

A PEOE Demonstration: Understanding Nutritional Facts

The following questions provide scenarios for the nutritional facts of an energy bar. Please predict what would happen to the calories of the energy bar if the nutritional facts were set-up according to the scenario. After circling your prediction, explain why think it is the correct choice. After the scenario is demonstrated, circle what actually happened (your observation). If the result is different from your prediction please explain why you think it turned out that way.

1. The nutritional facts for an energy bar with a peanut butter core is below:

Nutrition Facts	
Serving Size 1 Bar (2.0oz)	
Amount Per Serving	
Calories 244	Calories from Fat 96
% Daily Value*	
Total Fat 10.7g	16%
Saturated Fat 1.8g	9%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 78mg	3%
Potassium 105.8mg	3%
Total Carbohydrate 32g	11%
Dietary Fiber 4g	17%
Sugars 12g	
Protein 7.3g	15%
Vitamin A 0%	Vitamin C 0%
Calcium 5%	Iron 10%
Ingredients: Brown Rice Syrup, Peanut Butter, Organic Gluten Free Oats, Organic Flax Seed Meal, Organic Crispy Rice (organic brown rice, organic brown rice syrup, sea salt), Vanilla, Salt	
Contains: Peanuts	
May contain traces of: Milk, Soy, Wheat, Other Tree Nuts, Peanuts, pits or pit fragments, shell or shell fragments.	

What will happen to the amount of total fat and sugars if cranberries were added?

- a. Prediction (circle one):

Calories 294	Calories from Fat 142
% Daily Value*	
Total Fat 15.8g	24%
Saturated Fat 2.8g	14%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 83mg	3%
Potassium 88.2mg	3%
Total Carbohydrate 31g	10%
Dietary Fiber 4g	18%
Sugars 11g	

Calories 250	Calories from Fat 81
% Daily Value*	
Total Fat 9.0g	14%
Saturated Fat 1.6g	8%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 72mg	3%
Potassium 88.2mg	3%
Total Carbohydrate 38g	13%
Dietary Fiber 4g	17%
Sugars 19g	

b. Explain why you made that prediction:

c. Observation (circle one):

Calories 294	Calories from Fat 142
% Daily Value*	
Total Fat 15.8g	24%
Saturated Fat 2.8g	14%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 83mg	3%
Potassium 88.2mg	3%
Total Carbohydrate 31g	10%
Dietary Fiber 4g	18%
Sugars 11g	

Calories 250	Calories from Fat 81
% Daily Value*	
Total Fat 9.0g	14%
Saturated Fat 1.6g	8%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 72mg	3%
Potassium 88.2mg	3%
Total Carbohydrate 38g	13%
Dietary Fiber 4g	17%
Sugars 19g	

1.

d. Explain why that happened:

2. The nutritional facts for an energy bar with a oaty core is below:

Nutrition Facts	
Serving Size 1 Bar (1.9oz)	
Amount Per Serving	
Calories 177	Calories from Fat 18
% Daily Value*	
Total Fat 2.0g	3%
Saturated Fat 0.4g	2%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 84mg	4%
Potassium 6.6mg	0%
Total Carbohydrate 37g	12%
Dietary Fiber 3g	12%
Sugars 12g	
Protein 4.4g	9%
Vitamin A 0%	Vitamin C 0%
Calcium 4%	Iron 8%
Ingredients:	
Organic Gluten Free Oats, Brown Rice Syrup, Organic Crispy Rice (organic brown rice, organic brown rice syrup, sea salt), Vanilla, Salt	
Contains:	
May contain traces of: Milk, Soy, Wheat, Other Tree Nuts, Peanuts, pits or pit fragments, shell or shell fragments.	

What will happen to the amount of total fat and sugars if cherries were added?

a. Prediction (circle one):

Nutrition Facts	
Serving Size 1 Bar (2.1oz)	
Amount Per Serving	
Calories 194	Calories from Fat 16
% Daily Value*	
Total Fat 1.8g	3%
Saturated Fat 0.4g	2%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 81mg	3%
Potassium 5.5mg	0%
Total Carbohydrate 42g	14%
Dietary Fiber 3g	11%
Sugars 19g	

Nutrition Facts	
Serving Size 1 Bar (1.8oz)	
Amount Per Serving	
Calories 170	Calories from Fat 16
% Daily Value*	
Total Fat 1.8g	3%
Saturated Fat 0.4g	2%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 77mg	3%
Potassium 5.5mg	0%
Total Carbohydrate 36g	12%
Dietary Fiber 3g	10%
Sugars 14g	

b. Explain why you made that prediction:

c. Observation (circle one):

Nutrition Facts	
Serving Size 1 Bar (2.1oz)	
Amount Per Serving	
Calories 194	Calories from Fat 16
% Daily Value*	
Total Fat 1.8g	3%
Saturated Fat 0.4g	2%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 81mg	3%
Potassium 5.5mg	0%
Total Carbohydrate 42g	14%
Dietary Fiber 3g	11%
Sugars 19g	

Nutrition Facts	
Serving Size 1 Bar (1.8oz)	
Amount Per Serving	
Calories 170	Calories from Fat 16
% Daily Value*	
Total Fat 1.8g	3%
Saturated Fat 0.4g	2%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 77mg	3%
Potassium 5.5mg	0%
Total Carbohydrate 36g	12%
Dietary Fiber 3g	10%
Sugars 14g	

d. Explain why that happened:

3. Look at the Nutrition Facts below:

Nutrition Facts	
Serving Size 1 Bar (1.9oz)	
Amount Per Serving	
Calories 177	Calories from Fat 18
% Daily Value*	
Total Fat 2.0g	3%
Saturated Fat 0.4g	2%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 84mg	4%
Potassium 6.6mg	0%
Total Carbohydrate 37g	12%
Dietary Fiber 3g	12%
Sugars 12g	
Protein 4.4g	9%
Vitamin A 0%	Vitamin C 0%
Calcium 4%	Iron 8%
Ingredients: Organic Gluten Free Oats, Brown Rice Syrup, Organic Crispy Rice (organic brown rice, organic brown rice syrup, sea salt), Vanilla, Salt	
Contains: May contain traces of: Milk, Soy, Wheat, Other Tree Nuts, Peanuts, pits or pit fragments, shell or shell fragments.	

If adding cranberries to the energy bar adds 7 grams of sugar and reduces the protein to 3.8 grams, is there a nut that we can add to make the energy bar have **at least** 5 grams of protein? If so, what nut can be added?

a. Prediction: No Yes, nut _____

b. Explain why you selected that nut:

c. Observation (was there a nut):

d. Explain why there was/wasn't a nut:

4. Look at the Nutrition Facts below:

Nutrition Facts	
Serving Size 1 Bar (1.9oz)	
Amount Per Serving	
Calories 177	Calories from Fat 18
% Daily Value*	
Total Fat 2.0g	3%
Saturated Fat 0.4g	2%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 84mg	4%
Potassium 6.6mg	0%
Total Carbohydrate 37g	12%
Dietary Fiber 3g	12%
Sugars 12g	
Protein 4.4g	9%
Vitamin A 0%	Vitamin C 0%
Calcium 4%	Iron 8%
Ingredients: Organic Gluten Free Oats, Brown Rice Syrup, Organic Crispy Rice (organic brown rice, organic brown rice syrup, sea salt), Vanilla, Salt	
Contains: May contain traces of: Milk, Soy, Wheat, Other Tree Nuts, Peanuts, pits or pit fragments, shell or shell fragments.	

If adding apricots to the energy bar adds 3 grams of sugar and reduces the protein to 4.1 grams, is there a nut that we can add to make the energy bar have **at least 5** grams of protein? If so, what nut can be added?

a. Prediction: No Yes, nut _____

b. Explain why you selected that nut:

c. Observation (was there a nut):

d. Explain why there was/wasn't a nut:

5. Look at the Nutrition Facts below:

Nutrition Facts	
Serving Size 1 Bar (1.9oz)	
Amount Per Serving	
Calories 177	Calories from Fat 18
% Daily Value*	
Total Fat 2.0g	3%
Saturated Fat 0.4g	2%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 84mg	4%
Potassium 6.6mg	0%
Total Carbohydrate 37g	12%
Dietary Fiber 3g	12%
Sugars 12g	
Protein 4.4g	9%
Vitamin A 0%	Vitamin C 0%
Calcium 4%	Iron 8%
Ingredients: Organic Gluten Free Oats, Brown Rice Syrup, Organic Crispy Rice (organic brown rice, organic brown rice syrup, sea salt), Vanilla, Salt	
Contains: May contain traces of: Milk, Soy, Wheat, Other Tree Nuts, Peanuts, pits or pit fragments, shell or shell fragments.	

If adding blueberries to the energy bar adds 6 grams of sugar and reduces the protein to 4.0 grams, is there a nut (other than peanuts) that we can add to make the energy bar have **at least** 5 grams of protein? If so, what nut can be added?

a. Prediction: No Yes, nut _____

b. Explain why you selected that nut:

c. Observation (was there a nut):

d. Explain why there was/wasn't a nut: