

Instructor's Resource

Lesson to Introduce the *New* Nutrition Facts Label

Time needed: 30–45 minutes

Materials:

- Instructor's Resource—Understanding Changes to the Nutrition Facts Label
- The *New* Nutrition Facts Label infographic
- Changes to the Nutrition Facts Label student handout
- The *New* Nutrition Facts Label worksheet and answer key
- calculators

Procedure:

1. Review the Instructor's Resource—Understanding Changes to the Nutrition Facts Label for additional detail if necessary. This content is organized in the same order as content on the infographic.
2. Distribute the infographic and handout to students.
3. Use the Instructor's Resource to provide students with more detail as you review the infographic.
4. Work through sample calculations as needed.

Instructor's Resource

Understanding Changes to the Nutrition Facts Label

A final rule to amend the Food and Drug Administration's (FDA) food labeling regulation became effective July 26, 2016. Food manufacturers with sales greater than \$10 million have until July 26, 2018 to comply with the new regulation. Food manufacturers with less than \$10 million in sales have an additional year to comply. The Nutrition Facts label was updated with the following goals in mind:

- to align with current findings in nutrition research;
- to reflect the eating habits of Americans;
- to emphasize calories and serving size; and
- to focus on nutrients identified as public health concerns, or as being underconsumed.

Serving Sizes

Federal law requires that nutrition label serving sizes be based on amounts of foods and beverages that people **are actually eating, not what they should be eating**. Therefore, manufacturers are required to base serving sizes on a unit called *Reference Amounts Customarily Consumed (RACC)*. The 1993 RACCs were based on nationwide food consumption surveys performed in 1977–1978 and 1987–1988. And, although Americans' eating habits had changed significantly since that time, the RACCs had not been modified since they were established in 1993.

Serving sizes for the new Nutrition Facts label use updated RACCs. Data for the RACCs which were used for the revision are based on data gathered in surveys from 2003–2004, 2005–2006, and 2007–2008. Because the number of calories and levels of nutrients listed on the label are based on the serving size, it is important that the RACCs accurately reflect the amount of food typically eaten. Some examples of changes in serving sizes based on the new RACCs include

- ice cream: old serving size— $\frac{1}{2}$ cup; new serving size— $\frac{2}{3}$ cup
- yogurt: old serving size—8 ounces; new serving size—6 ounces
- soda: old serving size—8 ounces; new serving size—12 ounces (**Note:** Labels on both 12-ounce bottles and 20-ounce bottles will state servings per container as 1 serving because most people consume a 20-ounce bottle in one sitting.)

(**Note:** Serving sizes listed on Nutrition Facts labels are **not** the same as portion sizes described in dietary guidance such as MyPlate. Although some serving sizes will increase with this revision, this was done to provide consumers with more accurate information about the number of calories they are consuming—**not** to encourage consumers to eat a larger serving size.)

Calories

Calories from fat no longer appear on the Nutrition Facts label. This change is due to current nutrition research indicating that the type of fat is more important than the amount of fat. For example, foods that are *not* low in total fat, but have a fat profile made up of primarily mono- and polyunsaturated fats may be considered “healthy.”

Percent Daily Values

Percent Daily Values (%DV) were updated to reflect the following changes in dietary recommendations (per 2,000 calorie diet).

- Total fat: increased from 30% to 35% of total calories (65 grams to 78 grams)
- Total carbohydrate: decreased from 300 grams to 275 grams
- Dietary fiber: increased from 25 grams to 28 grams
- Sodium: decreased from 2,400 milligrams to 2,300 milligrams
- Potassium: increased from 3,500 milligrams to 4,700 milligrams
- Calcium: increased from 1,000 milligrams to 1,300 milligrams
- Vitamin D: increased from 10 micrograms to 20 micrograms (400 IU to 800 IU)

Vitamin D will be expressed in units called *micrograms* (μg) on the Nutrition Facts label, but vitamin D is often expressed in units called *international units* (IU). To convert units, use the following formulas:

$$\text{IU} \times 0.025 = \text{mcg}$$

$$\text{mcg} \div 0.025 = \text{IU}$$

example:

$$600 \text{ IU} \times 0.025 = 15 \text{ mcg vitamin D}$$

$$20 \text{ mcg} \div 0.025 = 800 \text{ IU vitamin D}$$

Added Sugars

The amount of added sugars a food contains will now be identified on the nutrition label due to evidence that consuming foods high in added sugars decreases the amount of nutrient-dense foods consumed and also increases total calories consumed. Additionally, diets lower in sugar-laced foods and beverages are associated with a reduced risk of heart disease. The wording “Includes X g Added Sugars” is used to make it clear that added sugars represent only a portion of the “Total Sugars” a food contains. The amount of total sugars includes both added sugars and naturally occurring sugars, such as lactose, fructose, and others. For example, milk contains a lot of “Total Sugars” due to the lactose which naturally occurs in milk. But milk contains no *added* sugars.

The Food and Drug Administration defines added sugars as sugars that are either added during the processing of foods, or are packaged as such (e.g., a sugar packet or bag of brown sugar). Added sugars include: syrups, brown sugar, high fructose corn syrup, invert sugar, maltose, trehalose, honey, molasses, sucrose, lactose, maltose sugar, concentrated fruit juice.

The % Daily Value (%DV) for added sugars is also included on the Nutrition Facts label. The %DV for added sugar is 10% of total daily calories. Therefore, if the recommended intake for your age, size, gender, and activity level is 2,300 per day, you should not consume more than 230 calories per day from added sugars.

Nutrients of Concern

According to national food consumption surveys, Americans do not always get enough vitamin D and potassium in their diets. Diets that provide insufficient amounts of these nutrients are linked with greater risk for chronic disease. For this reason, vitamin D and potassium are now required on the nutrition label, replacing vitamins A and C. When the nutrition label was first established, vitamins A and C were deficient in American diets but this is no longer the case. Vitamins A and C can still be listed on nutrition labels voluntarily, however.

Although food products can no longer contain artificial sources of *trans* fats from partially hydrogenated oils effective June 18, 2018, naturally occurring *trans* fats are still allowed. Naturally occurring *trans* fats are found in food from some animals, such as cows and goats. Additionally, food manufacturers will be able to petition the Food and Drug Administration to use partially hydrogenated oil in products, which may or may not be approved.

Footnote

The footnote was revised to better explain Percent Daily Values (%DV). To calculate %DV, use the following formula:

$$(\text{amount of nutrient in 1 serving of product} \div \text{recommended daily value}) \times 100 = \% \text{ Daily Value}$$

Using the Total Carbohydrate information from the Nutrition Facts label on the infographic as an example,

$$(34 \text{ g total carbohydrate} \div 275 \text{ g carbohydrate per day}) \times 100 = 12\% \text{ Daily Value}$$

Student Handout

Changes to the Nutrition Facts Label

Soon you will be seeing changes in the labeling on food packaging when shopping at the supermarket. The Food and Drug Administration (FDA) is giving the Nutrition Facts label a makeover after nearly 20 years! This is what you need to know:

Who?

- All food manufacturers will be required to use the revised Nutrition Facts label on their products.

When?

- Food manufacturers with sales of \$10 million per year or more must use the revised labels on their products no later than July 26, 2018.
- Food manufacturers with less than \$10 million in annual sales have an additional year to comply.

What?

- Serving sizes must be updated to reflect the amounts people typically eat. These serving sizes must appear in larger, bolder type.
- Calories must also appear in larger, bolder type.
- Calories from fat are no longer listed.
- Percent Daily Values must be updated to reflect current research.
- A new row must be added to show the amount of added sugars a product contains.
- Vitamin D and Potassium will replace Vitamins A and C on the label.
- The footnote has been revised to better explain Percent Daily Values.

Where?

- Nutrition Facts labels are required on most food packages. Foods that provide no significant nutritional value, such as plain coffee, tea, and many spices are not required to have a nutrition label. Foods such as sliced meats sold at a deli counter in bulk do not require nutrition labels. Foods sold at restaurants are not required to have Nutrition Facts labels, but restaurants will be required to meet menu labeling requirements effective May 5, 2017.

Why?

- Nutrition and health researchers continue to discover more about the connection between what we eat and our health. In addition, people's eating habits continue to change and evolve. As a result, the Nutrition Facts label has been revised to reflect these changes and provide more useful information to consumers as they make decisions about food choices.

The NEW Nutrition Facts Label

Implementation Deadline: July 26, 2018*

Old Label

Nutrition Facts		
Serving Size 1 cup (245g) Servings Per Container about 1		
Amount Per Serving		
Calories 208	Calories from Fat 27	
% Daily Value*		
Total Fat 3g	5%	
Saturated Fat 2g	10%	
<i>Trans</i> Fat 0g		
Cholesterol 12mg	4%	
Sodium 162mg	7%	
Total Carbohydrate 34g	11%	
Dietary Fiber 0g	0%	
Sugars 34g		
Proteins 12g		
Vitamin A	2%	
Vitamin C	3%	
Calcium	42%	
Iron	1%	

* 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
Cholesterol	Less than 300mg	300mg
Sodium	Less than 2,400mg	2,400mg
Total Carbohydrate	300g	375g
Dietary Fiber	25g	30g

Changes

- Serving sizes have been updated to reflect amounts people typically eat; presented in larger, bolder type.
- Calories are in larger, bolder type. Calories from fat are no longer listed.
- Percent Daily Values have been updated to reflect current research.
- For the first time, Added Sugars must be listed separately.
- Vitamins A and C have been replaced by Vitamin D and Potassium.
- The footnote was revised to better explain Percent Daily Values.

New Label

Nutrition Facts		
1 serving per container Serving size 1 cup (245g)		
Amount per serving		
Calories 208		
% Daily Value*		
Total Fat 3g	4%	
Saturated Fat 2g	10%	
<i>Trans</i> Fat 0g		
Cholesterol 12mg	4%	
Sodium 162mg	7%	
Total Carbohydrate 34g	12%	
Dietary Fiber 0g	0%	
Total Sugars 34g		
Includes 17g Added Sugars	34%	
Protein 12g		
Vitamin D 0mcg	0%	
Calcium 419mg	32%	
Iron 0.2mg	1%	
Potassium 537mg	11%	

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

*Companies with annual sales less than \$10 million have an additional year.



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Student Worksheet

The New Nutrition Facts Label

Name _____ Date _____ Period _____

1. List four changes that were made to the Nutrition Facts label. _____

2. By what date are food manufacturers with sales greater than \$10 million required to use the revised label on their food products? _____

Use the Nutrition Facts label below to answer the questions that follow.

Nutrition Facts	
17 servings per container	
Serving size	3/4 cup (28g)
Amount per serving	
Calories	110
% Daily Value*	
Total Fat 1.5g	2%
Saturated Fat 0g	0%
<i>Trans</i> Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	%
Total Carbohydrate 22g	4%
Dietary Fiber g	7%
Total Sugars 9g	
Includes 8g Added Sugars	%
Protein 2g	
Vitamin D 1mcg 5%	Calcium 104mg 8%
Iron 4.5mg 25%	Potassium 115mg 2%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

3. What is the serving size for this food? _____

4. How many calories per serving does this food contain? _____
5. What calorie level is used to calculate the % Daily Values on Nutrition Facts labels? _____
6. The new dietary recommendation used to calculate % Daily Value for sodium is 2,300 milligrams (mg). What is the % Daily Value for sodium for this food? (Round to the nearest whole number and show your work.) _____

7. The new dietary recommendation used to calculate % Daily Value for dietary fiber is 28 grams (g). How many grams of dietary fiber does this food contain? (Round to the nearest whole number and show your work.) _____

8. The dietary recommendation for % Daily Value for added sugars is 10% of daily calories. For a 2,000-calorie diet, how many calories in added sugars does this equal? (Round to the nearest whole number and show your work.) _____

9. How many grams of added sugars does this food contain? _____
10. What is the % Daily Value for added sugars for this food based on a 2,000-calorie diet? (Round to the nearest whole number and show your work. *Hint: Remember 1 gram of carbohydrate supplies 4 calories.*) _____

11. How many micrograms (mcg) of vitamin D are supplied by this food? _____
12. State two ways that you will use the Nutrition Facts label when making food choices. _____

Answer Key

The New Nutrition Facts Label

Name _____ Date _____ Period _____

- List four changes that were made to the Nutrition Facts label. _____
(List four:) servicing sizes were updated; serving sizes appear in larger, bolder type; calories appear in larger, bolder type; calories from fat are no longer listed; percent Daily Values have been updated; amount of added sugars is now included; percent Daily Value of added sugars is now included; vitamins A and C no longer are required on the label; vitamin D and potassium are now required on the label; the footnote explaining percent Daily Value was updated
- By what date are food manufacturers with sales greater than \$10 million required to use the revised label on their food products? July 26, 2018

Use the Nutrition Facts label below to answer the questions that follow.

Nutrition Facts	
17 servings per container	
Serving size	3/4 cup (28g)
Amount per serving	
Calories	110
% Daily Value*	
Total Fat 1.5g	2%
Saturated Fat 0g	0%
<i>Trans</i> Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	%
Total Carbohydrate 22g	4%
Dietary Fiber g	7%
Total Sugars 9g	
Includes 8g Added Sugars	%
Protein 2g	
Vitamin D 1mcg 5%	Calcium 104mg 8%
Iron 4.5mg 25%	Potassium 115mg 2%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

- What is the serving size for this food? 3/4 cup
- How many calories per serving does this food contain? 110 calories

5. What calorie level is used to calculate the % Daily Values on Nutrition Facts labels? 2,000 calories
6. The new dietary recommendation used to calculate % Daily Value for sodium is 2,300 milligrams (mg). What is the % Daily Value for sodium for this food? (Round to the nearest whole number and show your work.) 7%

$$160 \text{ mg sodium} \div 2,300 \text{ mg sodium} = 0.069 \times 100 = 6.9\% = 7\%$$

7. The new dietary recommendation used to calculate % Daily Value for dietary fiber is 28 grams (g). How many grams of dietary fiber does this food contain? (Round to the nearest whole number and show your work.) 2 grams dietary fiber

$$7\% \div 100 = 0.07$$

$$0.07 \times 28 \text{ g} = 1.96 = 2 \text{ grams dietary fiber}$$

8. The dietary recommendation for % Daily Value for added sugars is 10% of daily calories. For a 2,000-calorie diet, how many calories in added sugars does this equal? (Round to the nearest whole number and show your work.) 200 calories from added sugars

$$2,000 \text{ calories} \times 0.10 = 200 \text{ calories from added sugars}$$

9. How many grams of added sugars does this food contain? 8 grams
10. What is the % Daily Value for added sugars for this food based on a 2,000-calorie diet? (Round to the nearest whole number and show your work. *Hint: Remember 1 gram of carbohydrate supplies 4 calories.*) 16%

$$8 \text{ grams carbohydrate from added sugars} \times 4 \text{ calories/gram} = 32 \text{ calories from added sugars}$$

$$32 \text{ calories} \div 200 \text{ calories \% Daily Value for added sugars} = 0.16 \times 100 = 16\%$$

11. How many micrograms (mcg) of vitamin D are supplied by this food? 1 microgram (mcg or µg)
12. State two ways that you will use the Nutrition Facts label when making food choices. _____
Answers will vary.
