Energy Balance

GRADE LEVEL:
Second

OBJECTIVES:
1.  Increase physical activity.
2.  Use a pedometer to track physical activity.
3.  Matching energy intake to output

STANDARDS:
Colorado Physical Education Standards:
•  Standard 1: Students demonstrate competent skills in variety of physical activities and sports.
•  Standard 2: Students demonstrate competency in physical fitness.

VOCABULARY:
Calorie, energy, pedometer, balance

MATERIALS:
•  Sliced apples and Hershey Kisses®   •  Pencils
•  Pedometer for each student    •  Energy Balance data sheets
•  Several cones to mark the running circuit

BACKGROUND:
(10 Min.)
What is a calorie? (Energy in food)
Energy in food is measured by calories; physical activity burns calories (energy in  = energy out)
Take 10,000 steps every day - do you think it is better for your health to watch TV after school or play tag games with your friends?

Walk, run, jump, dance, skate…a pedometer counts every step you take!  Being physically active is good for your body. It makes your heart and lungs strong.  It helps your muscles grow stronger.  It can even make your bones healthier and stronger.  Who knows how many steps a day we should all take? (10,000). To meet this goal, we have to be active every day and make good choices about the things we do.

ACTIVITY 1:
(20 min)
Give the class general instructions on how to wear a pedometer.  Each child will then be given a pedometer.  Team leaders will help them to open it, reset it to zero and put it on their pants/waist band. Then, children will be lead in a walk around the classroom, one group following another, and back to their respective desks. The children will open their pedometers, read and record the number of steps on their data sheet. They will reset the pedometers to zero and make two loops around the classroom. Then, the children will open, read and record the data again. Next, you will ask them to compare their two step counts and see if the number of steps was doubled or not.

Snack: Clean hands with sanitizer. We will offer a choice of snack – either two slices of apple or two Hershey’s Kisses®. Children will come as a group to the snack table, make their choice, and return to their seats to eat their snack. ( 1 team member will go outside and set up the cones for activity # 2 while the children eat)
ACTIVITY 2:
(20 Min.)
Inform the children that if they chose apple slices they will need to walk/run 400 steps. However, if they chose chocolate, they will have to walk/run 800 steps. The children will then be led outside to the field where they will walk or run on a circuit marked with orange cones until they have accumulated the required number of steps. Children will then go back to the classroom and record their data on the data sheet.

When finished, the children can color a bar graph on their data sheet representing the number of steps they took.

SUMMARY - Q & A:
(10 Min.)
• Why did you have to only take 400 steps if you ate apples and not 800 steps?
• How can 2 slices of apple have less energy than 2 Hershey Kisses® even though the apple slices are bigger than the Hershey Kisses®?
• What is our step-goal for everyday? (10,000)
• What is our energy intake goal for each day? (2,000 calories)
• What are you going to tell your family about what you learned with Program ENERGY today?
Energy Balance – Check list

For a class of 25 students

Pedometer poster
25 pedometers
4 orange cones
Extra belts for students who wear dresses
2 serving trays
1 tray & cutting board
2 apple slicers
5 apples
1 bag Hersheys Kisses®
25 Napkins
Hand sanitizer (2-3 bottles)
25 data sheets
25 pencils
5 baskets to deliver/collect pedometers to/from groups of students