

**Teaches:** How bacteria sticks to thick mucous differently than normal mucous and why it takes CPT to knock the bugs loose from thick mucous.

## Suggested Age Range: 3 and Up

Prerequisite: Teach child "What are Lungs and How Do they Work?" first.

## Materials:

Tiny baking sprinkles Syrup or honey Water Paper towels

**Say and Do:** "Do you ever wonder why you need to do CPT (or "vest" or "thumpers" or whatever you call it) everyday? Let's do a fun experiment to see why!"

"Take a deep breath. Do you feel all that air coming in and going out? What part of your body is using the air?" ("Lungs! Remember we learned about lungs?" Show picture of lungs on next page.)

"When your body breathes in air, it also breathes in other things that are a part of the air like teeny tiny pieces of dust and other stuff called back-teer-eee-aaa (bacteria). Some kids call them bugs." (You can have your child draw pictures of little bugs around the lung picture on the next page.)

"But your lungs don't like dust and bugs. They say: Eww, yucky! And they want to get rid of the dust and bugs. Just like when we clean our house." (Suggestion: you can show the child how you clean the dust off furniture with a white paper towel and show them the dust.)

"Your lungs don't like to be dirty. So they have a special cleaning system using a type of water that's called meew-cuus (mucous). Can you say mucous with me?" (mucous)

"And because of your CF, *your* mucous is a little bit different than mine. And I'll show you how." Show your child a small dish of water. "*My* mucous is sort of like this." Then show your child a small dish of syrup or honey. "*Your* mucous is sort of like this. Compare the two: "Which one is thicker?" (syrup) "Now touch them both. Which one is stickier?" (syrup)

"Now pretend the sprinkles are the dust and bacteria. Let's see what happens when dust and bugs touch MY mucous."

Have child stick finger in water, and then dip in sprinkles. "See how many bacteria stick? Now shake your finger a little! Now how many are left?" (Not many)

"Now let's see what happens when dust and bugs touch YOUR mucous."

Have child stick finger in syrup then dip into sprinkles. "See how many bacteria stick? Now shake your finger a little. And now how many are left?" (Lots)

"So your lungs need a little extra help getting clean. That's why we do CPT, to shake out the bacteria. Now shake your finger harder, harder, more!" (Keep shaking until the sprinkles come mostly off). "Now how many are left?" (They are almost gone!)

"Yay! Good job! Bye bye bugs! It's good to have clean lungs! They work so much better when they are clean." (You can have your child black out the bugs they drew around the lung picture.)

This experiment was written by: Lisa C. Greene, BS CCP; Parenting Educator. The "sprinkles" idea was contributed by Kirsten Black.

