



STUDENT ENERGY BALANCE PORTFOLIO

STUDENT NAME

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#### **Portfolio Introduction**

Energy balance is the relation between intake of food and output of work. Energy balance is the overall term that we'll be using to describe a journey to optimal health and well-being. Like all great journeys, you'll need a map to guide your way. This personal portfolio will be that map. We'll blend this work together with regular physical activity and healthful nutrition habits to help you reach your goals.

Defining Key Terms
Define caloric intake.
Define caloric expenditure.
Define body composition.
Go to <a href="https://www.supertracker.usda.gov/">https://www.supertracker.usda.gov/</a> Create a profile and complete the steps to make an account.  Explain what SuperTracker is and how you might be able to use it to improve or maintain your personal health.







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### **Energy Balance Questions**

What is the relationship between energy balance and optimal health?
Describe an appropriate way to lose weight.
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Describe an appropriate way to gain weight.





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#### **5-Day Physical Activity Tracker (Caloric Expenditure)**

Tracking daily physical activity is important in order to determine your specific caloric intake needs. The more energy you expend, the higher your caloric intake should be. Complete the chart using the activities that you did throughout the week. Refer to the RPE scale to identify your RPE. Use your personal data in SuperTracker to determine your caloric expenditure for each activity.

Date	Activity	Minutes	RPE	Caloric Expenditure
Name one activi	itv not listed	Total Activ	/itv	Number of days in which your
above that you of P.E. class		Minutes:	,	caloric intake met your caloric expenditure:





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RPE Scale	Rate of Perceived Exertion
10	Max Effort Activity It feels almost impossible to keep going. I'm completely out of breath and can't talk. I can't keep this up for long.
9	Very Vigorous Activity It's really hard to maintain this intensity. I can barely breathe and can only speak a few words at one time.
7-8	Vigorous Activity This is almost uncomfortable. I'm breathing very heavily, but can speak a full sentence.
4-6	Moderate Activity I'm breathing heavily, but can hold a short conversation. I'm not uncomfortable, but I can feel the challenge in the activity.
2-3	Light Activity I can maintain this activity for hours. It's easy to breathe and carry on a conversation.
1	Very Light Activity I don't have to try hard at all, but I'm not watching TV or taking a nap.





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#### **5-Day Nutrition Tracker (Caloric Intake)**

When you are living a healthy lifestyle, you are balancing what you eat (caloric intake) with the things that you do to stay physically active (caloric expenditure). Use this chart, along with SuperTracker, to calculate your daily caloric intake for 5 days. Use the 'Food Tracker' feature in SuperTracker to search for the things you have consumed and add them to your online diary (don't forget to add all drinks). After you have finished logging your food for the day, transfer the caloric information into the chart below.

Date	Breakfast	Lunch	Dinner	Snacks	Total Caloric Intake / Day





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#### Physiological response to sugar, sodium, and fat.

Sugar, sodium, and fat affect a person's body in many ways. After you have finished logging your caloric intake for 5 days, use SuperTracker to look at your daily intake of sugar, sodium, and fat. Transfer that information into the chart below.

Date	Sugar(g)	Sodium(mg)	Fat(g)

Now, think back and rate your overall energy level and concentration level on a scale from 1-3 using the chart below.

Levels of Energy	Levels of Concentration		
1 - Extremely tired and find it difficult to engage in physical activity.	Extremely difficult to concentrate and participate in class.		
2 - Relatively energized and can engage in physical activity.	2 – Relatively focused. Able to concentrate and participate in class.		
3 - Very energized and find it easy to engage in physical activity.	3 - Very focused and find it easy to concentrate and participate in class.		

Date	Energy Level	Concentration Level





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#### **Tracking Sleep**

Sleep gives our bodies time to rest and reboot for the next day. According to the Centers for Disease Control and Prevention (CDC), as a teen it is optimal to get between 8.5 and 9.25 hours of sleep each night. For five days, track how many hours of sleep you accumulate each night.

Date			
Total Hours of Sleep			

#### **Body Composition**

Use one of the 3 measurement types listed below to measure and record your body composition.

Measurement Type	Score
Body Mass Index (BMI)	
Calipers & Skinfold Test	
Bioelectrical Impedance	





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### Thoughts to help you develop a plan.

After completing five days of tracking your energy balance behaviors, answer the following questions.

1.	Describe the relationship between physical activity and nutrition.
2.	Describe the relationship between energy balance and body composition.
3.	Is sleep important for energy balance and optimal personal health? Why or why not?





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#### **Develop A Plan**

Design and implement a plan, using SMART goals, to maintain an appropriate energy balance for a healthy, active lifestyle. Include caloric intake, caloric expenditure, levels of activity intensity, and sleep.

Caloric Intake Goal:		
Caloric Expenditure Goal:		
Sleep Goal:		

Use the chart below to check off each component of SMART goals to ensure your goals are specific, measurable, attainable, realistic, and timely.

	Specific	Measurable	Attainable	Realistic	Time- Related
Caloric Intake					
Caloric Expenditure					
Sleep					





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#### **Action Planning**

Based on your SMART goals, create a plan of action to either maintain or improve your personal health. Write in the caloric expenditure activities using specific lifetime activities you have chosen. Write in a daily caloric intake goal to include the types and amounts of food/drinks that you will consume. Lastly, write in the sleep you plan on getting each day.

	Day 1	Day 2	Day 3	Day 4	Day 5
Caloric Expenditure					
Caloric Intake					
Sleep					







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### **Goal Setting Reflection**

How would you describe your progress toward each of your SMART goals?
How is sleep affecting your progress?
What lifestyle adjustments could you make to improve your progress toward each of your goals?

When the time is up for each of your goals, repeat this process and create new goals.