

Energy Balance Tug of War

Goals:

- *Students will learn energy balance equation*
- *Students will understand the importance of a healthy diet and exercise*

Audience: 1st grade

Optional Craft, Activity or Snack:

- Go or Slow Tag
- Full or Hungry
- Go or Slow Worksheet

Materials:

- Rope

Common Core Standards Taught:

- English Language Arts: Speaking and Listening: 1.1
 - Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
 - Follow agreed-upon rules for discussion
- English Language Arts: Speaking and Listening: 1.3
 - Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood. of a topic or issue

Background:

Energy balance is when the energy we put in our bodies (food) equals the energy we put out (exercise). Weight gain occurs when we put more energy in (food) than we put out (exercise); weight loss occurs when we put more energy out (exercise) than we put in (food). To build a health body, it is important to consume a balanced diet and engage in exercise/physical activity.

Lesson:

Leader: Eating 'go' foods gives our bodies the fuel we need to grow strong and be healthy. In addition to eating 'go' foods, we also need to exercise. Being active helps build a strong heart, bones, and muscles, and it is so much fun! Playing basketball, ice skating, walking the dog, and riding your bike are all great ways to stay active.

Today, we are going to talk about finding the right balance of eating and exercising. Did you know that the more you move, the more fuel you need? Think about taking a long car ride; don't you need to fill up the gas tank more

often when you take a long road trip? However, a car doesn't need to fill up at the gas station if it doesn't travel very far.

Everybody needs food to live. But sometimes, people eat too much or too little.

When we don't eat enough, we can get a headache, feel tired, have a hard time concentrating, or feel crabby. However, if we eat too much (especially too many 'slow' foods), we can get an upset stomach, feel nauseous, or feel sleepy.

When we eat food, we want to eat enough to give us energy, but not too much or we might feel sick. Energy balance is when we eat the right amount of food to support our activity level.

Leader: (Get the rope and ask for a few volunteers to help. Assign the volunteers to either the food side or activity side).

To start, we will demonstrate energy balance.

(Have equal number of food volunteers and activity volunteers). This is energy balance. This side represents 'go' foods, and this side represents physical activity, such as running or playing outside.

What if we decrease physical activity? (ask a few students from the activity side to step away from the rope).

If we eat more food than we need, we might get an upset stomach or feel sleepy. If we continue to eat more than we need day after day, we might gain weight.

What would happen if we ate less food? (ask a few of the food volunteers to step away from the rope while the activity volunteers step back to the rope).

If we don't eat enough, we might get a headache, have a hard time concentrating, or feel weak. If we continue to eat less food, we may lose weight.

Kids' bodies need energy to grow, which is why it is important to have energy balance (have all volunteers return to the rope and let them play a quick game of tug of war).

Leader: Today, we learned about energy balance. In order to grow a healthy body, we need to eat the right amount of 'go' foods and we need to exercise.