

WHY DO WE GET BRAIN FREEZE?

Oof, brain freeze! **Eating or drinking cold things** can cause that quick, sharp, achy sensation, which is also known as an ice-cream headache.

One study found that pain is caused when the roof of your mouth, called **the palate**, **suddenly gets cold**. The cold makes the blood vessels in your palate shrink.

In response, your brain says, **"Hey, I don't want to get cold!"** Let's get more blood over here to warm things up!" That makes **an important blood vessel near the brain expand suddenly** to let more blood flow through. Scientists think the extra pressure from that increased blood flow makes nerves in the area send a quick signal of pain.

Even though it may feel as if the pain is in your temples or forehead, **it's your chilled palate** that got the brain-freeze ball rolling. Fortunately, the headache usually lasts just a few seconds or minutes, until the blood vessels return to normal size.



NAME SOME SWEET FOODS THAT ARE NOT CANDY.

If you were judging a baking contest, what would you consider besides taste?



COULD SCISSORS BE USED TO SLICE A CAKE?



Which foods can have different kinds of fillings?



WHAT FLAVOR OF ICE CREAM WOULD YOU SAY MATCHES YOUR PERSONALITY? WHY?



What foods do you think go with certain times or places?





WHY DO ONIONS MAKE YOU CRY?

Yum, someone's cooking with onions. They can be a delight for your nose. But for your eyes—well, that's a different story!

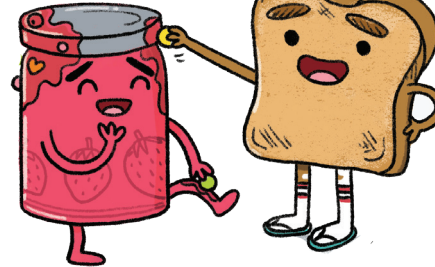
Chopping onions often makes people's peepers sting and water.

A gas from the onion is what makes your eyes water. When anything bruises, cuts, or chomps into an onion, **the onion releases this gas into the air**. When it reaches your face, it can irritate your eyes and the inside of your nose. Your eyes water in an automatic response that works to wash away the irritants.

Luckily, this isn't harmful. And there are things you can do to try to stop onions from causing tears. Some people wear goggles while cooking. Chilling the veggie first might also help, since the process that releases the gas happens more slowly in the cold.



Can foods be pretty?

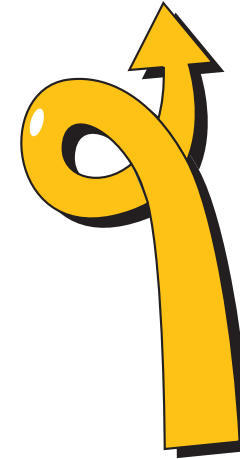


What food combinations do you eat most often?

WHAT FOODS LOOK SIMILAR BUT TASTE DIFFERENT?



How did the foods you ate today get to your plate?



WHY DO SOME FOODS NEED TO BE REFRIGERATED BUT OTHERS DON'T?



Why does cereal form a pile when you pour it out but milk forms a puddle?





WHY DO SONGS GET STUCK IN YOUR HEAD?

Songs that get stuck in our brain are known as earworms. An **earworm can get lodged in your noggin** after you listen to the tune play out loud. But it can also occur if something triggers a memory of the song—like visiting the place where you first heard it.

By examining brain scans, scientists have also formed an idea about **what happens in your head when you have an earworm**. When you hear music—or even imagine hearing music—part of the brain called the auditory cortex activates. This region is in charge of processing sounds. **It sends signals to other parts of the brain** linked to memory and emotion. Some scientists think your brain can get temporarily “stuck” sending these signals. And this leads to a song playing in your head on a loop.



IF YOU COULD CHOOSE ANY SONG TO BE YOUR FAMILY'S THEME SONG, WHAT WOULD IT BE?

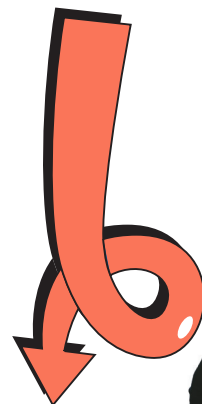


WHAT SOUNDS CAN YOU MAKE WITHOUT MOVING YOUR LIPS?

What type of music makes you feel happy?



HOW IS MUSIC LIKE A LANGUAGE? HOW IS IT DIFFERENT?



Which would you say is more important in a song: the words or the music?

Where do you think songwriters get their ideas?





WHY DO MY FINGERS AND TOES WRINKLE IN THE BATH OR SHOWER?

The tough outer layer of skin is a protein made by the living cells underneath. Like other proteins, **it swells up when it is soaked in water**. But it can't expand evenly in all directions because it is attached to the layer underneath.

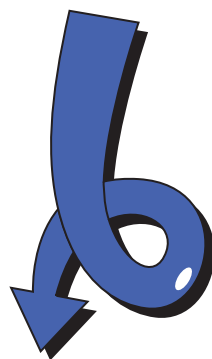
As it swells outward in some places, it pinches inward in other places. **That makes wrinkles**. But don't worry. Your skin will smooth out again as it dries. You may wonder why other parts of your body don't wrinkle up as much as the fingers and palms.

The layer of skin that swells and wrinkles is thicker on the palms of your hands and the bottoms of your feet than it is on most other body parts. That's why the skin on your palm wrinkles more than the skin on the back of your hand.

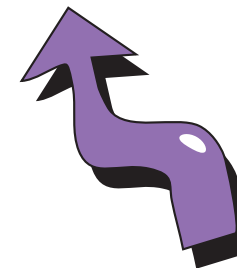


Where in your body do you feel different emotions?

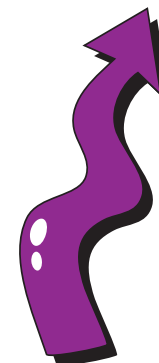
WHEN YOU STAND UP, WHICH PART OF YOUR BODY MOVES FIRST?



CAN YOU FEEL YOUR HEART BEATING? WHAT DOES IT SOUND LIKE?



HOW IS A LAUGH DIFFERENT FROM A SMILE?



How is food for your body like fuel for a car?



WHY DO WE YAWN?

For years, researchers thought a yawn was just a deep breath that took in a rush of oxygen and flushed out carbon dioxide. They dropped that idea after some experiments showed that **breathing extra oxygen didn't reduce yawning**, and having extra carbon dioxide didn't increase it.

Now researchers have an idea that because yawning is "contagious" (**seeing someone yawn can make you yawn, too**), it may help a group of people or animals go to sleep or wake up at the same time. Yawning might help wolf pups settle down to rest together or help human families wake up to start the day.

There is more to learn about yawning. For example, do researchers feel sleepy while they're studying it? **ZZzzzzzz.**

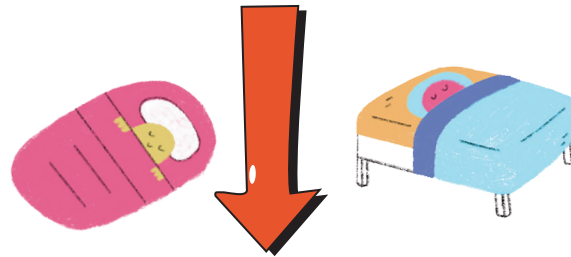


HOW ARE RESTING AND SLEEPING DIFFERENT?



WHAT'S THE SILLIEST DREAM YOU EVER HAD?

How is a sleeping bag different from a bed?



WHY DO YOU THINK MOST PEOPLE SLEEP AT NIGHTTIME RATHER THAN DAYTIME?



If there were no such thing as sleep, what would that be like?