Intro: Show students a Hershey Kiss (real or picture) and ask the following...

- How do our choices of food and exercise affect our health?
- What is the connection between food and exercise?
- Where do we find the calorie information for the foods we’re eating?

Food provides us with ENERGY in the form of calories, which are found on food labels, for our bodies to burn while we exercise. Exercise helps us to burn calories to maintain a healthy weight. So to learn more about calories...

View the YouTube clip: The Science Behind Calories and complete the questions.
https://www.youtube.com/watch?v=G0O87gWv-Xk&feature=share

Review: Answers to video clip questions.

A person’s total diet and activity level play an important role in determining his/her weight. To maintain weight, intake of calories must equal output.

Energy Balance: To maintain weight, intake of calories must = calories used in activity.

Energy Intake (supplied from foods eaten) = Energy Output (calories burned during physical activity/exercise)

Energy Imbalance:

Energy Intake > Energy Output = Weight Gain (3500 calories = one pound)

Energy Intake < Energy Output = Weight Loss

Discuss: On the label of the kiss it says a serving size of 9 kisses = 230 calories. So if we eat only one kiss, how many calories would we consume? 230/9 =26 calories per kiss. How quickly can you eat a Hershey’s Kiss? How long would we
have to walk in order to burn off the calories consumed in one Hershey’s Kiss? (5 minutes)

- Sometimes it takes longer to burn off the calories of what we eat than it takes to eat it.
- Think about some of the other foods you eat such as candy bars, soda, chips, fast foods, etc. How much exercise does it take to burn them off?

**Project:** Food Calorie Intake & Exercise Output Visual

See guide sheet for details but this can be done in an interactive student notebook or it can be a stand alone visual/poster.

Show a sample with the Hershey Kisses label, a picture of Hershey Kisses with the number of servings recommended and the calories (230 calories) referenced below it. Also show the number of minutes needed walking and running to burn off the serving size amount.

**Assessment or Reinforcement:** A Day in the Life of a Middle Schooler chart with my questions below.
Food Calorie Intake & Exercise Output Visual

Create a visual illustrating your knowledge of calorie intake and exercise/energy output with your favorite food or snack.

**Step 1:** Bring in a label of your favorite snack. Locate what the serving size is and the number of calories that serving size would contain. Use the internet or class resources and math skills to calculate the amount of time you would need to spend walking and running in order to burn off the calories in that food. Use the food label to complete the following information.

- Name of Food: ______________________________
- Serving Size: ________________________________
- Calories Per Serving: _________________________
- To Burn off Calories I would need to
  - Walk: ______________this much time
  - Run: ______________this much time

**Step 2:** Title your visual with the name of your food with markers.

**Step 3:** Glue the nutrition facts label along with a colorful illustration of this food which can be from a magazine, computer or hand drawn.

**Step 4:** Now add the serving size and calorie information on the food label/picture.

**Step 5:** Finally, add the amount of walking/running time would need to do in order to burn off the calories in this food if it were to be consumed.
### Nutrition Facts

**Serving Size:** 9 pieces (41g)

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>% Daily Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Calories</strong></td>
<td>230</td>
</tr>
<tr>
<td><strong>Calories from Fat</strong></td>
<td>120</td>
</tr>
<tr>
<td><strong>Total Fat</strong></td>
<td>13 g</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>8 g</td>
</tr>
<tr>
<td>Trans Fat</td>
<td></td>
</tr>
<tr>
<td><strong>Cholesterol</strong></td>
<td>10 mg</td>
</tr>
<tr>
<td><strong>Sodium</strong></td>
<td>35 mg</td>
</tr>
<tr>
<td><strong>Potassium</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Carbohydrate</strong></td>
<td>24 g</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>1 g</td>
</tr>
<tr>
<td>Sugars</td>
<td>21 g</td>
</tr>
<tr>
<td>Sugar Alcohols</td>
<td></td>
</tr>
<tr>
<td><strong>Protein</strong></td>
<td>3 g</td>
</tr>
<tr>
<td><strong>Vitamin A</strong></td>
<td>0 IU</td>
</tr>
<tr>
<td><strong>Vitamin C</strong></td>
<td>0 mg</td>
</tr>
<tr>
<td><strong>Calcium</strong></td>
<td>80 mg</td>
</tr>
<tr>
<td><strong>Iron</strong></td>
<td>0.36 mg</td>
</tr>
</tbody>
</table>

**Serving Size:** 9 pieces  
**Calories per serving:** 230  
To burn off 9 Hershey’s Kisses I would have to:  
- WALK for 45 minutes  
- RUN for 29 minutes
A Day in the Life of a Middle Schooler

Name____________________

Step 1: Add up all the (-) calorie numbers. They = ________________

Step 2: Add up all the (+) calorie numbers. They = ________________

Step 3: Calculate the difference. The difference = ________________

Is this number positive or negative (circle one)?

Step 4:

What does it mean if it’s negative?

What does it mean if it’s positive?

Step 5: Does this person get enough exercise? Explain why or why not.

Where in this person’s day could exercise be incorporated?

Step 6: What are some food selections, eaten by this person that could be cut down on portion-wise or eliminated all together? Why?