

Food Label Reading and Application

Nutrition & Physical Activity Program
Division of Chronic Disease & Injury Prevention
Department of Public Health



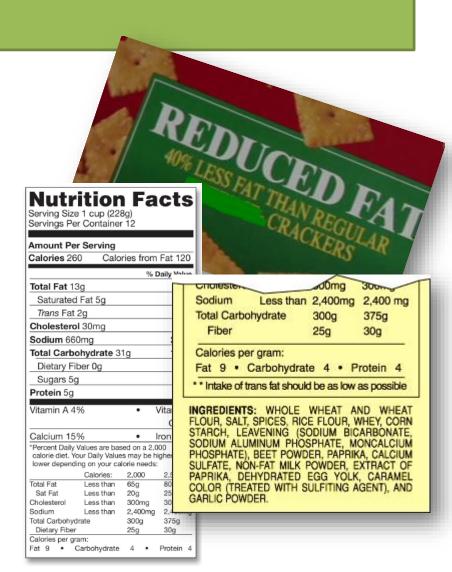
Objectives

- 1. Understand and identify at least two reasons why being able to accurately read a food label is important for staying healthy.
- 2. List the three important components of a food label that help when trying to choose/purchase a food product.
- Learn the six steps in how to read a food label.
- 4. Understand how to use the percent daily value and the "5/20 Rule".
- 5. Identify products made mostly with whole grains, sources of synthetic trans fats and added sugars from the ingredients label.



Why Read the Food Label?

- A food label on a food package contains three key components:
 - Nutritional value
 - Ingredients list
 - Nutrition claims
- Food labels help people to:
 - improve their eating habits;
 - be more informed about the nutrients the food product(s) have before they choose and purchase or consume the item.





Why Read the Food Label? (Continued)



Food labels also...

- Provide information on important nutrients such as sodium, cholesterol, fiber, saturated fat and other nutrients of major health concern.
- Contain information on food allergens.
- Helps you understand not just the grams and percentages of the nutrients in the product but what is in your food.

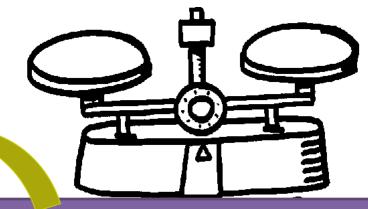


Ingredients List

Nutrition Facts: Serving Size 8fl.ozs.(240 r Servings Per Container 2	nL)
Amount Per Serving	
Calories 0	
% Daily	Values*
Total Fat Og	0%
Sodium Omg	0%
Total Carbohydrates Og	0′
Sugars Og	
Protein 0g	

Ingredients: purified water, organic extracts from cloves, organic cardamom seeds, organic connamon bark, and natural flavor

based on a 2,000 calorie diet.



A list of ingredients on a food label will tell you what is in the food. The ingredients on the list appear in descending order by weight.



Nutrition Claims: "Free"



- Definition: < 0.5 g or < 5 calories of the nutrient per serving
- These nutrients may be used with the term "free":
 - Fat
 - Saturated fat
 - Cholesterol
 - Sodium
 - Sugars
 - Calories
- Other terms used: Without, no, zero, skim (for fat-free milk)



Nutrition Claims: "Low"

- Meaning: You can eat this food often and you will not exceed the recommended amount of that nutrient.
- Nutrients that may be used with the term "low":

– Fat < 3g</p>

– Saturated fat < 1g*</p>

– Cholesterol < 20mg and < 2g sat fat</p>

– Sodium <140 mg</p>

Very low sodium < 35 mg

– Calories < 40 calories</p>

• Other terms used: Little, few, low source of, contains a small amount of.



^{*}with not more than 15% of calories from sat fat



Nutrition Claims: "Good source"

- Definition: Contains 10%-19% of the DV for a certain nutrient per serving.
- These nutrients may be used with the term "good source":
 - Calcium
 - Fiber
 - Vitamins (e.g. A, C, D)
 - Iron
- Other terms used: More, enriched, fortified, extra, plus, or added.





Nutrition Claims: "High"

 Definition: Can be used if food contains > 20% DV of a certain nutrient.

 Examples of nutrients that may be used with the term "high":

Calcium

Fiber

Other terms used: Rich in, excellent

source of.





Nutrition Claims: "Reduced"



- Definition: Food item is at least less than 25% of specified nutrient or calories than the original product per serving.
 - Nutrients that may be used with the term "reduced":
 - Fat
 - Salt
 - Calories
- Note: This term may not be used if the original version already meets the "low" claim requirement.



Nutrition Claims: "Less"

- Definition: Food item is at least less than 25% of specified nutrient or calories than another food. the original product per serving.
- These nutrients that can be used with the term "reduced":
 - Fat
 - Salt
 - Calories
- On a label: less sodium/fat, 25% less fat than...
- Other terms used: Fewer.





Sample label for Macaroni & Cheese

Nutrition Facts

Serving Size 1 cup (228g)

Total Fat 12g

1) Start Here
Serving Size 1 cup (228g)
Servings Per Container 2

2) Check Calories Calories 250

Amount Per Serving

Calories 250 Calories from Fat 110

at 110

18% 15%

10%

20%

10%

0%

4%

2%

20%

4%

% Daily Value*

3 Limit these Nutrients

Get Enough

of these

Nutrients

e

Cholesterol 30mg
Sodium 470mg
Total Carbohydrate 31g

Trans Fat 3g

Saturated Fat 3g

Dietary Fiber 0g

Sugars 5g Protein 5g

Vitamin A
Vitamin C
Calcium
Iron

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

5 Footnote

	your outerto noods.			
		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	2,400mg	2,400mg
	Total Carbohydrate		300g	375g
l	Dietary Fiber		25g	30g

(6)

Quick Guide to % DV

5% or less is Low

 20% or more is High



Step 1. Serving Size

- Definitions:
 - Serving Size a predetermined standardized amount of food item/product.
 - Serving Size on a Nutrition
 Facts label information is based on what the average person eats at one time.



In this example, 1 serving of macaroni and cheese = 1 cup.



	Single Serving	%DV	Two Servings	%DV
Serving Size	1 cup (228g)		2 cups (456g)	
Calories	250		500	
Calories from Fat	110		220	
Total Fat	12g	18%	24g	36%
Trans Fat	1.5g		3g	
Saturated Fat	3g	15%	6g	30%
Cholesterol	30mg	10%	60mg	20%
Sodium	470mg	20%	940mg	40%
Total Carbohydrate	31g	10%	62g	20%
Dietary Fiber	0g	0%	0g	0%
Sugars	5g		10g	
Protein	5g		10g	
Vitamin A		4%		8%
Vitamin C		2%		4%
Calcium		20%		40%
Iron		4%		8%



Step 2: Check Calories

Amount Per Serving

Calories 250

Calories from Fat 110

General Guideline to Calories*

40 calories is **low**

100 calories is moderate

400 calories is high

*Based on a 2,000 calorie diet





Step 3: Limit These Nutrients

A diet high in saturated fat, trans fat, sodium and cholesterol increases your risk for heart disease, diabetes and high blood pressure.

The goal is to stay below 100% of the Daily Value for <u>each</u> of these nutrients daily.

Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%





Step 4: Get Enough of These Nutrients



Dietary Fiber 0g	0%
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

Eating adequate amounts of these nutrients may help protect against certain chronic health conditions.



Step 5: Footnote

lories from Fat 110		
% Daily Va	alue*	
	18%	
	15%	
	10%	
	20%	
	10%	
	0%	
	4%	
	2%	
	20%	
	4%	

Percent Daily Value Your Daily Values r your calorie needs.	es are based nay be highe	on a 2,000 r or lower de	calorie diet. epending on
	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	2,400mg	2,400mg
Total Carbohydrate	\	300g	375g
Dietary Fiber		25g	30g



Another Look at the Footnote

Nutrient	DV	%DV	Goal
Total Fat	65 g	= 100%DV	Less than
Sat Fat	20g	= 100%DV	Less than
Cholesterol	300 mg	= 100%DV	Less than
Sodium	2400 mg	= 100%DV	Less than
Total Carbohydrate	300 g	= 100%DV	At least
Dietary Fiber	25 g	= 100%DV	At least

Based on a 2,000 Calorie Diet



Step 6: Quick Guide to % Daily Values

% Daily Va	alue*
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

The % DV is based on 100% of the daily value for each nutrient.





Do I have to calculate the % DV?



% Daily Va	alue*
Total Fat 12g	?
Saturated Fa(3g	?
Trans Fat 1.5g	
Cholesterol 30mg	?
Sodium 470mg	?

Your Daily Values your calcrie needs	may be highe		
,	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	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25 g	30g

* Percent Daily Values are based on a 2 000 calorie diet



The % DV does the math for you!

Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 1.5g	
Cholesterol 30mg	10%
Sodium 470mg	20%





THE 5/20 RULE

- 5% DV or less not a good source
 - 20% DV or more a good source

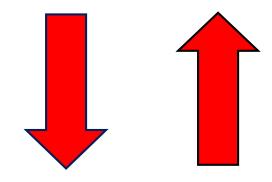


Limit these nutrients

Get enough of these nutrients

Amount Per Serv Calories 250		ories from	ı Fa	at 110
Odiones 200	Out	% Daily		
Total Fat 12g		70 Dany		18%
Saturated Fat	t 3a			15%
Trans Fat 3g	. • 9			
Cholesterol 30	ma			10%
				20%
Sodium 470mg				
Total Carbohyo				10%
Dietary Fiber	0g			0%
Sugars 5g				
Protein 5g				
Vitamin A				4%
Vitamin C				2%
Calcium				20%
Iron				4%
* Percent Daily Value Your Daily Values n your calorie needs.	es are based nay be highe	on a 2,000 er or lower de	calo	rie diet ding or
	Calories:	2,000		500
		C.E.~	80	0g
	Less than	65g	0.1	E
Sat Fat	Less than	20g		5g
Total Fat Sat Fat Cholesterol Sodium	Less than Less than	20g 300mg	30	00mg
Sat Fat Cholesterol	Less than	20g	30 2,	•

5% DV or less is Low



20% DV or more is High



Nutrients Without % DV

- Trans Fat
- Sugars
- Protein



Serving Size 1 co Servings Per Con Amount Per Serving Calories 250	ntainer 2	
% Daily Value*		
Total Fat 12g		18%
Saturated Fat 3g	g	15%
Trans Fat 3g		
Cholesterol 30mg		10%
Sodium 470mg		20%
Total Carbohydrate 31g		10%
Dietary Fiber 0g		0%
Sugars 5g		
Protein 5g		
Vitamia A		40/
Vitamin A		4%
Vitamin C		2%
Calcium		20%
Iron		4%



Trans Fats

- FDA required food manufactures to list trans fat on food labels in 2006.
- Foods and supplements with more than 0.5 g per serving are required to be listed on the label.
- USDA Dietary 2010 Guidelines, "Americans should keep their intake of trans fatty acids as low as possible."



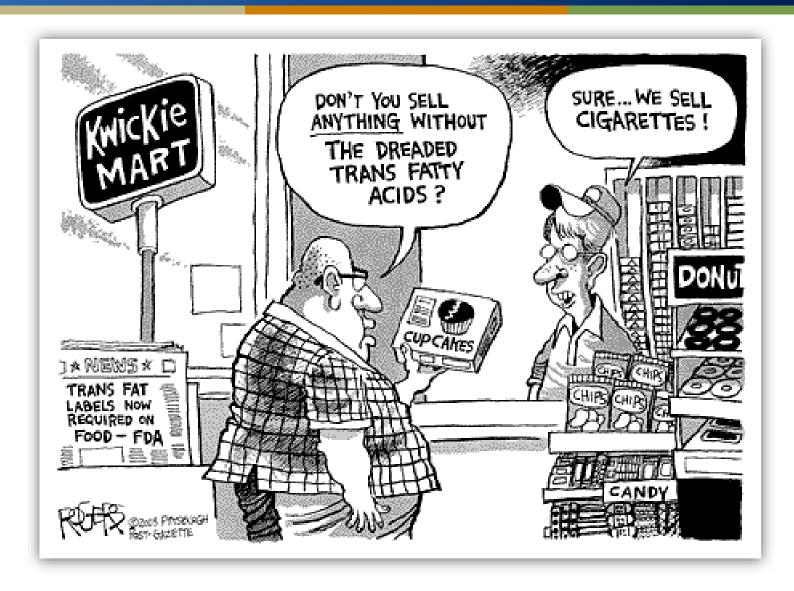


Trans Fats

- November 2013—FDA announced to ban trans fats from all food products.
 - 4,340 top-selling packaged foods were tested
 - 84% labeled as zero grams trans fat but had trans fat in them
- CDC estimates ban on trans fats could prevent:
 - Additional 7,000 deaths from heart disease
 - 20,000 heart attacks annually









Trans Fats – Reading the Label

Make sure you read the ingredients list for "partially hydrogenated" or "hydrogenated oils"

Ingredients: Liquid Canola Oil, Water, Partially Hydrogenated Soybean Oil, Plant Stanol Esters, Salt, Emulsifiers (Vegetable Mono- and Diglycerides, Soy Lecithin), Hydrogenated Soybean Oil, Potassium Sorbate, Citric Acid and Calcium Disodium EDTA to Preserve Freshness, Artificial Flavor, dl-α-Tocopheryl Acetate, Vitamin A Palmitate, Colored with Beta Carotene.

Distributed by Nutritionals, LLC FORT WASHINGTON, PA 19034 USA

Or Nutritionals, LLC 2005 U.S. Patent No. 5502045.

OCT/25/10 L056





Added Sugars

 Added Sugars – any sugar that is added to foods or beverages during processing or preparation

Anhydrous dextrose	Lactose
Brown sugar	Malt syrup
Confectioner's powdered sugar	Maltose
Corn syrup	Maple syrup
Corn syrup solids	Molasses
Dextrin	Nectars (e.g., peach nectar, pear nectar)
Fructose	Pancake syrup
High-fructose corn syrup	Raw sugar
Honey	Sucrose
Invert sugar	Sugar
	White granulated sugar

evaporated corn sweetener, fruit juice concentrate, crystal dextrose, glucose, liquid fructose, sugar cane juice, and fruit nectar.



Added Sugars – Food Label Terms

Sugar-Free – less than 0.5 g of sugar per serving

Reduced Sugar or Less Sugar – at least 25% less sugars per serving compared to a standard serving size of the traditional variety

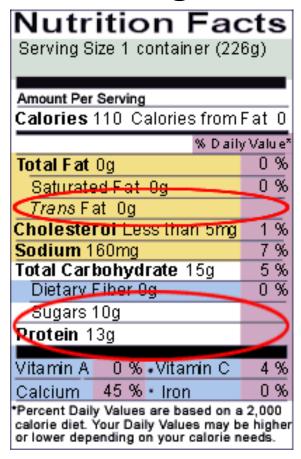
No Added Sugars or Without Added Sugars – no sugars or sugar-containing ingredient such as juice or dry fruit is added during processing

Low Sugar – not defined or allowed to be written on food labels

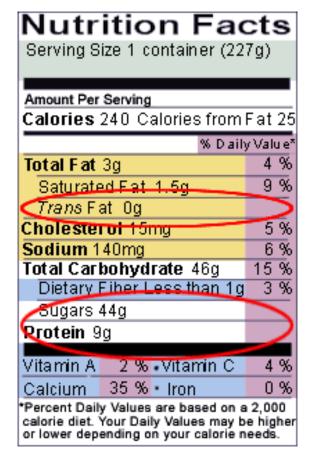


Added Sugars – Reading the Label

Plain Yogurt



Fruit Yogurt





Added Sugars – Reading the Label

Plain Yogurt

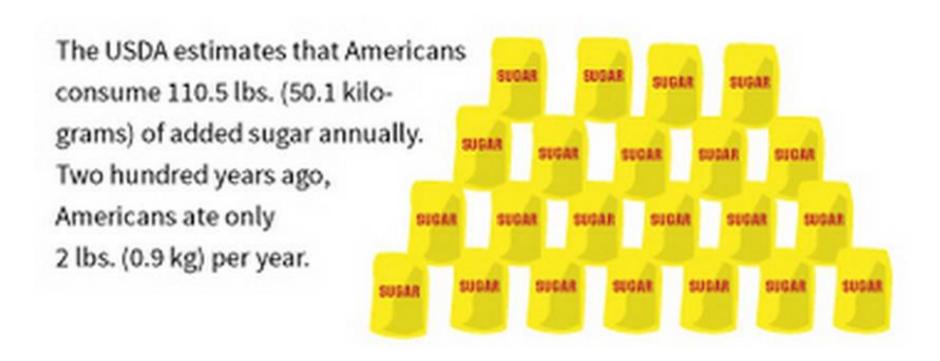
 Ingredients: cultured pasteurized grade A nonfat milk, whey protein concentrate, pectin.

Fruit Yogurt

 Ingredients: cultured grade A reduced fat milk, apples, high fructose corn syrup, cinnamon, nutmeg, natural flavors, and pectin.

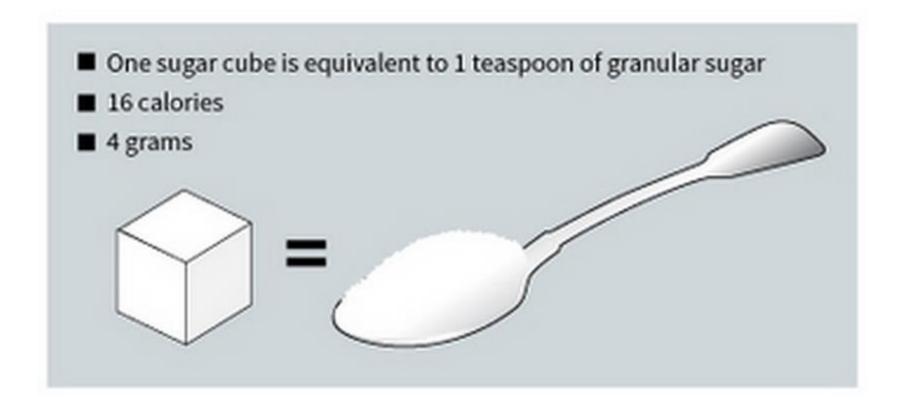


Added Sugars





Added Sugars





Added Sugar Limit Recommendations

USDA Dietary Guidance for Americans (DGA) 2010:

- No more than 5-15% of your total daily calories from added sugar and solid fats.
- Which is approximately 9 teaspoons.
- Max. 258 (13%) calories from solid fats and added sugars (SoFAS).





Added Sugar Limit Recommendations

American Heart Association (AHA):

- Women: No more than 100 calories a day from added sugar. (6 teaspoons)
- Men: No more than 150 calories a day from added sugar. (9 teaspoons)





Added Sugar Limit Recommendations

The World Health Organization (WHO):

Added sugar intake should be less than 10% of total calories per day.

- 50 g for a 2,000 calorie/day diet
- 12.5 teaspoons





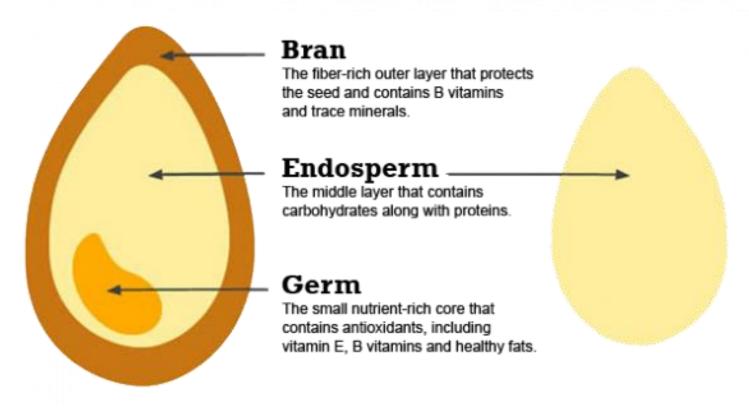
Other Food Label Claims





What About Grains?

Whole Grain vs. "White" Grain





Whole-Grains

TABLE A4-3. Examples of Whole Grains That Can Be Listed as an Ingredient

Brown rice	Whole-grain sorghum
Buckwheat	Whole-grain triticale
Bulgur (cracked wheat)	Whole-grain barley
Millet	Whole-grain corn
Oatmeal	Whole oats/oatmeal
Popcorn	Whole rye
Quinoa	Whole wheat
Rolled oats	Wild rice



Whole Grains – Reading the Label



Whole-Grains should be listed as a first or second ingredient



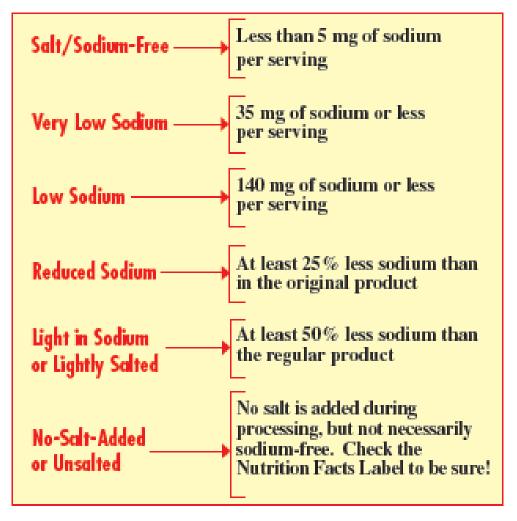
So what qualifies as a whole grain-rich food?

According to the USDA Food and Nutrition Service (Schools):

- Foods must meet one of three requirements:
 - a. Contain at least 8 g of whole grain (fiber) per serving OR
- 2. Qualify for FDA whole grain health claim (51% whole grain by weight) OR
- 3. The phrase "whole grain" listed as the first ingredient by weight for grain-based products (e.g. breads, cereals)
- In essence, at least 50% of the grain must be whole grain.

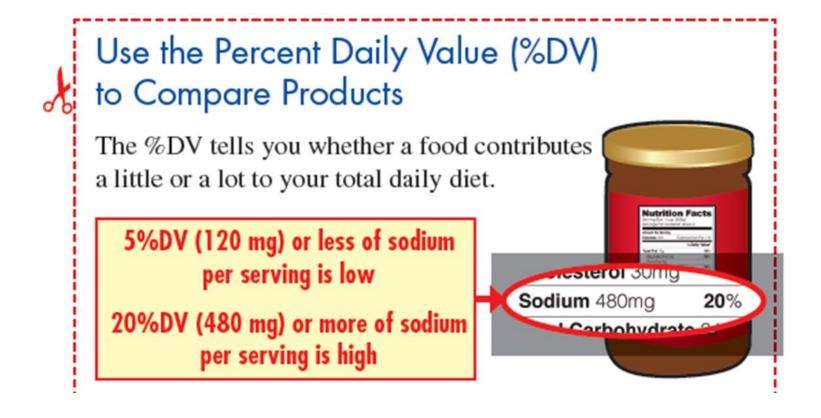


Sodium – Reading the Front Label





Sodium – Reading the Back Label



PROPOSED LABEL / WHAT'S DIFFERENT



Servings: larger, bolder type

> Updated Daily Values

% DV comes first

New: added sugars

> Of nutrients required

Nutrition Facts

8 servings per container Serving size 2/3 cup (55g)

Amount per 2/3 cup
Calories

230

% DV* Total Fat 8g 12% Saturated Fat 1g Trans Fat 0g Cholesterol 0mg 7% Sodium 160mg Total Carbs 37g 12% Dietary Fiber 4g 14% Sugars 1q Added Sugars Og Protein 3g Vitamin D 2mcg 10% Calcium 260mg 20% 45% Iron 8mg Potassium 235mg

* Footnote on Daily Values (DV) and calories reference to be inserted here. _ Serving sizes updated

Calories: larger type

Actual – amounts declared

New

footnote

to come

Photo and information source: http://www.foodnavigatorusa.com/Regulation/FDA-s-proposednutrition-label-changes-emphasizecalories-serving-sizes

45





Let's check your understanding!



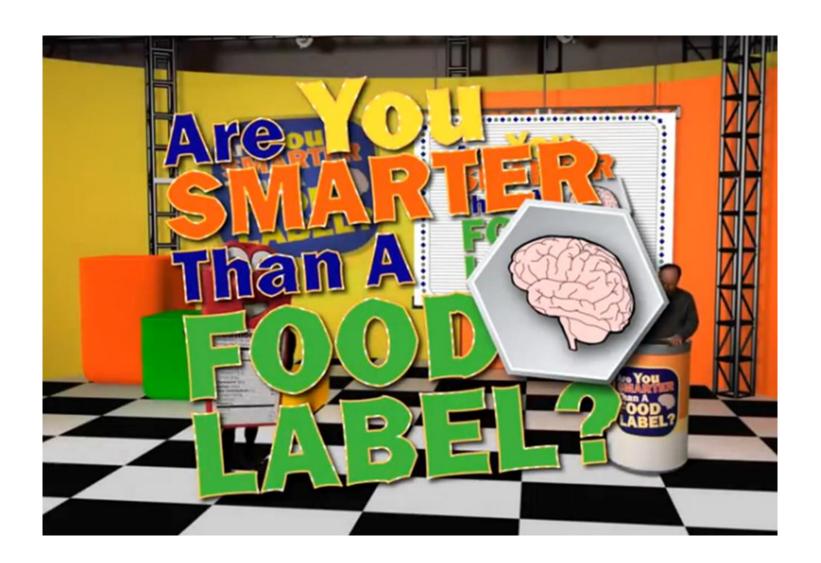


Photo source: 47





What does the <u>serving size</u> on a Nutrition Facts label tell us?

- a) The amount contained in the package;
- b) Recommended serving size that's normal/healthy;
- c) A pre-determined serving size that's based on what a typical person eats and/or what the manufacturer wanted it to be.





c) A pre-determined serving size that's based on what a typical person eats and/or what the manufacturer wanted it to be



What is the "5/20 Rule"?

- a) The formula for the number of calories it takes to run 5 miles in 20 minutes;
- b) The body's standard burn rate for fat consumed;
- c) A method to tell if a food is low or high in a particular nutrient.





c) A method to tell if a food is low or high in a particular nutrient.





What are the 3 things to remember when making healthy food choices?





Servings, calories and %DV (Daily Value)





What does "Excellent source of fiber" mean on a food label?

- a) That the product is made with 100% whole grains;
- b) There's at least 19% DV worth of fiber in this product;
- c) Thit product contains 20% or more of the DV for fiber;
- d) This term is not allowed to use on the food label.





c) This product contains 20% or more of the DV for fiber;



A Special Thanks to Our Contributor Sahra Pak, MS, RD