

## **Area-Nutrition and Wellness**

### **Scenario-Healthy Exercise and Burning Calories**

#### **Standards**

##### SD FACS Standards

6.2.2 Examine the relationship of nutrition and wellness to individual and family health, throughout the life span.

##### SD Mathematics Standards

6.N.2.1. Students are able to add, subtract, multiply, and divide decimals.

#### **What will you do?**

You will react to the given scenario on healthy exercise and burning calories.

#### **What is the scenario?**

You are the personal trainer at Anytown Fitness Center. You offer a personal training orientation and fitness plan for every client that purchases a membership. Today, three new clients join.

**Client 1:** Elli is an 18 year old high school senior. She is currently weighing 140 pounds and is 5'6" tall. Her present level of activity is very low, she states that she goes for a walk around the block about once a week. A typical day's eating habits include:

Breakfast-toast or cereal and a soda

Lunch-usually skips, unless they are having pizza at school

After school snack-mini pizza from Casey's, soda, candy bar

Supper-microwavable sandwich, potato chips, milk or pop

Evening snack-ice cream or popcorn

**Client 2:** James is a 15 year old high school sophomore. He is currently weighing 150 pounds and is 5'10" tall. He is involved in wrestling during the winter months and football during the fall. James is interested in a fitness plan that will work for the off seasons when he is not involved in wrestling and football. He is also interested in maintaining a healthy weight so he doesn't have to binge and starve during wrestling season. A typical day's eating habits (during the off season) include:

Breakfast-soda, orange juice, cinnamon roll

Lunch-whatever the school is serving

After school snack-frozen pizza (the whole thing), soda, chips

Supper-steak or hamburger, potatoes, vegetable, soda

Evening snack-cookies, ice cream, or chips

**Client 3:** Jordan is a 21 year old college student. His currently weighing 190 pounds and is 5'9" tall. He states that his only physical activity is

walking to class each day. Jordan wants to lose some weight and improve his physical fitness. A typical day's eating habits include:

Breakfast-soda, sausage/egg/cheese biscuit, hash brown

Morning snack-chips, candy bar

Lunch-burger, fries, soda, ice cream

Afternoon snack-chips, soda

Supper-Pasta with meat, bread, vegetable, soda

Evening snack-pizza, soda

Determine each client's body mass index (BMI). You will use the following formula: divide their weight in pounds by their height in inches, divide again by their height in inches, multiply by 703. The result is their BMI.

Determine if each client is underweight, appropriate weight, at risk of overweight, or overweight. Help each of your new clients make better choices about food and fitness. Create a healthy one-day menu for each of them. Then create a fitness plan, meeting the minimum recommendation of 60 minutes, 3 times per week. Each one-hour session must include at least 3 different fitness activities.

Calculate the amount of calories for each client's menu using the calorie lab website. <http://www.calorielab.com/>

Calculate the amount of calories burned for the fitness plan using the activity chart given.

Research how many calories are burned with regular body processes throughout the day. Calculate how many calories are consumed and burned by each client to determine whether they will lose, maintain or gain weight.

### **How will you do this?**

You will study the scenario given.

You will calculate the BMI of each client.

You will create a healthy one-day menu for each client and calculate the calories of the menu.

You will create a fitness plan for each client and calculate the calories burned during each week.

You will research the amount of calories burned for regular body processes.

You will determine whether each client needs to lose, maintain or gain weight from the calorie count.

### **How will you be evaluated?**

BMI answer key

Menu and calorie count

Fitness plan and calorie count

Summary of calories consumed and burned

**Resources**

Creative Living Skills, McGraw Hill/Glencoe, 2006

Websites

<http://www.calorielab.com/>

<http://www.nutristrategy.com/activitylist4.htm>