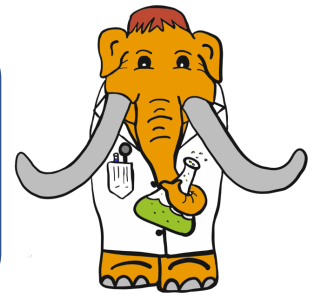


# Science Saturday @ Home

## Testing Your Salty Taste Buds



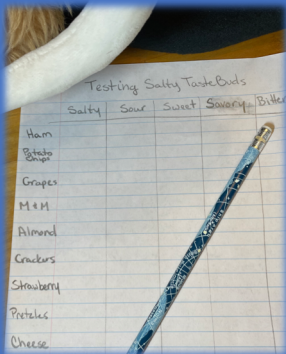
### Gathering Supplies:

Different Test Foods:  
Salty, Sour, Sweet, Savory, Bitter  
Glass of Water  
Paper and Pencil

### How To Steps:

Our tongue is a muscle in our mouths that helps us talk but also taste. The tongue is covered with 1,000's of tiny taste buds that contain "taste receptors". They send a message to our brain. The brain then interprets what the flavor is we are tasting.

1. With the help of a household adult pick about 8 to 10 different foods that you want to test your salty taste buds with. Try to think about foods that might also taste sour, sweet, savory or bitter.
2. Make up a table of the different types of taste perceptions (salty, sour, sweet, savory or bitter) along the top and then list the different foods that you will taste on the left side.
3. Have a glass of water to help clean your pallet between different foods.
4. Taste one food at a time and mark which category the taste falls in. Does the food taste salty to you?
5. After you taste each food, see if other people in your house will mark the food in the same categories as you when they taste them.
6. Also look at the salt content in the food that you tasted. Did the food with the highest amount of salt taste the saltiest to you?



## Did You Know?

Salt is probably the most important of the minerals found on earth! All animals need salt to survive, not just humans. Salt's chemical formula is NaCl, also known as Sodium Chloride.

Sodium Chloride is needed by the body in order to live. When in our bodies it helps with important cell functions, blood circulating, our heart beating and nerves firing. In its solid form Sodium Chloride is found in crystal structures, made up of one part sodium (Na) and one part chlorine (Cl). It easily dissolves in water where it breaks apart to form two ions. Sodium ions have a positive charge and the chlorine ions have a negative charge. This helps the water become a better electrical conductor, helping nerves and cells communicate inside our body.

One of the examples of communication is how high sodium levels will make us feel thirsty. If we don't drink enough water, we become dehydrated. This means that there is less water and a higher concentration of sodium in our bodies. That will send a message to our brain cells that we are thirsty. All the salt in a healthy adult body could fill 3 large salt shakers! Our bodies do not store this salt, we lose salt when we sweat or go to the bathroom. So we are always needing to replace salt that can be found in different types of foods that we eat.

Salt has been used by humans for thousands of years as a preservative to keep food from spoiling. Now we have to be careful not to eat too much salt found in high amounts in processed food. Too much salt can lead to health problems like high blood pressure.

A microscopic view of Sodium Chloride crystals. Also known as table salt.

