

BIG QUESTION: Does sound (hearing) influence taste?

EXPERIMENTAL PROCEDURE

1. Set the scene by telling the story.
2. Tell the children that they are going to investigate the importance of our sense of hearing when we eat.
3. In small groups, ask children to use a funnel to fill a container with small marshmallows and label it Shaker 1. They should then fill another container with aqua gravel or dried peas/beans and label it Shaker 2. The idea is to create one shaker that makes a dull, muffled sound and another shaker that creates a loud, rattling sound.
4. Now present children with two identical bowls of salted crisps / tortilla chips. When performing this activity, it is important to try and keep background noise to a minimum. If performing in small groups, coordinate the activity so that each group shakes the same shaker at the same time.
5. Working in small groups, tell the children to take a crisp from bowl 1. The children should eat the crisp/chip while simultaneously another participant / teacher should shake Shaker 1 next to the eater's ear.
6. **ASK:** How does the crisp/chip feel in your mouth? Answers should be written down.
7. Their responses should not be shared until they have all completed the full activity.
8. They should repeat the process with Shaker 2 (gravel/ dried lentils), while eating a crisp/ tortilla from bowl 2.
9. **ASK:** How does the crisp/chip feel in your mouth? Answers should be written down
10. **ASK:** Was there a difference in the way the crisp/chip tasted? If so what was the difference? Answers should be written down.
11. Once children have listened to each of the sounds and finished eating their mouthfuls, they will be asked to share and discuss their comments regarding mouth-feel and taste. How do the responses compare?
12. Responses are generally consistent: the rattling sound (Shaker 2) results in a crunchier feeling crisp. Responses have also revealed that the rattling sound shaker can make the crisps taste saltier.
13. The teacher will then reveal that the two samples of crisps were in fact from the same packet. Spend some time gathering the children's responses to the activity.

RESOURCES

- Empty plastic lidded bottles / lidded cardboard tubes (like Pringle's packaging) x 2 per group
- Plastic funnels
- Small marshmallows: Shaker 1
- Dried peas or beans/ aqua gravel: Shaker 2
- Bowls (must be the same) x 2 per group
- Salted crisps/ tortilla chips - the children should not know that the crisps are exactly the same.

To source

RESOURCES

- Mini versions of shakers for teacher reference only. One will make a loud, rattling sound and the other will make a soft, muffled sound. The teacher can practise the experiment with a colleague.

In Kit

SAFETY

If taste testing is taking place, you must ensure you have up to date information relating to any food allergies and take appropriate precautions.

WHAT NEXT?

Children could use musical instruments and percussion to create a 'soundscape' suitable to accompany food such as crackers, breakfast cereals and biscuits. They could produce a graphic score and perform their original composition in the school dinner hall. They should also be prepared to justify their choice of sounds and rhythms and explain how they think this will enhance the overall eating experience.