method
- Repeat steps 1 and 2 before each method.

**#1 Wash you hands with cold water and no soap.**

**#2 Wash your hands with warm water and no soap.**

**#3 Wash your hands with warm water and soap.**

- Did you get them clean without soap? Did warm water help? When you wash your hands in real life, soap lifts off millions of microbes (germs) and rinses them away.
- Does it matter how much time you spend washing them? Try the experiment again. This time use warm water and soap, but change the length of time:

**#1 Rub for 5 seconds**

**#2 Rub for 10 seconds**

**#3 Rub for 20 seconds**

## Results:

What did you learn?

Which method removed the most cinnamon (or bacteria)?

Which method removed the least?

How long does it take to get the bacteria washed off?

Why does the warm water help? How does soap help? How does rubbing help?

