

Worksheet 6-1: Label Analysis—Protein

Instructions: Use the pizza burger label to answer the questions that follow.

Flowery Branch Farm

Tomato & Basil Pizza Burger

Nutrition Facts

Serving Size 1 Burger (67g)
Servings Per Container 4

Amount Per Serving		Calories from Fat ?	
Calories 120			
		% Daily Value*	
Total Fat 6g			9%
Saturated Fat 1.5g			8%
<i>Trans</i> Fat 0g			
Polyunsaturated Fat 2.5g			
Monounsaturated Fat 1.5g			
Cholesterol 10mg			3%
Sodium 280mg			12%
Potassium 160mg			5%
Total Carbohydrate 7g			2%
Dietary Fiber 3g			10%
Sugars 2g			
Protein 10g			
Vitamin A 4%	•	Vitamin C 10%	
Calcium 2%	•	Iron 6%	

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

100% VEGETARIAN

INGREDIENTS: Textured Soy Protein Concentrate with Water, Onion, Mushrooms, Tomato Paste (Tomatoes, Salt), Textured Wheat Gluten with Water, Corn Oil with TBHQ for Freshness, Mozzarella Cheese (Pasteurized Milk, Cultures, Salt, Enzymes), Provolone Cheese (Pasteurized Milk, Cultures, Salt, Enzymes), Egg Whites, Water, Red Bell Peppers, Dried Tomato, Contains Two Percent or Less of Potato Starch, Methyl-Cellulose, Garlic, Autolyzed Yeast Extract, Cheddar Cheese Powder (Cheddar Cheese [Milk, Salt, Cheese Cultures, Enzymes], Whey, Buttermilk, Salt, Disodium Phosphate), Basil and Other Spices, Paprika for Color, Garlic, Natural and Artificial Flavors from Non-Meat Sources, Maltodextrin, Soybean Oil, Modified Corn Starch with Corn Syrup Solids, Lactic Acid, Salt, Canola Oil, Caramel Color, Soy Lecithin, Torula Yeast, Barley Malt Flour, Triacetin, Citric Acid, Dextrose. **CONTAINS SOY, WHEAT, MILK AND EGG INGREDIENTS.**

1. a. What is the gram amount of protein listed per serving of this product?
- b. How many calories from protein does this represent?

2. What would be the contribution (percentage of total protein) of this product towards the total amount of recommended protein for a person who weighs 55 kilograms?

3.
 - a. What is the percentage of the total calories coming from fat of this product?

 - b. How does this compare with a comparable amount of 90% lean ground beef?

4.
 - a. What is the source of cholesterol in this product?

 - b. Why is this level so low?

5.
 - a. What is the level of iron in this product?

 - b. Is this considered high or low and why?

6.
 - a. What is the most abundant ingredient listed for this product?

 - b. What is the source of this ingredient?

7. What are the sources of saturated fat in this product?

8.
 - a. Is this type of protein easily digested and absorbed by the body?

 - b. Why or why not?

Worksheet 6-2: Intake Analysis—Protein

Eating Plan E (1 Day's Intake)	Eating Plan F (1 Day's Intake)	Eating Plan G (1 Day's Intake)
¾ cup Nature's Path flax cereal ½ cup soy milk ½ cup acai juice + seltzer water 1 medium banana 12 ounces coffee 6 ounces 6-grain yogurt, ½ cup blueberries ¾ cup raspberries 2 Mushroom Lover's Veggie Burgers 1 cup roasted carrot soup ½ cup sweet green peppers 6 carrot sticks 2 whole-wheat wasa crackers 8 ounces Vruit juice 8 ounces soy milk 1 peanut butter Fiber One Bar 6 ounces grilled salmon 10 cooked asparagus spears 6 ounces white wine ½ cup olives ½ cup sun-dried tomatoes ½ cup whole-wheat angel hair pasta ¼ cup mixed nuts	2 scrambled eggs 1 cup whole milk 2 slices bacon 2 1-ounce Slim Jims 6 ounces lean ground beef 2 ounces provolone cheese ¼ cup blue cheese dressing 12 ounces water 2 ounces cheddar cheese cubes 6 ounces grilled chicken breasts 1 scrambled egg 1 cup lettuce ½ cup blue cheese dressing 2 ounces pork rinds 12 ounces water	1 cup honey dew melon 1 cup fresh strawberries 1 large apple ½ avocado ½ cup sweet green peppers ½ cup sweet red peppers ¼ cup black olives 1 medium orange 1 medium banana 1 cup boiled green beans 10 cooked asparagus spears 1 cup sautéed mushrooms 1 cup kidney beans ¼ cup dried apricots ¼ cup dried Craisins 5 dried, pitted dates

Look at Eating Plans E, F, and G:

1. a. What type of diet is represented by each of these eating plans?
 b. Which of these diets exceeds the recommended amount of protein?
2. How can Eating Plan F be modified to reduce the amount of saturated fat and protein?
3. a. Does Eating Plan G provide enough protein?
 b. Why or why not?
 c. What other nutrients are lacking from this eating plan?
 d. How could this diet be modified (but kept in the same general category) to provide the nutrients that are lacking?

Worksheet 6-4: Where Are the Proteins? Meats versus Vegetables as Sources

People who eat animal products but no meat are called lacto-ovo vegetarians. They eat eggs and dairy products such as milk, cheese, or eggs. People who eat no animal products are called vegans. They eat beans, grains, nuts, fruits, and vegetables. Both types of vegetarians eat this way for many years and are as healthy as anyone else. How do they do it?

Can you get enough proteins if you don't eat meat? What if you don't eat any animal products? How can you find out? You can try some diet planning and diet analysis to find out where the protein is found in foods.

Design a 1-day diet as if you are a meat eater, lacto-ovo vegetarian, or vegan. You can analyze the food using the food composition table in the back of your textbook or by using software such as *Diet Analysis +*. Prepare a table (or computer printout) including each food/amount, grams of protein, grams of saturated + *trans* fats, and grams of unsaturated fats (polyunsaturated + monounsaturated).

Example of part of a day's intake for a vegan:

Food and amount	Protein (grams)	Sat. + <i>trans</i> fat (grams)	Poly. + mono. fat (g)
2 small whole-wheat bagels	24 g	0.6 g	1.6 g
2 cups apple juice	1 g	0 g	0 g
2 slices whole-wheat bread	6 g	0.6 g	1.6 g
1 vegan soy burger patty	16 g	0 g	0.8 g
¼ tomato, sliced	0.25 g	0 g	0.2 g
¼ cup onion, sliced	0.5 g	0 g	0 g

Can you get enough (or too much) protein if you eat a lacto-ovo vegetarian diet? A vegan diet? If you did not get enough protein for your body weight, suggest ways that you could get more. Consider trying food substitutions or adjusting portion sizes.

Compare the fat content of the 3 diets. Which of your diet plans most closely followed dietary recommendations for the amounts and types of fats as presented in your textbook?

Worksheet 6-5: Plant Proteins in Human Nutrition—Myths and Realities

Instructions: Some common myths regarding plant protein sources are listed in the table below. Fill in the right side of the table with the facts to counter each myth.

Myth	Reality
Plant proteins are not complete; they lack certain amino acids.	
Plant proteins are lower in quality than animal proteins.	
Proteins from different plant foods must be carefully mixed and eaten together in the same meal.	
Plant proteins are difficult to digest.	
People cannot meet protein needs with plant proteins alone.	
Plant proteins are lacking in nutritional value because they are not balanced.	