Kelly Wall  
Body Systems  
Grade: 3  
Digestive System  

Objectives/Purpose: This activity is designed to help kids understand how food particles are passed through the walls of the small intestines and into the bloodstream.

Materials: coffee filter  
spoon  
1 tsp. cocoa  
1 tsp. sugar  
tape  
two clear medium sized glasses  
water and jug

Background Information: I received this experiment from a handout from a teacher at my mom’s elementary school in Birmingham, Al. I found it very useful when I taught the digestive system.

Preparation: Have all the material you will need for this experiment ready at the beginning of class. (I had enough materials for each child in the class) Tape the coffee filters into half of the cups, so they do not fall into the cup when the experiment takes place. Fill the jug full of water so the kids do not have to fill the glasses themselves.

Procedure: Place the coffee filter into the clear cup and tape it to the sides so that it will not fall into the cup. Fill the second cup with about one fourth full of water. Then let the kids add 1 teaspoon of sugar and cocoa to the cup filled with water. Stir the mixture so the sugar and cocoa are mixed in well. Now slowly pour the mixture into the cup with the filter and allow the mixture to drip into the bottom of the glass.

What Happens: The filter will trap the cocoa particles and not allow them to pass through. The sugar and water will (and the color of the cocoa but not the actual cocoa)

Assessment/Evaluation: This is great activity used to show how the small intestines will absorb nutrients from the digested food. The digested substances will pass through the walls of the small intestine while the larger particles (waste) are kept out and will move into the large intestine.