What’s on a Food Label?

Image source: USDA/SNAP-Ed
Confused about food labels?

Here’s what you need to know …
Required Information on All Food Labels

A. A statement of identity
B. A net weight or contents statement
C. An ingredient statement
D. A statement that gives the name and place of business of the product’s manufacturer, packer, or distributor
E. The Nutrition Facts label

Image source: FDA
Statement of Identity

- Describes the product
- Common name of the food
What is the statement of identity for these products?
What is the statement of identity for these products?

- cream cheese
- granola bars
Net Weight or Contents Statement

The edible product is listed:

- By weight, volume or numerical count
- In English and metric units

Image source: Photo by Alice Henneman
Find the Net Weight
Find the Net Weight

Image source: Photo by Alice Henneman
**Ingredient Statement**

Ingredients are listed:

- Below the Nutrition Facts panel
- By common name in descending order by weight

*Image source: FDA*
Which of these ingredient statements lists sugar as its largest ingredient by weight?

**Ingredients:** wheat flour, whole oat flour, corn syrup, sugar, soybean and palm oil …

**Ingredients:** sugar, whole grain corn flour, wheat flour, whole oat flour, oat fiber, soluble corn fiber, vegetable oil …

**Ingredients:** water, vegetable oils, sugar, vinegar, modified starch, wheat starch, salt …
Which of these ingredient statements lists sugar as its largest ingredient by weight?

Ingredients: wheat flour, whole oat flour, corn syrup, sugar, soybean and palm oil …

Ingredients: sugar, whole grain corn flour, wheat flour, whole oat flour, oat fiber, soluble corn fiber, vegetable oil …

Ingredients: water, vegetable oils, sugar, vinegar, modified starch, wheat starch, salt …
Ingredient Statement & Allergen Labeling

Eight allergens must be identified:

- Eggs
- Milk
- Wheat
- Soy
- Peanuts
- Type of Tree nuts
- Type of Fish
- Type of Shellfish

Image source: Pixabay.com
Two Ways of Labeling Allergens

1. Include the name of the food source in parenthesis following the common or usual name of the major food allergen in the list of ingredients in instances when the name of the food source of the major food allergen does not appear elsewhere in the ingredient statement for another allergenic ingredient.

Ingredients: Enriched flour (wheat flour, malted barley, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), sugar, partially hydrogenated cottonseed oil, high fructose corn syrup, whey (milk), eggs, vanilla, natural and artificial flavoring, salt, leavening (sodium acid pyrophosphate, monocalcium phosphate), lecithin (soy), mono- and diglycerides.


Any Cookie Company
College Park, MD 20740

2. Place the word "Contains," followed by the name of the food source from which the major food allergen is derived, immediately after or adjacent to the list of ingredients, in a type size that is no smaller than that used for the ingredient list.

Ingredients: Enriched flour (flour, malted barley, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), sugar, partially hydrogenated cottonseed oil, high fructose corn syrup, whey, eggs, vanilla, natural and artificial flavoring, salt, leavening (sodium acid pyrophosphate, monocalcium phosphate), lecithin, mono- and diglycerides.

Any Cookie Company
College Park, MD 20740

Image source: FDA
Find the Allergen

Source of example: Jennifer Miner, Canadian Food Inspection Agency at FSIS Public Meeting on Allergens

Within the **ingredients** list:

**Ingredients:** apples, pie crust [flour (wheat), shortening, liquid albumen (egg), salt], sugar, flour lemon juice, whole milk, cinnamon. May contain pecans.

Using a **contains** statement:

**Ingredients:** apples, pie crust [flour, shortening, liquid albumen, salt], sugar, flour lemon juice, whole milk, cinnamon.

**Contains:** Wheat, Egg, Milk. May contain pecans.
### 1. Find the Allergen

**Ingredients:** apples, pie crust (flour (wheat), shortening, liquid albumen (egg), salt], sugar, flour lemon juice, whole milk, cinnamon. **May contain pecans.**

### 2. Using a contains statement

**Ingredients:** apples, pie crust (flour, shortening, liquid albumen, salt], sugar, flour lemon juice, whole milk, cinnamon. **Contains:** Wheat, Egg, Milk. **May contain pecans.**

Source of example: Jennifer Miner, Canadian Food Inspection Agency at FSIS Public Meeting on Allergens
Statement with Name and Place of Business

The statement can be of the product’s:

- Manufacturer
- Packer or
- Distributor

DISTRIBUTED BY HY-VEE, INC.
WEST DES MOINES, IA  50266
SATISFACTION GUARANTEED
CALL 1-800-289-8343

Image source: Photo by Alice Henneman
Country of Origin

Required by U.S. Customs and Border Protection for imported foods
What is the country of origin on this label?

Wild Alaska PACIFIC COD
Skinless & Boneless

INGREDIENTS: PACIFIC COD, WATER, SODIUM PHOSPHATES, SALT.

WILD CAUGHT. PRODUCT OF CHINA.

NET WT 2 LBS (907g)
What is the country of origin on this label?

Wild Alaska PACIFIC COD
Skinless & Boneless
NET WT 2 LBS (907g)

INGREDIENTS: PACIFIC COD, WATER, SODIUM PHOSPHATES, SALT.

WILD CAUGHT. PRODUCT OF CHINA.

Image source: USDA, CC license CC BY 2.0
The Facts about the Nutrition Facts Label

Interpreting the Updated Labels
Nutrition Facts Label Changes

- Serving sizes updated
- Calories: larger type
- Updated daily values
- Actual amounts declared
- New footnote

Servings: larger, bolder type
New: added sugars
Change in nutrients required

* 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.
WHY the changes?

- New science is available to help consumers make decisions about food
- Daily values updated to the 2015-2020 Dietary Guidelines

<table>
<thead>
<tr>
<th>Serving size based on what people actually eat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Added sugars are listed – Americans are consuming too much sugar</td>
</tr>
<tr>
<td>Vitamin D and Potassium are added – many do not get enough</td>
</tr>
</tbody>
</table>
What’s considered a single serving has changed in the decades since the original nutrition label was created. So now serving sizes will be more realistic to reflect how much people typically eat at one time.
Labeling Single-Serving Packages

Image source: FDA
Sorting out “Nutrient Content Claims, “Health Claims” and Other Claims on Food Labels

Image source: Photo by Alice Henneman
Nutrient Content Claims

On labels, the terms used to describe nutrients in foods have approved definitions.
### Sample Nutrient Content Claims

<table>
<thead>
<tr>
<th>Claim</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calorie free</td>
<td>less than 5 calories per serving</td>
</tr>
<tr>
<td>Reduced calorie</td>
<td>at least 25% fewer calories than regular version</td>
</tr>
<tr>
<td>Low calorie</td>
<td>40 calories or less per serving</td>
</tr>
<tr>
<td>Fat free</td>
<td>less than 0.5 grams fat per serving (trans or saturated)</td>
</tr>
<tr>
<td>Reduced fat</td>
<td>at least 25% less fat than regular version</td>
</tr>
<tr>
<td>Low fat</td>
<td>3 grams or less of fat per serving</td>
</tr>
<tr>
<td>Sample Nutrient Content Claims</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
</tr>
<tr>
<td>Sugar free</td>
<td>less than 5 calories per serving</td>
</tr>
<tr>
<td>Reduced sugar</td>
<td>at least 25% less sugar than regular version</td>
</tr>
<tr>
<td>No added sugar</td>
<td>no sugars added during processing or packing, including</td>
</tr>
<tr>
<td></td>
<td>ingredients that contain sugar such as juice or dry fruit</td>
</tr>
<tr>
<td>Sodium free</td>
<td>less than 5 mg of sodium per serving</td>
</tr>
<tr>
<td>Reduced sodium</td>
<td>at least 25% less sodium than regular version</td>
</tr>
<tr>
<td>Low sodium</td>
<td>140 mg or less sodium per serving</td>
</tr>
<tr>
<td>Light/Lite</td>
<td>1/3 fewer calories or 50% less fat than regular version</td>
</tr>
</tbody>
</table>
### Sample Nutrient Content Claims

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage of Daily Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High, rich in, excellent source of:</td>
<td>20% or more</td>
</tr>
<tr>
<td>Good source of, contains, provides:</td>
<td>10% to 19%</td>
</tr>
<tr>
<td>More, enriched, fortified, added:</td>
<td>10% or more</td>
</tr>
</tbody>
</table>
Some Additional Nutrition-Related Label Terms

**Gluten Free, Without Gluten, Free of Gluten, or No Gluten:** Foods cannot contain wheat, rye, barley or cross breeds of these grains (2014)

**Healthy:** Current guidance by FDA is that manufacturers can use the term on foods that meet one of these definitions): Food not low in total fat but has fat profile of mostly mono and polyunsaturated fats OR contains at least 10% of the Daily Value of potassium or Vitamin D per reference amount commonly consumed.

**Natural:** Currently no definition
Label Examples: Natural, Healthy, Gluten Free

Image source: Photos by Alice Henneman
Which Label Does NOT Have a Government “Definition”?

Image source: Photo by Alice Henneman; illustration by Vicki Jedlicka
Which Label Does NOT Have a Government “Definition”?

Image source: Photo by Alice Henneman; illustration by Vicki Jedlicka
A Health Claim describes a relationship between a food, food component or dietary supplement AND a reduced risk for a specific disease or health condition.

1

Health Claims are based on extensive research.

2
“Authorized” Health Claims

• There must be significant scientific agreement (SSA) among qualified experts that the claim is supported by the totality of publicly available scientific evidence for a substance/disease relationship.

• The authorized health must contain the elements of a substance and a disease or health-related condition.
Examples of “Authorized” Health Claims

• “Diets low in sodium may reduce the risk of high blood pressure, a disease associated with many factors.”

• “Healthful diets with adequate folate may reduce a woman's risk of having a child with a brain or spinal cord birth defect.”

• “Development of cancer depends on many factors. Eating a diet low in fat and high in fruits and vegetables, foods that are low in fat and may contain vitamin A, vitamin C, and dietary fiber, may reduce your risk of some cancers. Oranges, a food low in fat, are a good source of fiber and vitamin C.”
“Qualified” Health Claims

• Qualified health claims (QHCs) are supported by scientific evidence, but do not meet the more rigorous “significant scientific agreement” standard required for an authorized health claim.

• They must be accompanied by a disclaimer or other qualifying language to accurately communicate to consumers the level of scientific evidence supporting the claim.
Examples of “Qualified” Health Claims

• “Scientific evidence suggests, but does not prove, that whole grains (three servings or 48 grams per day), as part of a low saturated fat, low cholesterol diet, may reduce the risk of diabetes mellitus type 2.”

• “Supportive but not conclusive scientific evidence suggests that daily consumption of about 1½ tablespoons (20 grams) of oils containing high levels of oleic acid, may reduce the risk of coronary heart disease. To achieve this possible benefit, oleic acid-containing oils should replace fats and oils higher in saturated fat and not increase the total number of calories you eat in a day. One serving of [x] oil provides [x] grams of oleic acid (which is [x] grams of monounsaturated fatty acid).”
Is This an “Authorized” or a “Qualified’ Health Claim and Why?

Diets rich in whole grain foods and other plant foods and low in saturated fat and cholesterol may help reduce the risk of heart disease.

Image source: Photo by Alice Henneman
Is This an “Authorized” or a “Qualified’ Health Claim and Why?

Authorized health claim

Diets rich in whole grain foods and other plant foods and low in saturated fat and cholesterol may help reduce the risk of heart disease.

Image source: Photo by Alice Henneman
Is This an “Authorized” or a “Qualified’ Health Claim and Why?

Image source: Photo by Alice Henneman

While many factors affect heart disease, diets low in saturated fat and cholesterol may reduce the risk of this disease.
Is This an “Authorized” or a “Qualified” Health Claim and Why?

Authorized health claim

While many factors affect heart disease, diets low in saturated fat and cholesterol may reduce the risk of this disease.

Image source: Photo by Alice Henneman
LIMITED AND NOT CONCLUSIVE SCIENTIFIC EVIDENCE SUGGESTS THAT EATING ABOUT 1-1/2 TBSP (19 GRAMS) OF CANOLA OIL DAILY MAY REDUCE THE RISK OF CORONARY HEART DISEASE DUE TO THE UNSATURATED FAT CONTENT IN CANOLA OIL. TO ACHIEVE THIS POSSIBLE BENEFIT, CANOLA OIL IS TO REPLACE A SIMILAR AMOUNT OF SATURATED FAT AND NOT INCREASE THE TOTAL NUMBER OF CALORIES YOU EAT IN A DAY.
Is This an “Authorized” or a “Qualified’ Health Claim and Why?

LIMITED AND NOT CONCLUSIVE SCIENTIFIC EVIDENCE SUGGESTS THAT EATING ABOUT 1-1/2 TBSP (19 GRAMS) OF CANOLA OIL DAILY MAY REDUCE THE RISK OF CORONARY HEART DISEASE DUE TO THE UNSATURATED FAT CONTENT IN CANOLA OIL. TO ACHIEVE THIS POSSIBLE BENEFIT, CANOLA OIL IS TO REPLACE A SIMILAR AMOUNT OF SATURATED FAT AND NOT INCREASE THE TOTAL NUMBER OF CALORIES YOU EAT IN A DAY.

Qualified Health Claim

Image source: Photo by Alice Henneman
Other Label Statements…

- “No hormones added” or “raised without hormones”
- “GMO Free”
Hormone Free

- “Free of hormones” or “hormone free”
- “No hormones added” or “raised without hormones”
- Anything that is or has been alive contains hormones, including plants!

Is there anything in this photo that is “hormone free”? 
Pork and Poultry

- Added hormones aren’t allowed by USDA in pork and poultry.
- A claim of “no hormones added” on pork or poultry must be followed by the statement, “Federal regulations prohibit the use of hormones.”
Are you paying extra for a food when none of its ingredients contained GMOs in the first place?

Which banana is NOT a GMO food?
Neither of them are GMO foods and never have been.
GMO Foods in United States

Currently available …

- Corn (field and sweet)
- Soybeans
- Cotton
- Canola
- Alfalfa
- Sugar beets
- Papaya (Hawaiian)
- Squash
- Artic Apples

More information …

- Arctic Apples (first available in some areas by 2017 with market presence growing yearly)
- NOTE: Not all versions of all these foods are genetically engineered.
- Before being placed on the market, genetically modified foods must be approved by the Food and Drug Administration, the USDA and the Environmental Protection Agency
Food Date Labels: What Do They Mean?
• Label confusion contributes to food waste.

• 84% of consumers in a 2016 study by Johns Hopkins discarded food near the package date at least occasionally.
A "Use-By" date is the last date recommended for the use of the product while at peak quality. It is not a safety date except for when used on infant formula.

A "Sell-By" date tells the store how long to display the product for sale for inventory management. It is not a safety date.

A "Best if Used By/Before" date indicates when a product will be of best flavor or quality. It is not a purchase or safety date.

H.R. 3981, referred to as the “Food Date Labeling Act of 2019,” was introduced (July 25, 2019) to establish requirements for quality and discard dates that may voluntarily be used in food packaging. Terms under consideration are:

• “BEST If Used By” or “BB” to designate a “quality” date.

• “USE By” or “UB” would designate a discard date for foods that the producer, manufacturer, distributor, or retailer advises the product not be consumed.

NOTE: This Act shall only apply to food products that are labeled on or after the date following the final passage of the bill.
A required “Use by” date is currently (and will continue to be) used on infant formulas. The date is selected by the manufacturer based on tests and other information to inform retailers and consumers that the formula:

• will contain no less than the amount of nutrient declared on the label, and

• will be of acceptable quality until that declared date.
Proper Storage

• After the date passes, the product may not be the best quality, but the product may still be safe, wholesome and of good quality, if handled properly.

• Store refrigerated foods at 40°F or below.

• Consider the following canned food guidelines…
Storing Commercial Canned Foods (in a Cool Dry Place, Below $85^0\text{F}$)

High-acid foods keep 12 to 18 months.

Examples: juices (tomato, orange, lemon, lime and grapefruit); tomatoes; grapefruit, pineapple, apples and apple products, mixed fruit, peaches, pears, plums, all berries, pickles, sauerkraut and foods treated with vinegar-based sauces or dressings like German potato salad and sauerbraten

Image source: USDA/FSIS
Storing of Commercial Canned Foods (in a Cool Dry Place, Below 85°F)

Low-acid foods keep 2 to 5 years.

Examples: meat and poultry, stews, soups (except tomato), spaghetti (noodle and pasta) products, potatoes, corn, carrots, spinach, beans, beets, peas, pumpkin

Image source: USDA/FSIS
Canned Food Safety: Dented Cans

- A small dent in a can that is in otherwise good shape should be safe.
- Discard deeply dented cans (a dent you can lay your finger into).
- A sharp dent on either the top or side seam can damage the seam and let bacteria enter. Discard!
- When in doubt, throw it out!

Image source: Photo by Alice Henneman
Canned Food Safety: Rusted Cans

- Discard heavily rusted cans. They can have tiny holes in them allowing bacteria to enter.
- Surface rust that you can remove by rubbing with your finger or a paper towel isn’t serious and can be kept.
- If there is any rust inside, do not eat the food! Rust isn’t safe to eat.
Don’t Use Bulging or Leaking Cans!
Storing Frozen Foods

Food stored constantly at 0°F will always be safe. Only the quality suffers with lengthy freezer storage.

Image source: USDA
Storing Raw Eggs in the Shell

- Eggs cartons may contain a “Sell-By” or “EXP” date so retailers don’t keep them on the shelves past a certain date. Though not federally required, they may be state required in some areas.
- After eggs are purchased, they will maintain their best quality for about 3 weeks beyond the expiration or sell by date.
- Refrigerate eggs in original carton in coldest part of refrigerator (40°F or below), not the door due to loss of coolness from repeated opening of the door.
Food Storage App

“Are these leftovers still good?”
There’s an app for that.

Image source: USDA/FSIS
In conclusion, become an able label reader!
General reference

Questions?

Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the United States Department of Agriculture.

University of Nebraska–Lincoln Extension educational programs abide with the nondiscrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture.

Reference to commercial products or trade names is made with the understanding that no discrimination is intended of those not mentioned and no endorsement by University of Nebraska–Lincoln Extension is implied for those mentioned.