

# Activity

## Digestive S<sub>1</sub>

### Going Crackers

As you might guess from the word itself, carbohydrates are made of carbon (*carbo-*), hydrogen (*hydr-*), and oxygen (*-ate*). Foods that are rich in carbohydrates are the ones that contain starches and sugars. Your body can perform a little “magic” and change the starches into a sugar (called glucose), which you need for energy. In the mouth, a substance in saliva digests (breaks down) starch into sugar. The substance is ptyalin. The following activity will show you how quickly this change takes place in your mouth.

#### Materials

- |                        |   |
|------------------------|---|
| glass-marking pencil   | <del>drinking cup</del>                       |
| 4 test tubes           | large beaker                                  |
| test-tube rack         | graduated cylinder                            |
| white soda cracker     | Benedict's solution                           |
| iodine solution        | <del>Beaker</del> <del>beaker</del> HOT PLATE |
| medicine dropper       | <del>straw</del>                              |
| <del>spoon</del> straw | <del>vinegar</del>                            |

#### Procedure

1. With a glass marking pencil, label the test tubes from 1 to 4.
2. Divide a white soda cracker in half. Put one half of the soda cracker aside for use in step 9. **DO NOT SET CRACKER ON LAB TABLE.**
3. Divide the other half of the soda cracker into two equal pieces. Place one piece into test tube 1 and the other piece into test tube 2.
4. Add 3 drops of iodine solution to test tube 1. Iodine solution will turn black in the presence of a starch.

