Eating and Exercise

Name _____

"You are what you eat"… sort of. Your diet is very important to your overall health. As you will discover in this activity, it is not simply the amount of food you eat that matters. The type of calories, (proteins, fats, carbohydrates) and how much of each type you eat are also important to your health. Combine a healthy diet with a sensible exercise program and you will improve your chances of living a long, healthy life.

Use the *Exercise and Eating* simulation to discover how you can improve your overall health through simple changes to your diet and level of activity.

Begin by setting and recording the following for yourself or an imaginary person:

Age _____ (years/months)

Height _____ (feet/inches)

Weight _____ (pounds)

Body Fat _____ % (BMI)

◯ Male ◯ Female

Lifestyle (activity level)

◯ Very Sedentary

◯ Sedentary

◯ Moderate Activity

◯ Very Active

Now fill your plate…

Place all of the food you or your imaginary person would eat in 1 day on your plate. Include breakfast, lunch, supper, and snacks. Please don't overdo it (if this is you, try to be accurate).

Record Calories taken in:

Protein _____

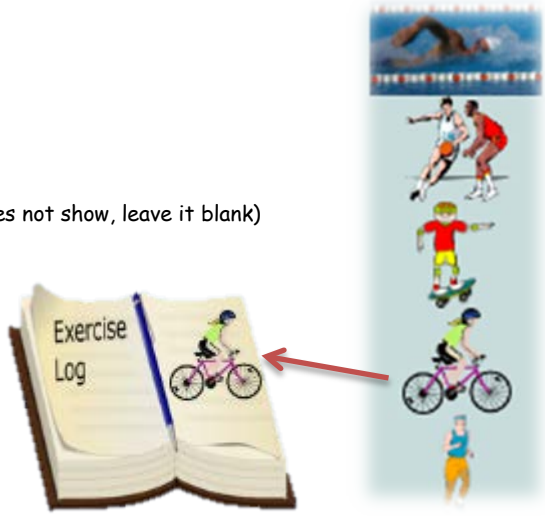
Carbs _____

Fats _____

Total Calories _____

O.K., let's break a sweat…

Select the form of exercise that you or your imaginary person would do each day. Drag the activity icon to the log book. You can do more than one activity but don't overdo it (if this is you, try to be accurate).



Record Calories burned:

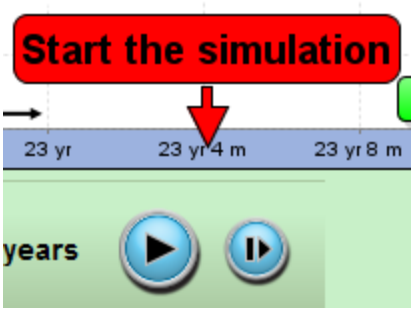
Exercise _____ (this is the number of

Lifestyle (activity level) _____ (if this number does not show, leave it blank)

Resting BMR _____

Total Calories burned _____

Begin the Simulation!



Run the simulation for 2 years (simulation time).

Record your new data after 2 years (simulation time):

Age _____ (years/months)

Height _____ (feet/inches)

Weight _____ (pounds)

Body Fat (BMI) _____ (%)

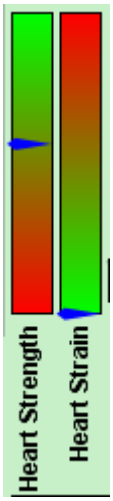
Analysis:

1. How did your age change after two years?

2. How did your height change after two years?

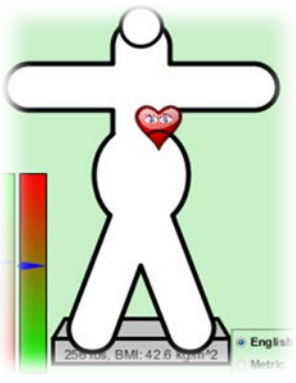
3. How did your weight change after two years?

4. How did your % body fat (BMI) change after two years?



5. How did your heart strength and heart strain change after two years?

6. How did your body (stick person) change after two years?



Follow up: Maintaining a healthy balance of exercise and nutrition

Reset the simulation

Try to improve your diet by changing the ratio of proteins, carbs, and fats (total calories may or may not change). Leave all other settings (including exercise) the same or as close as you can get it to your original settings. Run the simulation again for two years of simulation time.

Record Calories taken in:

Protein _____

Carbs _____

Fats _____

Total Calories _____

Record Calories burned:

Exercise _____

Lifestyle (activity level) _____ (if this number does not show, leave it blank)

Resting BMR _____

Total Calories burned _____

7. How has your new diet affected your overall health? Include % body fat, weight, and heart strength/strain in your discussion.

8. How does eating more protein and fewer carbs improve your overall health? (If you do not have any data, use the simulation to collect some).

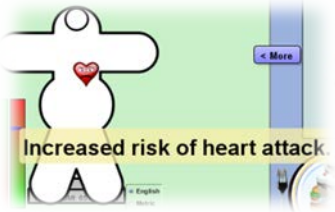
9. What else could you do with this simulation to improve your overall health?

Just for fun:

1. Compare a diet with nearly equal amounts of protein, carbs, and fats with a diet having the same number of calories but nearly all sugar and fat? What happens?

2. Create a simulation that causes a person to starve within 1 year of simulation time. Explain what you did to accomplish this.

3. Create a simulation that causes a risk for heart attack within 1 year of simulation time. How did you do it?



4. Create a simulation that causes a person to become obese within 1 year of simulation time. What was your strategy?

5. Create a person who starts out weighing 500 pounds and slims down to 175 pounds within 1 year of simulation time. Tell us how you did it?