

The Science of Nutrition Laboratory Science 70

Reading Labels

Reading food labels will help you become a better consumer. Some of the information on food labels is mandatory (required by law) and some is voluntary (written as a courtesy to the consumer).

Mandatory information includes

- The name of the product
- The style of the product (type of liquid, size of pieces, etc.)
- The net weight of the contents (this does not include the weight of the container)
- The name, address, and zip code of the company
- Any special information that affects people with health problems
- Presence of artificial color, flavor, or preservatives
- A list of ingredients in order of weight in the package: the ingredient of the heaviest amount is listed first.
- Nutrition information, including the number of calories and the number of calories from fat

Voluntary information includes

- The brand name
- A picture of the food
- The number of servings per package
- Recipes and serving suggestions
- Freshness dates

Using a food label, draw a circle around each kind of the above information you are able to find on the label.

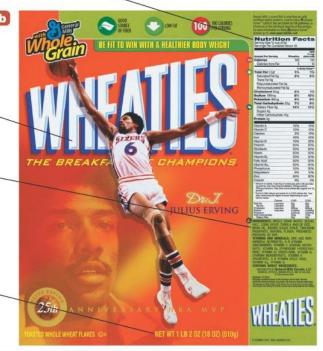


The Nutrition Facts
panel lists standardized
serving sizes, specific
nutrients, and shows how a
serving of the food fits into a
healthy diet by stating its
contribution to the
percentage of the Daily
Value for each nutrient. The
old cereal box doesn't
contain this information.

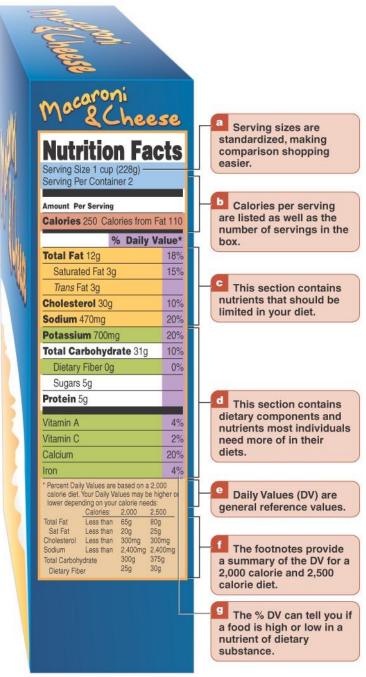
The **name** of the product must be displayed on the front label.

The **ingredients** must be listed in descending order by weight. This format is missing in the old box. Whole grain wheat is the predominant ingredient in the current cereal box.

The **net weight** of the food in the box must now be located at the bottom of the package.



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Part 1:

Using another food label or package provided by the instructor, answer the following questions.

| 1. | What is the name of the product? |
|-----|---|
| 2. | The net weight of this product is |
| 3. | What company produces this product? |
| 4. | What is its address? |
| 5. | What are the first three ingredients listed? |
| 6. | Where is the U.P.C. code on the label? |
| 7. | What is the expiration date or code on your product? |
| 8. | How much of this product makes one serving? |
| 9. | Nutritional information (per serving) |
| | Calories Protein |
| | Total carbohydrates |
| | Total fat (grams) |
| | Saturated fat (grams) |
| | Cholesterol (grams) |
| | Sodium (mg) |
| 10. | Look at the Percent of Daily Values. Are most of the nutrients less than 2%? Yes No |

| | 11. From reading the nutritional information, would you consider this convenience food to be nutritional. No Explain your answer | ıtriti |
|-----|--|--------|
| | 12. Three items of voluntary information on this label are, and | |
| | 13. Why do you think the government makes laws regulating food labels? | |
| Pa | art 2: | |
| | e the labels or packages of two similar products. Label one product as A and one as B. Answer th lowing questions. | ne |
| Pro | oduct A name | |
| Pro | oduct B name | |
| 1. | How many calories are in a serving of product A?How many calories are in a serving of product B? | |
| 2. | What is the serving size of product A? What is the serving size of product B? | |
| 3. | How many of the calories in product A come from fat? How many of the calories in product B come from fat? | |
| 4. | List the vitamins product A contains. List the vitamins product B contains. | |
| 5. | How much sodium per serving does product A contain? How much sodium per serving does product B contain? | |
| 6. | How much protein per serving does product A contain? How much protein per serving does product B contain? | |

| 12. | . Why? |
|-----|--|
| 11. | . Which of the two products is the most nutritious? |
| 10. | List any minerals in product A? List any minerals in product B? |
| 9. | What is the total number of carbohydrates in product A? |
| 8. | How much cholesterol per serving does product A contain? How much cholesterol per serving does product B contain? |
| 7. | How much fat per serving does product A contain? How much fat per serving does product B contain? |

How's Your Nutrition Intuition?

Match each food to its nutrition label. Write the letter of the appropriate nutritional label A-L next to the food product.

Labels Foods

| 1 | Pringles potato chips |
|-----|-------------------------------------|
| 2 | Fritos |
| 3 | Pretzels |
| 4 | Wavy Lays potato chips |
| 5 | On-Cor Gravy and Salisbury Steaks |
| 6 | RF Macaroni pasta (dry) |
| 7 | Mountain Trail Mix |
| 8 | Hershey's Miniatures chocolates |
| 9 | Life Savers Crème Savers hard candy |
| 10 | Fig Newtons |
| 11 | Spam |
| 12. | Bumble Bee Albacore Tuna in water |

Key

How's Your Nutrition Intuition?

Match each food to its nutrition label. Write the letter of the appropriate nutritional label A-L next to the food product.

Labels Foods

| 1. <u>C</u> | Pringles potato chips |
|--------------|-------------------------------------|
| 2. <u>E</u> | Fritos |
| 3. <u> </u> | Pretzels |
| 4 G_ | Wavy Lays potato chips |
| 5. <u>K</u> | On-Cor Gravy and Salisbury Steaks |
| 6. <u>D</u> | RF Macaroni pasta (dry) |
| 7. <u>H</u> | Mountain Trail Mix |
| 8 | Hershey's Miniatures chocolates |
| 9. <u>I</u> | Life Savers Crème Savers hard candy |
| 10. <u>B</u> | Fig Newtons |
| 11. <u>F</u> | Spam |
| 12. L | Bumble Bee Albacore Tuna in water |

A Nutrition Facts Serving Size Servings Per Container about 19 Amount Per Serving Calories 120 Calories from Fat 10 % Daily Value* M. A. **Total Fat** 1g 1% Saturated Fat 0a 0% Polyunsaturated Fat 0g Monounsaturated Fat 0g 0% **Cholesterol** 0mg Sodium 400mg 17% Total Carbohydrate 23g 8% Dietary Fiber less than 1g 4% Sugars less than 1g Protein 3g Vitamin C 0% Vitamin A 0% Iron 8% Calcium 0% *Percent Dally Values are based on a 2,000

calorie diet. Your daily values may be higher

or lower depending on your calorie needs:

Nutrition Facts Servings Per Container About 15 **Amount Per Serving** Calories 110 Calories from Fat 20 % Daily Value Total Fat 2.5q Saturated Fat 1g 4% Polyunsaturated Fat 0g Monounsaturated Fat 1g 0% Cholesterol Omg 5% Sodium 120mg Total Carbohydrate 20g 7% 6% Dietary Fiber 1g Sugars 13g Protein 1g Vitamin A 0% • Vitamin C 0% Calcium 0% - Iron 4% * Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

B

NUTRITION FACTS/ DATOS DE NUTRICIÓN

Serving Size 1 Ounce/ Tamaño por Ración 1 Onza

Servings Per Container/ Raciones Por Envase aprox. 6

Amount Per Serving/Cantidad Por Ración Calories/Calorías 150

Calories from Fat/Calorías de Grasa 90

 % Daily Value*/% Valor Diario*

 Total Fat/Grasa Total 10 g
 15%

 Saturated Fat/Grasa Saturada 1.5 g
 8%

 Cholesterol/Colesterol 0 mg
 0%

 Sodium/Sodio 180 mg
 8%

Total Carbohydrate/

Total de Carbohidratos 15 g

Protein/Proteina 2 g

Vitamin C/Vitamina C 6%

Not a significant source of dietary fiber, sugars, vitamin A, calcium, and iron. / No as una fuente importante de fibra dietéca, azucares, vitamina A, calcio ni hiero.

es una tuente importanze de libra dierrecci, accusates, vianta la creación institu-Percion I Dally Values are basso on a 2,000 calori dels four daily values may be higher or lower depending on your calorie needs. "Los Protontajes de Valores Diarrios están bassdos en una dieta de 2,000 calorías. Sus valores darios pueden ser mayores o menores, dependiendo de calorías. Sus valores darios pueden ser mayores o menores, dependiendo de

| Esy . | Calories/Calorias: | 2000 | 2500 |
|---|--|--------------------------|----------------------------------|
| Total Fat/Grasa Total Sat. Fat/Grasa Sat. Cholesterol/Colesterol | Less than/Menos de Less than/Menos de Less than/Menos de | 65 g 20 g 300 mg | 80 g 25 g 300 mg 2400 m |
| Scdkum/Sodio Total Carbohydrate/ Total de Carbohidratos Dietary Fiber/Fibra Diet | Less than/Menos de ética | 2400 mg 300 g 25 g | 375 g 30 g |

Nutrition Facts Serving Size: 3/4 cup (56 g) Servings Per Container: 3 Amount Per Serving Calories 210 Calories from Fat 10 % Daily Value* Total Fat 1 g 2% Saturated Fat 0 g 0% Polyunsaturated Fat 0.5 g Monounsaturated Fat 0 g Cholesterol 0 mg 0% 0% Sodium 0 mg** Total Carbohydrate 42 g 14% Dietary Fiber 2 g 7% Sugars 3 g Protein 7 g Vitamin A 0% Vitamin C 0% Calcium 0% Iron 10% Thiamin 30% Riboflavin 10% Niacin 15% *Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs: 2,000 2,500 Calories: Total Fat Less than 65g 80g Saturated Fat Less than 25g Cholesterol Less than 300mg 300mg 2,400mg 2,400mg Sodium Less than Total Carbohydrate 300g 375g

25g

Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4

30g

Dietary Fiber

Nutrition Facts Serving Size 1oz. (28g Servings Per Container About 3 **Amount Per Serving** Calories 160 Calories from Fat 90 % Daily Value* Total Fat 10g 16% Saturated Fat 1.5g 8% Cholesterol Oma 0% Sodium 160mg 7% Total Carbohydrate 15q 5% Dietary Fiber 1g 4% Sugars 0g Protein 2g Vitamin A 0% Vitamin C 0% Calcium 2% Iron 0% * 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 Lass than 20g 25g Less than 300mg 300mg Cholesterol 2,400mg Sodium Less than 2,400mg Total Carbohydrate 300g 375g Dietary Fiber 30g

Calories per gram:

Fat 9 • Carbohydrate 4

Protein 4

| Nutrition | Amount/serving | %DV* | Amount/serving %DV* | | | |
|---|--|------|---------------------|--|--|--|
| Facts | Total Fat 16g | 25% | Total Carb. 0g 0% | | | |
| Serv. Size 2 oz. (56g) Servings per container 6 | Sat. Fat 6g | | | | | |
| Calories 170 | Cholest. 40mg | 13% | Sugars 0g | | | |
| Fat Cal. 140 | Sodium 750mg | 31% | Protein 7g | | | |
| *Percent Daily Values (DV) are based on a 2,000 calorie diet. | Vitamin A 0% - Vitamin C 0% - Calcium 0% - Iron 2% | | | | | |



Mutrition Facts Serving Size 1 oz.. Servings Per Container About 12 **Amount Per Serving** Calories 150 Calories from Fat 90 % Daily Value* Total Fat 10g 15% Saturated Fat 3g 16% Cholesterol Omg 0% Sodium 180mg 8% Total Carbohydrate 15g 5% Dietary Fiber 1g 4% Sugars 0g Protein 2g Vitamin A 0% Vitamin C 10% Iron 2% Calcium 0% * Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorle needs: 2,000 65g 20g 300mg Calories: Total Fat Less than Less than 80g 25g 300mg Sat. Fat Cholesterol Less than Sodium Total Carbohydrate 2,400mg 300g Less than 2,400mg 375g Dietary Fiber 25g 30g Calories per gram: Carbohyorate 4 Protein 4 at 's

I

Nutrition Facts Serving Size Servings Per Container about 11 Amount Per Serving Calories from Fat 15 Calories 70 % Daily Value 2% Total Fat 1.5g 7% Saturated Fat 1.5g 1% Sodium 30mg 4% Total Carbohydrate 13g Sugars 11g Protein 0g *Percent Daily Values are based on a 2,000 calorie diet.

Nutrition Facts Serving Size 1/4 Cup (30g) Servings Per Container 45 Amount Per Serving Calories 150 Calories from Fat 80 % Daily Value Total Fat 9a 14% 10% Saturated Fat 2g **Cholesterol** Omg 0% Sodium 70ma 3% 5% **Total Carbohydrate** 15g Dietary Fiber 2g 8% Sugars 11g **Protein** 4g Vitamin A 0% 6 Vitamin C 0% 4% Iron 4% Calcium • *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 Saturated Fat Less Than 20g 25g Less Than 300mg 300mg Cholesterol Sodium Less Than 2,400mg 2,400mg 300g Total Carbohydrate 375g **Dietary Fiber** 30g Calories per gram:

Fat: 9 • Carbohydrate: 4

Protein: 4

Nutrition Facts Serving Size (43 g) Servings Per Container about 9 Amount Per Serving Calories 230 Calories from Fat 120 % Daily Value* Total Fat 13 g 20% Saturated Fat 7 g 35% Cholesterol 5 mg 2% Sodium 30 mg 1% Total Carbohydrate 25g 8% Dietary Fiber 1 g 4% Sugars 22g Protein 3g Vitamin A 0% Vitamin C 0% Calcium 6% Iron 2% *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 25g 20g Cholesterol Less than 300mg 300mg Sodium Less than 2,400mg 2,400mg Total Carbohydrate 300g 375g Dietary Fiber 25g 30g



| Servings Per Co | ntair | ner 6 | | |
|--|-------------------|------------|------------------------|-------|
| Amount Per Servin | q | | | |
| Calories 200 | | ries fro | m Fat | 120 |
| | | 9 | 6 Dally V | lalue |
| Total Fat 13g | | | | 20% |
| Saturated Fat | 6g | | | 30% |
| Cholesterol 30 |)ma | | 1 | 10% |
| Sodium 790mg | | | | 3% |
| Total Carbohyd | | 8a | | 3% |
| Dietary Fiber | | 9 | | 4% |
| Sugars Og | 9 | | | ₩ 70 |
| Protein 10g | | μ. | | |
| Flotem 10g | | | | |
| Vitamin A 0% | • | Vitan | nin C (|)% |
| Calcium 4% | • | Iron | 8% | |
| Percent Daily Values a diet. Your daily values depending on your cal | may b lorie ne | e higher | 2,000 call or lower | orie |
| Calories Total Fat Less Th | | 2,000 | 2,500 |) |
| Sat Fat Less Th | - | 65g 20g | 80g 25g | |
| Cholesterol Less Th | | 300mg | 300m | a l |
| Sodium Less Th | | 2400mg | 2400r | |
| Total Carbohydrate Dietary Fiber | | 300g | 375g | |

| Nutrit | ion | Amount/serving | %DV* | Amount/serving | , %DV* | *Percent Dai | y Values (DV |) are based | on a 2,000 |
|--------------|-----|---|---|----------------|--------|-------------------------|------------------------|--------------------------|-----------------------|
| Facts | | Tetal Fat 1.0g | 2% | Total Carb. 0g | 0% | or lower dep | ending on | alues may your calori | be higher e needs: |
| Serv. Size | | Sat Fat Qg | 0% | Fiber-0g. | 0% | Total Fat | Caloriese Less than | 2,000 65g | 2,500 80g |
| (2.7oz./76g) | | Cholest. 35mg | 12% | Sugars.0g | | Sat Fat Cholesterol | Less than | 20g 300ma | 25g 300ma |
| Calories 90 | | Sodium 350mg | 15% | | 36% | Sodium Total Carbohy | Less than | 2,400mg 300g | 2,400mg |
| Fat Cal. 10 | | Vitamin A 0% • Vita Niacin 30% • Vitamin B-6 | /itamin A 0% • Vitamin C 0% • Calciúm 0% • Iron 2% iácin 30% • Vitamin B-6 15% • Vitamin B-12 20% • Phosphorus 15% | | | Dietary Fiber 250 300 | | | 375g 30g |