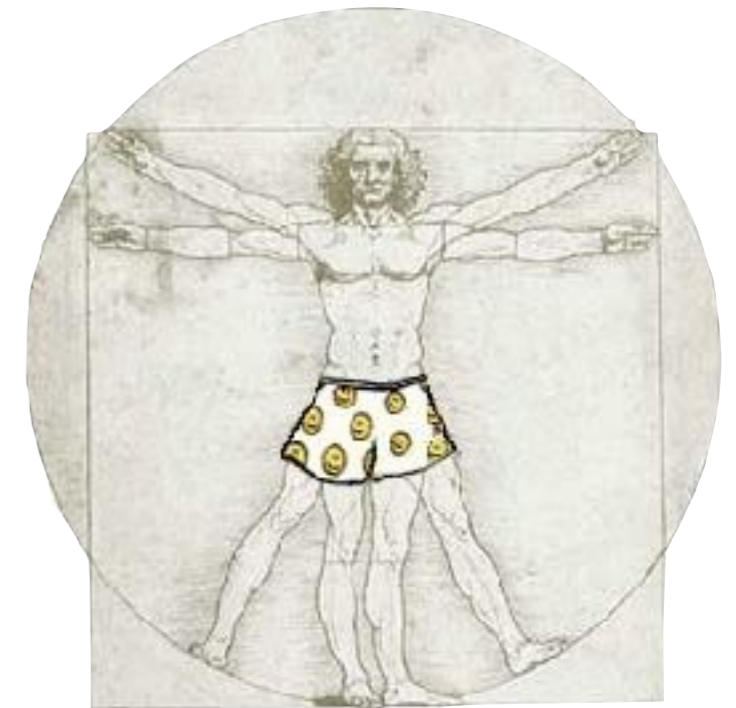
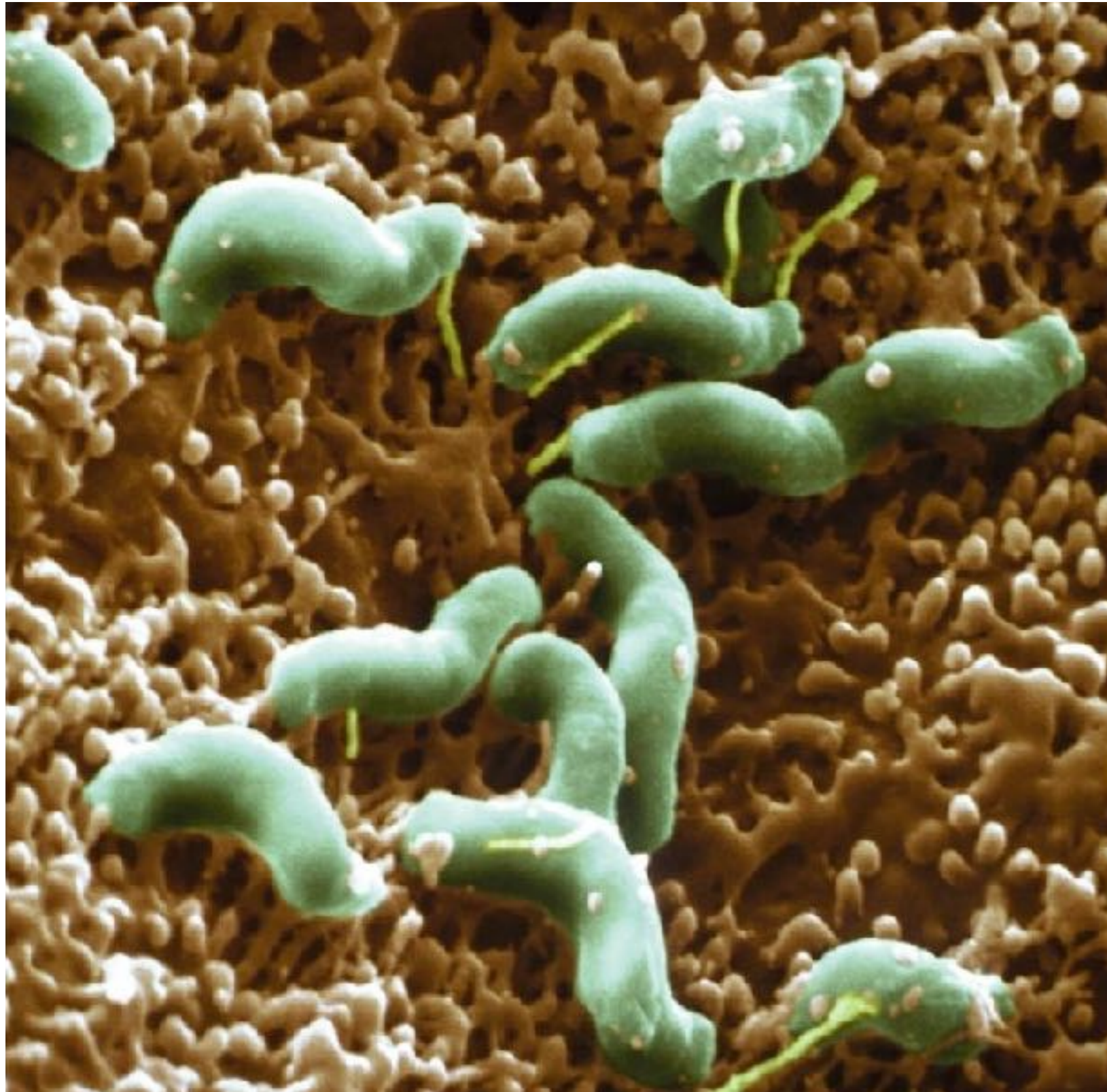


# Unit 14

## The Effects of Salivary Amylase



*Miss School, Miss Out!*

# The Effects of Salivary Amylase

**Question:** Which carbohydrate(s), glucose, sucrose, or starch, does salivary amylase digest?

**Prediction:**

**Procedure:** Collect 10 mL of saliva and add an equal amount of distilled water. For each test, add 2.5 mL of carbohydrate, 1 mL of saliva/water mixture, and 1 mL of Benedict's reagent to a test tube. Let the tube stand for 5 minutes; heat for 5 minutes and look for a color change.

**Observations:** Collect before and after observations and record within a data table.

**Analysis:** Which carbohydrate(s) does salivary amylase catabolize? Support your decision with observational evidence.

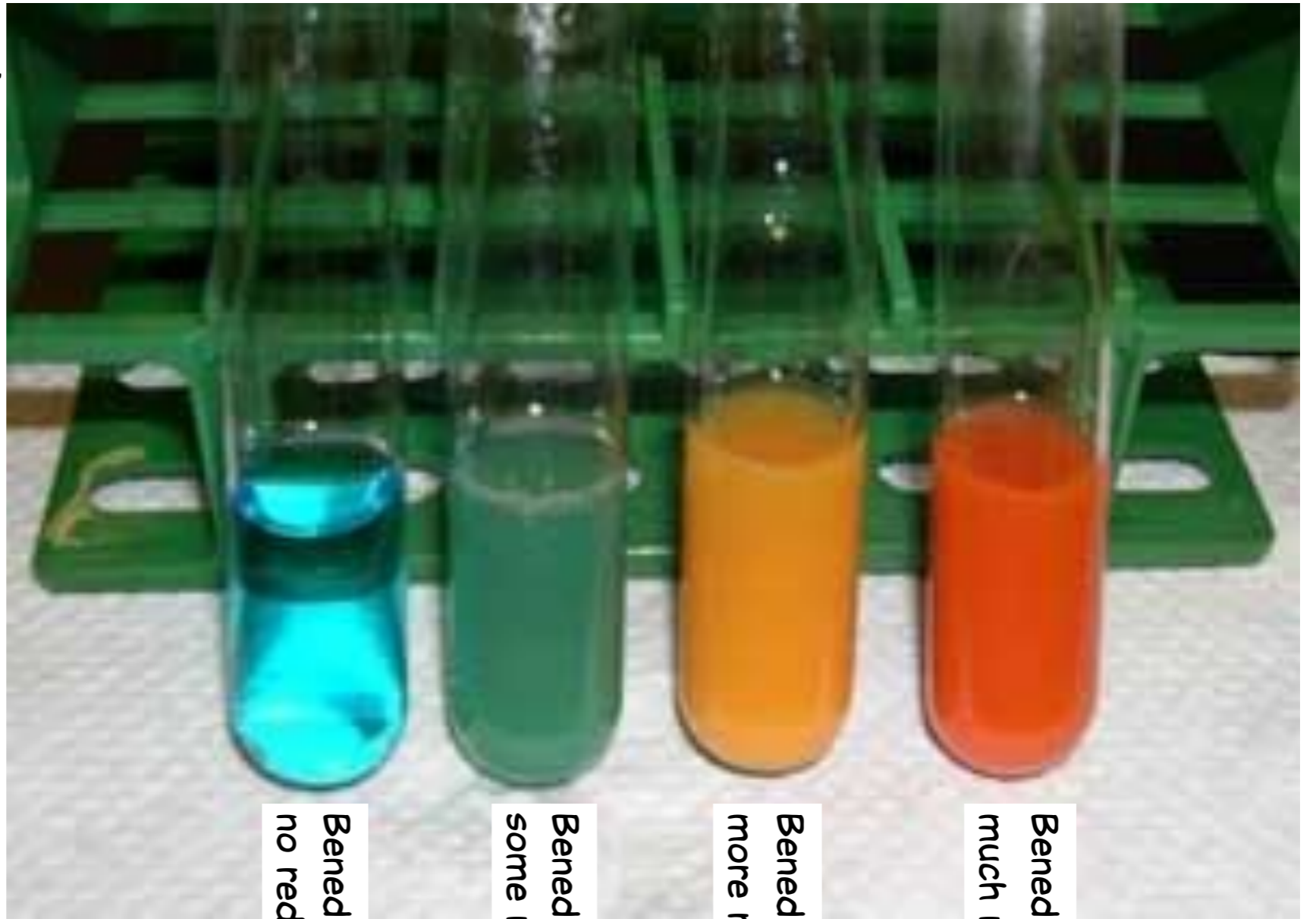
# The Effects of Salivary Amylase

## Benedict's Reagent & Various Carbohydrates

Glucose:

Sucrose:

Starch:



Benedict's - no reaction  
no reducing sugar present

Benedict's - slight reaction  
some reducing sugar present













Benedict's - normal reaction  
more reducing sugar present

Benedict's - major reaction  
much reducing sugar present

# The Effects of Salivary Amylase

<i>Observations</i>	<i>Glucose Control</i>	<i>Glucose w/ amylase</i>	<i>Sucrose Control</i>	<i>Sucrose w/ amylase</i>	<i>Starch Control</i>	<i>Starch w/ amylase</i>
<i>Before Heating</i>						
<i>After Heating</i>						
<i>Analysis</i>						

# The Effects of Salivary Amylase

<i>Observations</i>	<i>Glucose Control</i>	<i>Glucose w/ amylase</i>	<i>Sucrose Control</i>	<i>Sucrose w/ amylase</i>	<i>Starch Control</i>	<i>Starch w/ amylase</i>
<i>Before Heating</i>						
<i>After Heating</i>						
<i>Analysis</i>	reducing sugar present	reducing sugar present	no reducing sugar present	no reducing sugar present	no reducing sugar present	reducing sugar present