

What's In Your Food?



Richard Collins, MD “The Cooking Cardiologist”
Susan Buckley, RD
South Denver Cardiology

Sample label for Macaroni & Cheese

Nutrition Facts

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

Amount Per Serving

Calories 250 **Calories from Fat** 110

% Daily Value*

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%

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

Quick Guide to % DV

- 5% or less is Low
- 20% or more is High

Footnote

	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

① **Start Here** →

② **Check Calories**

③ **Limit these Nutrients**

④ **Get Enough of these Nutrients**

⑤ **Footnote**

⑥

What's In Your Food?

- The Nutrition Facts label, mandated by Congress on processed food packages since 1990, was designed to help Americans consume a more nutritious diet.
- If manufacturers had to reveal the nutrients and calories in foods maybe they would be encouraged to add healthier ingredients and to eliminate or reduce those that are detrimental to health.
- This strategy worked well for reducing artery-damaging trans fats, but not nearly so well for ridding products of salt and sugar.
- And manufacturers added things like vitamins, minerals and fiber to make products appear healthier than they really are.

Nutrition Facts

Serving Size 1 pastry (52g)
Servings Per Container 6

Amount Per Serving	
Calories	190
Calories from Fat	35
% Daily Value*	
Total Fat 4g	6%
Saturated Fat 1.5g	7%
Trans Fat 0g	
Polyunsaturated Fat 1g	
Monounsaturated Fat 1.5g	
Cholesterol 0mg	0%
Sodium 150mg	6%
Potassium 140mg	4%
Total Carbohydrate 35g	12%
Dietary Fiber 5g	20%
Soluble Fiber 3g	
Insoluble Fiber 2g	
Sugars 16g	
Protein 4g	

Iron 6%

Not a significant source of vitamin A, vitamin C and calcium.

*Percent Daily Values are based on a diet of other people's secrets.
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Percent Daily Values are based on a diet of other people's secrets.

INGREDIENTS: WHOLE GRAIN WHEAT FLOUR, WATER, CORN SYRUP, SUGAR, HIGH FRUCTOSE CORN SYRUP, VEGETABLE OIL (PALM, CANOLA), POLYDEXTROSE, VITAL WHEAT GLUTEN, WHEY, COCOA PROCESSED WITH ALKALI, MODIFIED CORN STARCH, RED 40 AND OTHER COLOR ADDED, YELLOW CORN FLOUR, SALT, ENRICHED FLOUR (WHEAT FLOUR, NIACIN, IRON, THIAMIN MONONITRATE, RIBOFLAVIN, FOLIC ACID), LEAVENING AGENTS (AMMONIUM BICARBONATE, BAKING SODA), GELATIN, NATURAL AND ARTIFICIAL FLAVOR, ENZYME MODIFIED SOY PROTEIN, SOY LECITHIN, POTASSIUM SORBATE AND TBHQ ADDED TO PRESERVE FRESHNESS. CONTAINS WHEAT, MILK AND SOY INGREDIENTS.

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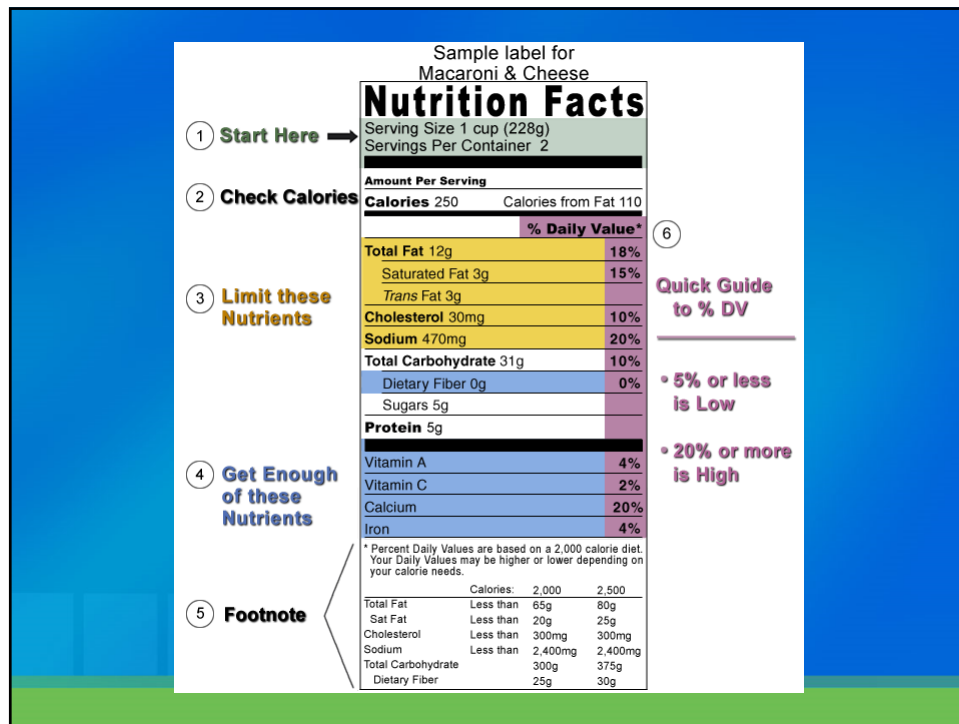


What's In Your Food?

- “Although the numbers can look good, the product may not be real food and have no nutritional value,” said Dr. David Kessler, who as the commissioner of the Food and Drug Administration (1990-1997) championed the development of the current label.
- But the label itself is also a problem for many people - especially those who *cannot relate grams of a nutrient or percentages of the Daily Value to the amount of food that goes in their mouths.*
- Prompted by the Institute of Medicine, the F.D.A. is planning a **revision**.
- It will be a while in coming: Thousands of public comments must be reviewed, then final rules issued and the food industry given time to implement them.

Nutrition Facts Label

- While the Nutrition Facts label has been an important tool to help people make better food choices over the past 24 years, the only major change has been the requirement, effective in 2006, that trans fat be declared.



Nutrition Facts Label

- FDA is proposing to update the Nutrition Facts label to improve public health, incorporating the new nutrition recommendations to reduce the risk of chronic diseases such as cardiovascular disease, obesity, high blood pressure and stroke, and to encourage an adequate intake of essential nutrients

Current

Nutrition Facts	
Serving Size 2/3 cup (55g)	
Servings Per Container About 8	
Amount Per Serving	
Calories 230	Calories from Fat 72
% Daily Value*	
Total Fat 8g	12%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	12%
Dietary Fiber 4g	16%
Sugars 1g	
Protein 3g	
Vitamin A	10%
Vitamin C	8%
Calcium	20%
Iron	45%
* Percent Daily Values are based on a diet of other people's secrets.	
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 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

Proposed

Nutrition Facts	
8 servings per container	
Serving size 2/3 cup (55g)	
Amount per 2/3 cup	
Calories	230
% DV*	
12%	Total Fat 8g
5%	Saturated Fat 1g
	Trans Fat 0g
0%	Cholesterol 0mg
7%	Sodium 160mg
12%	Total Carbs 37g
14%	Dietary Fiber 4g
	Sugars 1g
	Added Sugars 0g
	Protein 3g
10%	Vitamin D 2mcg
20%	Calcium 260mg
45%	Iron 8mg
5%	Potassium 235mg
* Footnote on Daily Values (DV) and calories reference to be inserted here.	

Easier to Read

- The new label easier to read!
- With this new design, your eyes are drawn towards the important information.
- The calorie count jumps out at you and the % Daily Value of Nutrients is much easier to trace.

Do People Read the Food Label?

- Data from FDA's Health and Diet Surveys in 2002 and 2008 show that more and more consumers are using the Nutrition Facts label.
- For example, the percentage of respondents reporting that they "often" read a food label the first time they purchase a food product rose from 44% in 2002 to 54% in 2008
- Among these consumers, two-thirds reported using the label to see how high or low the food was in components such as calories, sodium, vitamins or fat.
- More than half said they used labels to get a general idea of the nutritional content of the product.

New Food Label

- The look of the label would remain, but FDA is proposing several changes to highlight key parts of the label that are important in addressing current public health problems like obesity.
- Some of the proposed changes that would affect the look of the label include:
- Highlighting the caloric content of foods by increasing the type size and placing in bold type the number of calories and servings per container.
- Shifting to the left of the label % Daily Value (DV).
- The %DV is intended to help consumers place nutrient information in the context of a total daily diet.

New Food Label

- Declaring the actual amount, in addition to %DV, for all vitamins and minerals when they are declared.
- Changing "Amount Per Serving" to "Amount per ____", with the blank filled in with the serving size in common household measures, such as "Amount per 1 cup."
- Replacing the listing of "Total Carbohydrate" with "Total Carbs" and indenting **"Added Sugars"** directly beneath the listing for "Sugars."
- Right justifying the actual amounts of the serving size information.
- Reversing the order of "Serving Size" and "Servings Per Container" declarations.

Nutrition Facts			
Serving Size 2/3 cup (55g)			
Servings Per Container About 8			
Amount Per Serving			
Calories 230		Calories from Fat 72	
		% Daily Value*	
Total Fat 8g			12%
Saturated Fat 1g			5%
Trans Fat 0g			
Cholesterol 0mg			0%
Sodium 160mg			7%
Total Carbohydrate 37g			12%
Dietary Fiber 4g			16%
Sugars 1g			
Protein 3g			
Vitamin A			10%
Vitamin C			8%
Calcium			20%
Iron			45%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily value 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	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per 2/3 cup	
Calories	230
% DV*	
12% Total Fat 8g	
5% Saturated Fat 1g	
Trans Fat 0g	
0% Cholesterol 0mg	
7% Sodium 160mg	
12% Total Carbs 37g	
14% Dietary Fiber 4g	
Sugars 1g	
Added Sugars 0g	
Protein 3g	
10% Vitamin D 2mcg	
20% Calcium 260mg	
45% Iron 8mg	
5% Potassium 235mg	
* Footnote on Daily Values (DV) and calories reference to be inserted here.	

Daily Value

- Removing the existing footnote that describes the Daily Values for 2,000 and 2,500 calories to provide more space to better explain the percent dietary value.
- This part of the nutrition label is often misunderstood by consumers, and FDA is conducting an experimental study to help determine how the footnote can help consumers to better understand the %DV.

Nutrition Facts	
Serving Size 2/3 cup (55g)	
Servings Per Container About 8	
Amount Per Serving	
Calories 230	Calories from Fat 40
% Daily Value*	
Total Fat 8g	12%
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Cholesterol 0mg	0%
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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

Why are they changing the food label?

- Greater Understanding of Nutrition Science
- Updated Serving Size Requirements and New Labeling Requirements for Certain Package Sizes
- New Label Design

Greater Understanding of the Nutrition Science

- The FDA will now require information about “added sugars.”
- Many experts recommend consuming fewer calories from added sugar as more and more research pours in about the dangers of added sugars
- Newer research on nutrients like **sodium, dietary fiber, potassium and Vitamin D** has also come to light and will be reflected in the new label



Greater Understanding of the Nutrition Science

- The new labels will require manufacturers to declare the amount of **potassium and Vitamin D** on the label, because they are new “nutrients of public health significance.”
- Calcium and iron would continue to be required, and Vitamins A and C could be included on a **voluntary basis**.
- While continuing to require “Total Fat,” “Saturated Fat,” and “Trans Fat” on the label, “Calories from Fat” would be removed because research shows the type of fat is more important than the amount.

Nutrition Facts	
Serving Size 2/3 cup (55g)	
Servings Per Container About 8	
Amount Per Serving	
Calories 230	Calories from Fat 40
% Daily Value*	
Total Fat 8g	12%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	12%
Dietary Fiber 4g	16%
Sugars 1g	
Protein 3g	
Vitamin A	10%
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Calcium	20%
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* Percent Daily Values are based on a diet of other people's secrets.	
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	Calories: 2,000 2,500
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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

Revising nutrients

- FDA analyzed data from the National Health and Nutrition Examination Survey (NHANES) and determined that calcium, vitamin D, potassium, and iron should be mandatory.
- These are nutrients for which the U.S. population is consuming inadequate amounts and are associated with the risk of chronic disease.
- Calcium and iron are already required; vitamin D and potassium would be newly required.

Vitamin D, Potassium

- Vitamin D is important for its role in bone development and general health, and intakes among some population groups are inadequate.
- Adequate potassium intake is beneficial in **lowering blood pressure** and intakes of this nutrient are also low among some population groups.
- FDA will propose that mandatory labeling no longer be required for vitamin C or vitamin A because current data indicate that deficiencies are not common; these vitamins would still be allowed to be declared on labels voluntarily.



Sodium

- Over **75% of dietary sodium** comes from eating packaged and restaurant foods.
- Most Americans eat too much sodium, and sodium has been linked to high blood pressure, which can increase your risk of heart disease, kidney disease, and stroke.
- The FDA is proposing to set a daily value of 2,300 mg for sodium, which is based on the tolerable upper intake level for sodium established in 2005 by the Institute of Medicine (IOM) and current sodium recommendations from other consensus reports.
- The Daily Value on the current label is 2,400 mg, so the proposed change would not be significant. A Daily Value of 2,300 mg, however, is much lower than the average daily consumption in the U.S. of about 3,400 mg/day.

Sodium

- Some evidence points to the need for a lower daily value.
- For example, the 2010 Dietary Guidelines for Americans recommended a reduction in sodium intake to less than 2,300 mg/day and a further reduction to 1,500 mg/day among groups that are at increased risk of the blood pressure-raising effects of sodium (individuals ages 51 or older, African Americans, and individuals with high blood pressure, chronic kidney disease or diabetes).
- These groups account for about half the U.S. population.
- But a recent report on sodium issued in 2013 concluded that evidence from studies on direct health outcomes is inconsistent and insufficient to conclude that lowering sodium intakes below 2,300 mg/day will increase or decrease the risk of cardiovascular disease outcomes or mortality in the general U.S. population or in identified subgroups.

Updated Serving Size Requirements

- The FDA would change the **serving size** requirements to reflect how people eat and drink today, which has changed since serving sizes were first established 24 years ago.
- By law, the label information on serving sizes must be based on what people actually eat, not on what they “should” be eating.



- Have you ever been able to get 4 servings out of a pint of Ben and Jerry's?
- I didn't think so
- On the new label, serving sizes for many foods have been updated to reflect more realistic (in other words, larger) portion sizes.



Updated Serving Size Requirements

- The FDA would require that packaged foods, including drinks, that are typically eaten in one sitting be labeled as a single serving and that calorie and nutrient information be declared for the entire package.
- For example, a 20-ounce bottle of soda, typically consumed in a single sitting, would be labeled as one serving rather than as more than one serving.

Current Label	Proposed Label																												
Nutrition Facts Serving Size 8 fl oz (240 mL) Servings Per Container about 2.5 <hr/> <table> <tr> <th>Amount Per Serving</th><th>% Daily Value*</th></tr> <tr> <td>Calories 110</td><td></td></tr> <tr> <td>Total Fat 0g</td><td>0%</td></tr> <tr> <td>Sodium 70mg</td><td>3%</td></tr> <tr> <td>Total Carbohydrate 31g</td><td>10%</td></tr> <tr> <td>Sugars 30g</td><td></td></tr> <tr> <td>Protein 0g</td><td></td></tr> </table> <hr/> <small>*Percent Daily Values are based on a 2,000 calorie diet</small>	Amount Per Serving	% Daily Value*	Calories 110		Total Fat 0g	0%	Sodium 70mg	3%	Total Carbohydrate 31g	10%	Sugars 30g		Protein 0g		Nutrition Facts Serving Size 1 bottle (600 mL) Servings Per Container 1 <hr/> <table> <tr> <th>Amount Per Serving</th><th>% Daily Value*</th></tr> <tr> <td>Calories 275</td><td>14%</td></tr> <tr> <td>Total Fat 0g</td><td>0%</td></tr> <tr> <td>Sodium 175mg</td><td>7%</td></tr> <tr> <td>Total Carbohydrate 78g</td><td>26%</td></tr> <tr> <td>Sugars 75g</td><td></td></tr> <tr> <td>Protein 0g</td><td></td></tr> </table> <hr/> <small>*Percent Daily Values are based on a 2,000 calorie diet</small>	Amount Per Serving	% Daily Value*	Calories 275	14%	Total Fat 0g	0%	Sodium 175mg	7%	Total Carbohydrate 78g	26%	Sugars 75g		Protein 0g	
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Updated Serving Size Requirements

- For certain packages that are larger and could be consumed in one sitting or multiple sittings, manufacturers would have to provide “dual column” labels to indicate both “per serving” and “per package” calories and nutrient information.
- Examples would be a 24-ounce bottle of soda or a pint of ice cream.
- This way, people would be able to easily understand how many calories and nutrients they are getting if they eat or drink the entire package at one time.

Serving Sizes

- For serving sizes, the FDA set the current reference values (**Reference Amounts Customarily Consumed, or RACCs**), in 1994, based primarily on Nationwide Food Consumption Surveys conducted in 1977-1978 and 1987-1988.
- More recent food consumption data show that about 27 of the 158 (about 17%) of the current RACCs should be changed for different food categories.
- That would mean that manufacturers would potentially have to adjust serving sizes based on these proposed changes to the RACCs.
- FDA is also proposing to add 25 new RACCs, many at the request of various industry groups.

Dual Column Labeling

- Certain larger packages that could be consumed in one sitting or in multiple sittings would be required to be labeled per serving and per package.
- This dual column labeling would be required if a package contained at least 200% of the RACC and less than or equal to 400% of the RACC.
- Examples would be a 24-ounce can of soda, a 10.5 ounce frozen entrée, a 19 ounce can of soup, and a pint of ice cream.
- For packages containing more than 400% of the RACC, dual column labeling would not be required.

Dual Column Format			
Nutrition Facts			
2 servings per container			
Serving size		1 cup (255g)	
Calories	Per 1 cup	Per container	
	220	440	
	% DV*		% DV*
Total Fat	8% 5g	15% 10g	
Saturated Fat	10% 2g	20% 4g	
Trans Fat	0g	0g	
Cholesterol	5% 15mg	10% 30mg	
Sodium	10% 240mg	21% 480mg	
Total Carbs	12% 35g	23% 70g	
Dietary Fiber	21% 6g	43% 12g	
Sugars	7g	14g	
Added Sugars	4g	8g	
Protein	9g	18g	
Vitamin D	25% 5mcg	50% 10mcg	
Calcium	15% 200mg	30% 400mg	
Iron	6% 1mg	10% 2mg	
Potassium	10% 470mg	20% 940mg	

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

Added Sugars

- **Added sugars!** While the American Heart Association recommends limiting added sugars to 6 tsp/day for women and 9 tsp/day for men, there was no way to know how much you were getting because added sugars weren't required to be on labels.

- Plain yogurt

Nutrition Facts	
Serving Size 1 container (226g)	
Amount Per Serving	
Calories 110	Calories from Fat 0
	% Daily Value*
Total Fat 0g	0 %
Saturated Fat 0g	0 %
Trans Fat 0g	0 %
Cholesterol Less than 5mg	1 %
Sodium 160mg	7 %
Total Carbohydrate 15g	5 %
Dietary Fiber 0g	0 %
Sugars 10g	
Protein 13g	
Vitamin A 0 % • Vitamin C 4 %	
Calcium 45 % • 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.

INGREDIENTS: CULTURED PASTEURIZED GRADE A NONFAT MILK, WHEY PROTEIN CONCENTRATE, PECTIN, CARRAGEENAN.

- Fruited yogurt

Nutrition Facts	
Serving Size 1 container (227g)	
Amount Per Serving	
Calories 240	Calories from Fat 25
	% Daily Value*
Total Fat 3g	4 %
Saturated Fat 1.5g	9 %
Trans Fat 0g	0 %
Cholesterol 15mg	5 %
Sodium 140mg	6 %
Total Carbohydrate 46g	15 %
Dietary Fiber Less than 1g	3 %
Sugars 44g	
Protein 9g	
Vitamin A 2 % • Vitamin C 4 %	
Calcium 35 % • 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.

INGREDIENTS: CULTURED GRADE A REDUCED FAT MILK, APPLES, HIGH FRUCTOSE CORN SYRUP, CINNAMON, NUTMEG, NATURAL FLAVORS, AND PECTIN. CONTAINS ACTIVE YOGURT AND L. ACIDOPHILUS CULTURES.

Added Sugars

- “Sugars” now on labels include both “added sugars” and sugars that are naturally occurring in food (lactose, fructose, etc)
- Americans on average eat 16% of their total calories from added sugars, the major sources being soda, energy and sports drinks, grain based desserts, sugar-sweetened fruit drinks, dairy-based desserts and candy.
- Currently, “Sugars” are required to be labeled on packages, and the FDA is proposing that “Added Sugars” indented under “Sugars” would also be required so that both naturally occurring sugars and added sugars would be listed.
- An omission in the current proposals is a Daily Value for added sugar, which would let consumers quickly see whether a food is low or high in added sugars.

Current Proposed

Nutrition Facts		Nutrition Facts	
Serving Size 2/3 cup (55g) Servings Per Container About 8		8 servings per container Serving size 2/3 cup (55g)	
Amount Per Serving		Amount per 2/3 cup	
Calories 230	Calories from Fat 40	Calories 230	
% Daily Value*		% DV*	
Total Fat 8g	12%	Total Fat 8g	12%
Saturated Fat 1g	5%	Saturated Fat 1g	5%
Trans Fat 0g		Trans Fat 0g	
Cholesterol 0mg	0%	Cholesterol 0mg	0%
Sodium 160mg	7%	Sodium 160mg	7%
Total Carbohydrate 37g	12%	Total Carbs 37g	12%
Dietary Fiber 4g	16%	Dietary Fiber 4g	14%
Sugars 1g		Sugars 1g	
Protein 3g		Added Sugars 0g	
Vitamin A	10%	Protein 3g	
Vitamin C	8%	10% Vitamin D 2mcg	
Calcium	20%	20% Calcium 260mg	
Iron	45%	45% Iron 8mg	
* Percent Daily Values are based on a diet of other people's misdeeds.		5% Potassium 235mg	
Your daily value may be higher or lower depending on your calorie needs.		* Footnote on Daily Values (DV) and calories reference to be inserted here.	
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	30g 37g		
Dietary Fiber	25g 30g		

Calories from fat

- The new label would remove the requirement for declaring “Calories from fat.”
- Current research shows that the total fat in the diet is less important than the type of fat.
- In addition, FDA consumer research shows that removal of the declaration of “calories from fat” has no effect on consumers’ ability to judge the healthfulness of a product.
- FDA would continue to require “Total Fat,” “Saturated Fat,” and “*Trans* Fat” on the label.

Sample label for Macaroni & Cheese

Nutrition Facts

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

Amount Per Serving

Calories 250 **Calories from Fat** 110

% Daily Value*

Total Fat 12g	18%
Saturated Fat 3g	15%
<i>Trans</i> 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%

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

1 Start Here →

2 Check Calories

3 Limit these Nutrients

4 Get Enough of these Nutrients

5 Footnote

6 Quick Guide to % DV

- 5% or less is Low
- 20% or more is High

Fiber

- If approved, the “fiber” on a label will reflect only the intact, unprocessed fiber in whole foods, and exclude purified fibers such as maltodextrin and inulin (which are added to processed foods).
- For example, labels on **Kellogg's To Go Milk Chocolate Breakfast Shake** boast of its “5 grams of fiber.”
- But the fiber comes from maltodextrin and polydextrose, making the shake a poor substitute for breakfast foods it might displace, such as whole grain cereal and fruit.
- Processed fibers like inulin and modified starches don't confer the same benefits as the intact fiber that occurs in fruits, vegetables, and whole grains

Alternate Label

- There is also an alternate label proposal
- It is **even clearer** about which nutrients are beneficial (“get enough”) and which ones we need to limit (“avoid too much”)

Alternate Format	
Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per 2/3 cup	
Calories	230
% Daily Value*	
QUICK FACTS:	
12%	Total Fat 8g
12%	Total Carbs 37g
	Sugars 1g
	Protein 3g
AVOID TOO MUCH:	
5%	Saturated Fat 1g
	Trans Fat 0g
0%	Cholesterol 0mg
7%	Sodium 160mg
	Added Sugars 0g
GET ENOUGH:	
14%	Fiber 4g
10%	Vitamin D 2mcg
20%	Calcium 260mg
45%	Iron 8mg
5%	Potassium 235mg
* Footnote on Daily Values (DV) and calorie reference to be inserted here.	

New Food Label

- The new label may encourage manufacturers to reformulate existing products and offer new products with a healthier nutrition profile.
- Following the requirement that trans fat be declared on the label, manufacturers worked to significantly decrease the trans fat content of food products.
- These new revisions, though positive over all, do not go nearly far enough.

- What the proposed new labels don't do is consider a product's overall nutritional value.
- There is nothing on the label that actively encourages consumers to purchase food rich in the fruits, vegetables, and whole grains, lean proteins that are rightfully considered “real food.”
- Instead, the focus is on specific nutrients — an emphasis that gives food companies an incentive to fortify their products so they can make claims such as “added fiber” or to produce sugar-laden foods that can be labeled “low fat.”

NuVal

- The NuVal System was developed by an independent panel of nutrition and medical experts led by Dr. David Katz of the Yale Griffin Prevention Research Center
- The effort was funded by Griffin Hospital, a non-profit community hospital and teaching affiliate of the Yale University School of Medicine located in Derby, CT, and home to the Yale Griffin Prevention Research Center
- It helps you see – at a glance – the nutritional value of the food you buy.
- It employs a patent-pending algorithm which converts complex nutritional information into a single, easy-to-use score.

NuVal

- NuVal Scores summarize comprehensive nutritional information in one simple number between 1 and 100.
- Each NuVal Score takes into account more than just the nutrition fact panel.
- It considers 30-plus nutrients and nutrition factors – the good (protein, calcium, vitamins) and the not-so-good (sugar, sodium, cholesterol).



Sample NuVal® Scores

Broccoli	100
Blueberries	100
Spinach	100
Skim Milk	100
Atlantic Salmon	93
2% Milk	84
Almonds	84
Skinless Chicken Breast	57
Eggs	56
85% Lean Ground Beef	38

NuVal® Scores are powered by a sophisticated scientific algorithm that takes into account more than 30 nutrient and nutrition factors, in addition to their effects on health outcomes.

$$\text{Numerator} \div \text{Denominator} = \text{Score of 1 to 100}$$

Numerator

Iron Vitamin A
Fiber Vitamin C
Vitamin D
Vitamin E
Magnesium Zinc
Omega-3 fatty acids
Potassium Folate
Total carotenoids
Calcium Vitamin B12
Vitamin B6
Total bioflavonoids

Trans Fat
Cholesterol
Saturated Fat
Sodium
Sugar

Score of 1 to 100



NuVal

- NuVal® Scores are displayed directly on shelf price tags and other in-store signage, so you can compare the nutritional value of products at a glance and as part of your regular shopping routine.
- For more information: <http://www.nuval.com>

New Food Label

- Unlike NuVal, the new food labels fail to give shoppers a fast and easy way to distinguish among similar products
- Front-of-package traffic light signals could also be used to highlight the good, bad or neutral health value of a food.
- “Ecuador is already doing this because they’re so worried about obesity,” Marion Nestle, a professor of nutrition, food studies and public health at New York University, said in an interview. “In Great Britain, it was shown that when people saw red dots on a package, they didn’t buy it.”

- Consumers need front-of-package labeling that they can trust.
- The food industry has claimed the front of food packages for ***promoting*** its products, and the FDA has accepted that convention, with nutrition facts panel confined to the side or back of a package.
- But there is no reason it has to be that way
- The Institute of Medicine and the FDA have worked together in the past to develop some tough front-of-package proposals, but these efforts stalled after a self-protective food industry offered a voluntary labeling strategy known as **Facts Up Front**
- Because food manufacturers are afraid the FDA may require the stop light labeling, they devised their own labels -Facts Up Front

- The Grocery Manufacturers Association (GMA) and Food Marketing Institute (FMI) have started to launch their new \$50 million campaign to promote voluntary “Facts Up Front” labels on food packages.



- They are worried that the FDA will institute a more stringent stop light label now used in other countries
- The red, yellow, and green traffic light signals evaluate the content of calories, saturated and trans fat, sodium, and sugars, all nutrients to watch out for.
- Studies in other countries show that red signals often discourage consumers from buying products made by the companies GMA and FMI represent.
- In Great Britain, it was shown that when people saw red dots on a package, they didn't buy it

Nutrition Tips

Amount Per Serving

Calories 240

Total Fat 2g **Low**

Saturated Fat 0g **Low**

Sugar 12g **High**

Sodium 250mg **Med**

- The purpose of the facts up front labels that food manufacturers want to use is to make highly processed foods look healthier, whether or not they really are.
- Will slightly better-for-you processed foods help anyone make better food choices? No.



Facts up Front

- There is no color coding of the nutrient info, so a consumer does not know if a certain amount of sodium or fat is high or not.
- The value for sugars is confusing.
- Is 16 grams a lot or a little? Also, how much of the sugar is naturally occurring and how much has been added?
- Naturally occurring sugars (in fruit, veggies, dairy) at least come with additional nutrients.
- Lastly, there is no indication of the daily value for sugar consumption. (By the way, The 16 grams in the example above are 4 teaspoons of sugar.)



Facts Up Front

- Including 2 positive nutrients on the label will confuse consumers – A product high in saturated fat but also high in fiber – is it good or not?
- This will also encourage excessive fortification of foods just to **appear** healthy.
- You can **fortify junk food** with vitamins, minerals or omega 3 fats, it still won't make it healthy to eat.
- There is no way to know how **processed** a food product is just by looking at the front of pack.



Fox Guarding the Hen House??

- This voluntary labeling allows companies—whose interest is selling more product—to choose what information is on the label and how it is displayed.
- Companies can feature positive nutritional facts and downplay foods' negative attributes
- Research has shown that companies can also mislead by *how* the information is displayed, with green labels suggesting products are healthier.



PER 1 CUP SERVING					
140 CALORIES	1g SAT FAT 5% DV	410mg SODIUM 17% DV	5g SUGARS	1000mg POTASSIUM 20% DV	VITAMIN A 25% DV

Ingredient List

- The proposed FDA revisions also fails to address the ingredients list, which currently enables manufacturers to disguise the total contribution of undesirable nutrients by listing each one separately.
- A consumer cannot tell that added sugar is the main ingredient if sugar, honey, high-fructose corn syrup, agave and grape juice concentrate are listed individually.

Raisin Bran Crunch

- Whole grain wheat, sugar, raisins, rice, wheat bran, whole grain oats, brown sugar syrup, glycerin, corn syrup, contains 2% or less of salt, malt flavoring, modified corn starch, molasses, palm oil, cinnamon, honey, natural and artificial flavor, BHT for freshness.

Nutrition Facts	
Serving Size	1 Cup (53g)
Calories	190 (kcal)
Total Fat	1 g
Sodium	200 mg
<u>Sugar</u>	<u>19 g</u>
Dietary Fiber	4

- The new labels would NOT “actively encourage consumers to purchase real foods rich in fruits, vegetables and whole grains,” Dr. Kessler, former commissioner of the FDA said.
- “Although the numbers can look good, the product may not be real food and have no nutritional value,” said Dr. David Kessler, who as the commissioner of the Food and Drug Administration championed the development of the current label.
- Consumers need to read the ingredient label for that
- “The answer to obesity, if there is one, is eating real food and moving away from foods laden with fats, sugars and salt. Highly processed food goes down in a whoosh, but real food slows down eating,” said Kessler

- The new label, like the current one, would still focus on specific nutrients and give food companies an incentive to fortify their products so they can make claims such as “added fiber” or to produce sugar-laden foods that can be labeled “low fat”
- We are still **focusing on the trees instead of the forest**
- Food manufacturers LOVE nutrition – they can change processed foods to contain the “nutrient de jour” so consumers THINK they are buying a healthier product
- Whole foods can’t do this – an avocado can’t change to contain omega 3 fatty acids

FDA

- The public comment period for the new labels has closed
- The FDA will then issue a final rule.
- Officials said they hope to complete the process this year.
- The FDA is proposing that manufacturers have just over two years (two years after the effective date) to comply with any final requirements
- The FDA estimates the Nutrition Facts overhaul alone will cost the industry about \$2 billion.

What Food Additives Should we Try to Avoid?

- Food additives have been used for centuries to enhance the appearance and flavor of food and prolong shelf life.
- But do these food additives really “add” any value to your food?
- Food additives find their way into our foods to help with processing, packaging and storage.
- But how do we know what food additives are in that box of rice and beans and why does it have such a long shelf life?

Food Additives

- A typical American household spends about 90% of their food budget on processed foods, and are exposed to lots of artificial food additives, many of which can cause health problems
- Vitamins and minerals added to junk food make them **appear** to be healthful
- Mixtures of colorings, flavorings, fat, and a thickening agent can be used to create **imitation berries or other fruit**.
- Transglutaminase (“meat glue”) is an enzyme that splices small pieces of meat into larger steaks.
- Hydrolyzed vegetable protein and MSG bring out meaty flavors and allow companies to use less real food.
- Canthaxanthin and astaxanthin are carotenoid colorings used to make farmed salmon appear as pink as more-expensive wild salmon.

Wendy's Hamburger

- Hamburger Patty Cooked , : , Beef Ground Seasoned , with , Salt , Ketchup , : , Tomato(es) Concentrate (Made From , Tomatoes Ripe) , Vinegar Distilled , Corn Syrup High Fructose , Corn Syrup , Salt , Spices , Onions Powder , Flavoring Natural , Crinkle Cut Pickle Slices , : , Cucumbers , Water , Salt , Vinegar , Lactic Acid , Sodium Benzoate (Preservative) , Flavors Natural , Polysorbate 80 , Turmeric (Colors) , Onions Red , Bun , : , Flour Enriched (Wheat Flour , Barley Malted Flour , Thiamine Mononitrate Vitamin B1 , Riboflavin Vitamin B2 , Niacin Vitamin B3 , Iron , Folic Acid Vitamin B9) , Water , Corn Syrup High Fructose , Vegetables Oil (Contains One Or More Of The Following , : , Soybean(s) , Cottonseed , Canola) , Yeast , Salt , Wheat Gluten , Contains 2% or less of the Following: (, Dough Conditioner(s) (Contains One Or More Of The Following , : , Sodium Stearoyl Lactylate , Calcium Stearoyl 2 Lactylate , Ascorbic Acid , Azodicarbonamide , Mono and Diglycerides , Datem , Enzymes) , Yeast Nutrients (Contains One Or More Of The Following , : , Monocalcium Phosphate , Calcium Sulphate , Calcium Carbonate , Ammonium Sulfate) , Turmeric (Colors) , Paprika , Annatto , Flavors Natural , Calcium Silicate , Calcium Propionate (Preservative)

Beef

- Beef: what about the growth hormones, antibiotics, GMO corn feed or a grain diet that has been grown with synthetic pesticides and fertilizers, residues of persistent chemicals such as PCBs, dioxin, and many pesticides that are known to concentrate in animal fat
- Another popular way processors bring down the cost of beef is by using meat fillers
- Meat fillers use ammonia to kill all the E. coli and salmonella.
- None of that is on the label



10,000 Chemicals in Food

- 1,480 direct food additives approved by FDA
- 140 color additives approved by FDA
- 2,700 natural or artificial flavors determined to be GRAS (generally recognized as safe)
- GRAS (“generally recognized as safe”)—ingredients either reviewed (but not formally approved) by FDA or declared safe by companies without necessarily telling FDA

Food Additives

- Only 900 GRAS and listed, affirmed, or reviewed by FDA
- 500 pesticides
- 3,800 indirect additives/food contact substances

Food Additives

- >7,000 ingredients in food are not required to be individually listed on food labels
- Antibiotics and other chemicals in animal feed (only colorings fed to farmed salmon are labeled)
- Chemical contaminants from the environment and packaging
- Pesticides (some are listed on shipping crates, which consumers don't see)

Food Additives to Avoid

- Most food additives are safe
- Try to avoid the most questionable additives and you'll also avoid many of the least healthy foods.
- Additives to avoid:



Aspartame – artificial sweetener

- **Where it's found:** Several sugar substitute products; an array of diet foods including sodas, drink mixes and low-calorie frozen desserts; chewing gum
- **Why avoid this additive:** Controversy over aspartame's safety has swirled since the '70s, when studies done on rats suggested it may cause brain tumors.
- More recent animal studies have now linked aspartame to lymphomas, leukemia and breast cancer. As well, some people show an acute sensitivity to aspartame, suffering headaches and dizziness shortly after consuming it. And to top it all off, not only have "diet" products containing aspartame not been shown to aid in weight loss, they may even cause you to eat more.

Acesulfame-potassium (aka acesulfame-K)

- **Where it's found:** Baked goods, chewing gum, gelatin desserts, soft drinks, energy drinks

What it is: An artificial sweetener about 200 times sweeter than sugar

Why avoid this additive: Two animal studies suggest that this additive could be cancer-causing, though other studies say it's safe. It also breaks down into a substance—acetoacetamide—that in large quantities has been found to affect the thyroid in dogs, rabbits and rats. Watch for it in foods that use sucralose, an artificial sweetener—acesulfame-potassium is often used in conjunction with it.

Sodium Nitrite & Sodium Nitrate

- **Where it's found:** Bacon, ham, hot dogs, lunch meats and other processed meats

What it is: It's used as a preservative, as well as for flavoring and coloring (it stabilizes the red color of cured meats, preventing them from turning grey). It also hinders the growth of bacteria that may cause botulism.

Why avoid this additive: Sodium nitrite can cause the formation of nitrosamines, which are cancer-causing chemicals; this reaction occurs especially in bacon. Look for bacon products that contain ascorbic acid or erythorbic acid; both are safe additives that help inhibit the potentially dangerous reaction.

Partially hydrogenated vegetable oils

- **Where it's found:** A wide variety of processed foods, especially shortening and some margarines, deep-fried foods, cookies, baked goods and snack foods. Many products have shifted to using alternatives; it's important to read labels.

What it is: A processed type of fat that helps increase shelf life and improves the texture of some processed foods

Why avoid this additive: The process to make partially hydrogenated vegetable oil creates trans fats, which may contribute to an increased risk of heart disease and strokes, and contributes to increased inflammation, diabetes and other health problems.

Common Food Dyes

- Studies show that artificial colorings which are found in soda, fruit juices and salad dressings, may contribute to behavioral problems in children and lead to a significant reduction in IQ.
- Animal studies have linked other food colorings to cancer. Watch out for these ones:
- **Blue #1 and Blue #2**
- **Red dye # 3 (also Red #40 – a more current dye)**
- **Yellow #6 and Yellow Tartrazine**
- Colorings and flavorings are used to simulate real fruit juice, tricking people into paying more for a beverage based on chemicals

Food Dyes

- FOOD DYES (*Blue 1, Blue 2, Green 3, Red 3, Red 40, Yellow 5, Yellow 6*) – Dyes trigger symptoms of ADHD in sensitive children. In the 1980s the FDA determined that Red 3 is a carcinogen, but industry pressure prevented the agency from banning it.
- In the 1990s FDA studies found high levels of a carcinogen (benzidine) in Yellows 5 and 6.
- Dyes are often used together with artificial flavorings to simulate—and replace—real fruit, egg, or vegetable ingredients.



Sodium Sulfite

- Preservative used in wine-making and other processed foods like dried fruit.
- According to the FDA, approximately one in 100 people is sensitive to sulfites in food.
- The majority of these individuals are asthmatic, suggesting a link between asthma and sulfites.
- Individuals who are sulfite sensitive may experience headaches, breathing problems, and rashes.
- In severe cases, sulfites can actually cause death by closing down the airway altogether, leading to cardiac arrest.

BHA and BHT

- Butylated hydroxyanisole (BHA) and butylated hydroxytoluene (BHT) are preservatives found in cereals, chewing gum, potato chips, and vegetable oils.
- This common preservative keeps foods from changing color, changing flavor or becoming rancid.
- Effects the neurological system of the brain, alters behavior and has potential to cause cancer.
- BHA and BHT are oxidants which can form cancer-causing reactive compounds in your body.
- The federal government considers this chemical to be a carcinogen.

Found in: Potato chips, gum, cereal, frozen sausages, enriched rice, bread, lard, shortening, candy, jello

“Natural Flavors”

- The exact definition of natural flavorings and flavors from Title 21, Section 101, part 22 of the Code of Federal Regulations is as follows:
- *"The term natural flavor or natural flavoring means the essential oil, oleoresin, essence or extractive, protein hydrolysate, distillate, or any product of roasting, heating or enzymolysis, which contains the flavoring constituents derived from a spice, fruit or fruit juice, vegetable or vegetable juice, edible yeast, herb, bark, bud, root, leaf or similar plant material, meat, seafood, poultry, eggs, dairy products, or fermentation products thereof, whose significant function in food is flavoring rather than nutritional"*
- In other words, natural flavors can be pretty much anything approved for use in food.
- It's basically impossible to tell what is in natural flavors unless the company has specified it on the label.

“Natural Flavors”

- Biotech companies make flavorings that are produced with bacteria, fungi and yeasts using enzymatic processes.
- For example, natural cheese flavor can be made using a bacteria that converts glucose into butyric acid, a component naturally present in butter and some cheeses.
- The biotech company Senomyx invented four flavorings that were approved by the FDA in 2005 as GRAS, including S336, the biotech replacement of MSG.
- This chemical captures the same savory flavor as MSG — enhancing the flavor of the free glutamate already present in the food.
- Using S336 would enable the labeling of “No MSG” and “natural flavor,” which makes tracking any possible side effects difficult.

Flavor Houses

- Food companies can produce food that is a lot cheaper using flavor formulas instead of real ingredients
- Key-lime flavor made with real limes is more expensive and complicated to produce because real food is more expensive and varies by season
- The flavor of key lime can be made in a flavor house a lot cheaper

- Flavors made in **flavor houses** combine chemicals and other ingredients to simulate flavor
- Big business – flavor houses are expected to make about \$4 billion this year, up from 2.5 billion in 2002
- Flavor formulas are secret appearing on ingredient labels in vague terms like “natural and artificial flavors”
- Many are non controversial like the tropical flavoring mangosteen distillate
- Others like castoreum – an anal excretion from beavers that gives foods a musky taste and was traditionally added to vanilla flavoring, not so much

High Fructose Corn Syrup

- High fructose corn syrup (HFCS) is a highly-refined artificial sweetener which has become the number one source of calories in America.
- It is found in **almost all processed foods**.
- HFCS packs on the pounds faster than any other ingredient, increases your LDL (“bad”) cholesterol levels, and contributes to the development of diabetes and tissue damage, among other harmful effects.

Found in: most processed foods, breads, candy, flavored yogurts, salad dressings, canned vegetables, cereals

Monosodium Glutamate

- MSG is an amino acid used as a flavor enhancer in soups, salad dressings, chips, frozen entrees, and many restaurant foods.
- MSG is known as an excitotoxin, a substance which overexcites cells to the point of damage or death.
- Studies show that regular consumption of MSG may result in adverse side effects which include depression, disorientation, eye damage, fatigue, headaches, and obesity.
- MSG effects the neurological pathways of the brain and disengages the "I'm full" function which explains the effects of weight gain.
- Found in: Chinese food (Chinese Restaurant Syndrome) many snacks, chips, cookies, seasonings, most Campbell Soup products, frozen dinners, lunch meats

How do we avoid flavorings and additives?






- The best solution is to choose organic whole foods.
- Buy seasonal fruits and vegetables.
- Choose grass-fed meats and wild fish.
- Replace soda with stevia or cane juice-sweetened drinks.
- Make your own sauces and dressings from scratch.
- Avoid "diet," and fat-free foods.
- Choose products with fewer than 7 ingredients – 5 is even better
- Make sure none of the ingredients contain numbers or words you can't pronounce.
- Last but not least, always read labels.



May trigger an acute, allergic reaction, but
Unsafe in amounts consumed or is very poorly tested and not worth any risk.

Resources

- http://www.cspinet.org/reports/chemcuisine.htm#safety_summary
- Center for Science in the Public Interest – Chemical Cuisine

	Safe
	Caution
	Cut Back
	Certain People Should Avoid
	Avoid

Environmental Working Group

- *EWG's Food Scores* is the first guide to the American supermarket landscape to rate foods against all of these criteria: **nutritional value; health concerns about ingredients (including additives and preservatives) and contaminants (such as mercury, arsenic and BPA); and the degree and type of processing.**
- EWG developed its food rating system to tally the pluses and minuses of **5,000 food ingredients** and finished products from **1,500 brands.**
- Ratings of more than **80,000** foods found on American supermarket shelves, analyzing an extensive collection of data
- Smart Phone app, computer

- **Nutrition.** The nutrition scoring algorithm considers multiple factors, including calories, saturated fat, trans fat, sugar, sodium, protein, fiber and fruit, vegetable and nut content.
- **Ingredient concerns.** The ingredient concerns algorithm focuses on factors such as the likely presence of key contaminants, pesticides, hormones and antibiotics, and the health implications of certain food additives.
- **Processing.** The processing score reflects EWG's best estimate of the extent to which a particular food has been processed. Scoring factors include modification of individual ingredients from whole foods and the number of artificial ingredients.
- Then combines these three scores into a single overall product score.

Let's Get Cooking!

