

Saliva Science

Procedure

- 1. Collaborate** Work with a partner. Record your observations in the chart below. Put a quarter spoonful of breadcrumbs in a clear plastic cup. Add 20 drops of water. Stir for 2 minutes.

Safety: Wear goggles and gloves.

Dish	Change	Time
No Saliva		
Saliva		

- 2. Experiment** Transfer a small amount of the mixture to a dish labeled *No Saliva*. Add 1 drop of iodine solution. Record any changes and the time they took. Iodine solution turns starch blue-black. **Safety:** Iodine solution is poisonous and stains.
- 3. Use Variables** Put a quarter spoonful of breadcrumbs in another cup. Add 20 drops of water. Then add 5 mL of saliva solution. Stir for 2 minutes. After stirring, put the cup in a warm, sunny place for 8 minutes.
- 4. Compare** After 8 minutes, add another 5 mL of saliva solution. Stir for 2 minutes. Return the cup to the sunny place for 8 minutes. Then transfer a small amount to a dish labeled *Saliva*. Test with 1 drop of iodine solution. Record any changes and the time they took.

Conclusion

Write the answers to the questions below.

1. **Compare** How did the results of the iodine test in steps 2 and 4 compare?

2. **Infer** What can you infer about what saliva does?

Investigate More!

Design an Experiment What foods contain starch? Write out a plan to test a variety of foods. Get permission to carry out your plan.