

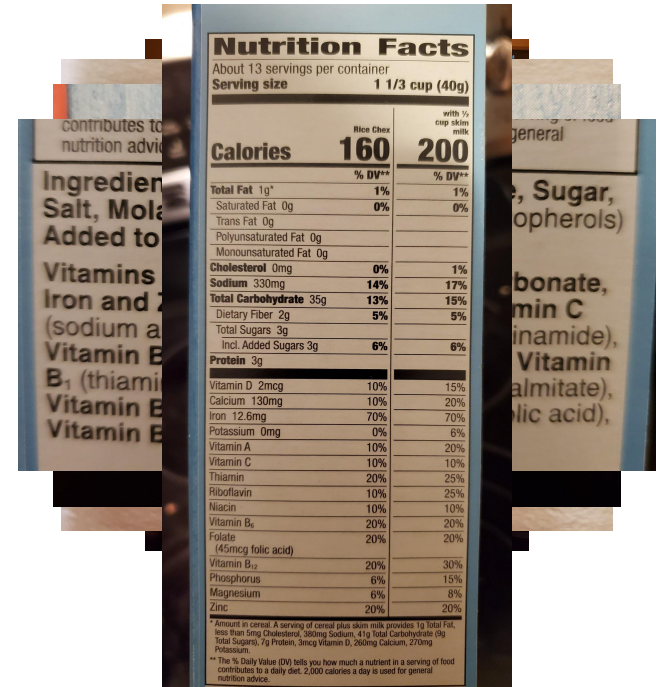
Reading Labels

What's really in your food?

What can we learn from food labels?

By law, there are 5 items that must appear on all packaged foods...

1. The name of the food.
2. The name and address of the manufacturer.
3. The net contents of the package.
4. The ingredients list.
5. The Nutrition Facts panel.



Ingredients List

- ❑ Items in the list are always listed in DESCENDING order by WEIGHT.
- ❑ Items containing major food allergens must clearly label that they contain these foods. This can be done one of two ways:
 - ❑ In the ingredients list (Ex. “casein (milk)”)
 - ❑ A separate statement after the ingredients list (Ex. “Contains milk”)
- ❑ Try to look for items with a short list of ingredients that you know how to pronounce.
- ❑ Look for pseudonyms for sugar, such as brown sugar, corn syrup, honey, molasses, sorbitol and words that end in “ose” like dextrose, fructose, glucose, levulose.

Types of Ingredients	What They Do	Examples of Uses	Names Found on Product Labels
Preservatives	Prevent food spoilage from bacteria, molds, fungi, or yeast (antimicrobials); slow or prevent changes in color, flavor, or texture and delay rancidity (antioxidants); maintain freshness	Fruit sauces and jellies, beverages, baked goods, cured meats, oils and margarines, cereals, dressings, snack foods, fruits and vegetables	Ascorbic acid, citric acid, sodium benzoate, calcium propionate, sodium erythorbate, sodium nitrite, calcium sorbate, potassium sorbate, BHA, BHT, EDTA, tocopherols (Vitamin E)
Sweeteners	Add sweetness with or without the extra calories	Beverages, baked goods, confections, table-top sugar, substitutes, many processed foods	Sucrose (sugar), glucose, fructose, sorbitol, mannitol, corn syrup, high fructose corn syrup, saccharin, aspartame, sucralose, acesulfame potassium (acesulfame-K), neotame
Color Additives	Offset color loss due to exposure to light, air, temperature extremes, moisture and storage conditions; correct natural variations in color; enhance colors that occur naturally; provide color to colorless and "fun" foods	Many processed foods, (candies, snack foods margarine, cheese, soft drinks, jams/jellies, gelatins, pudding and pie fillings)	FD&C Blue Nos. 1 and 2, FD&C Green No. 3, FD&C Red Nos. 3 and 40, FD&C Yellow Nos. 5 and 6, Orange B, Citrus Red No. 2, annatto extract, beta-carotene, grape skin extract, cochineal extract or carmine, paprika oleoresin, caramel color, fruit and vegetable juices, saffron (Note: Exempt color additives are not required to be declared by name on labels but may be declared simply as colorings or color added)
Flavors and Spices	Add specific flavors (natural and synthetic)	Pudding and pie fillings, gelatin dessert mixes, cake mixes, salad dressings, candies, soft drinks, ice cream, BBQ sauce	Natural flavoring, artificial flavor, and spices

Flavor Enhancers	Enhance flavors already present in foods (without providing their own separate flavor)	Many processed foods	Monosodium glutamate (MSG), hydrolyzed soy protein, autolyzed yeast extract, disodium guanylate or inosinate
Fat Replacers (and components of formulations used to replace fats)	Provide expected texture and a creamy "mouth-feel" in reduced-fat foods	Baked goods, dressings, frozen desserts, confections, cake and dessert mixes, dairy products	Olestra, cellulose gel, carrageenan, polydextrose, modified food starch, microparticulated egg white protein, guar gum, xanthan gum, whey protein concentrate
Nutrients	Replace vitamins and minerals lost in processing (enrichment), add nutrients that may be lacking in the diet (fortification)	Flour, breads, cereals, rice, macaroni, margarine, salt, milk, fruit beverages, energy bars, instant breakfast drinks	Thiamine hydrochloride, riboflavin (Vitamin B ₂), niacin, niacinamide, folate or folic acid, beta carotene, potassium iodide, iron or ferrous sulfate, alpha tocopherols, ascorbic acid, Vitamin D, amino acids (L-tryptophan, L-lysine, L-leucine, L-methionine)
Emulsifiers	Allow smooth mixing of ingredients, prevent separation Keep emulsified products stable, reduce stickiness, control crystallization, keep ingredients dispersed, and to help products dissolve more easily	Salad dressings, peanut butter, chocolate, margarine, frozen desserts	Soy lecithin, mono- and diglycerides, egg yolks, polysorbates, sorbitan monostearate
Stabilizers and Thickeners, Binders, Texturizers	Produce uniform texture, improve "mouth-feel"	Frozen desserts, dairy products, cakes, pudding and gelatin mixes, dressings, jams and jellies, sauces	Gelatin, pectin, guar gum, carrageenan, xanthan gum, whey

pH Control Agents and acidulants	Control acidity and alkalinity, prevent spoilage	Beverages, frozen desserts, chocolate, low acid canned foods, baking powder	Lactic acid, citric acid, ammonium hydroxide, sodium carbonate
Leavening Agents	Promote rising of baked goods	Breads and other baked goods	Baking soda, monocalcium phosphate, calcium carbonate
Anti-caking agents	Keep powdered foods free-flowing, prevent moisture absorption	Salt, baking powder, confectioner's sugar	Calcium silicate, iron ammonium citrate, silicon dioxide
Humectants	Retain moisture	Shredded coconut, marshmallows, soft candies, confections	Glycerin, sorbitol
Yeast Nutrients	Promote growth of yeast	Breads and other baked goods	Calcium sulfate, ammonium phosphate
Dough Strengtheners and Conditioners	Produce more stable dough	Breads and other baked goods	Ammonium sulfate, azodicarbonamide, L-cysteine
Firming Agents	Maintain crispness and firmness	Processed fruits and vegetables	Calcium chloride, calcium lactate
Enzyme Preparations	Modify proteins, polysaccharides and fats	Cheese, dairy products, meat	Enzymes, lactase, papain, rennet, chymosin
Gases	Serve as propellant, aerate, or create carbonation	Oil cooking spray, whipped cream, carbonated beverages	Carbon dioxide, nitrous oxide

<https://www.fda.gov/food/food-ingredients-packaging/overview-food-ingredients-additives-colors#qanatural>

Nutrition Facts

- ❑ Contains the most useful information about the food to help you make healthful food choices.
 - ❑ Servings Per Container and Serving Size
 - ❑ Calories per serving
 - ❑ %DV - Percent Daily Values
 - ❑ Total Fat w/breakdown of Sat. and Trans Fat
 - ❑ Cholesterol
 - ❑ Sodium
 - ❑ Total Carbohydrates w/breakdown of Fiber and Sugars
 - ❑ Protein
 - ❑ Vitamin D, Calcium, Iron and Potassium (Required)
 - ❑ Other Vitamins and Minerals may be listed also



Nutrition Claims

- ❑ Nutrient content claims on food labels must adhere to specific definitions laid out by the FDA.
- ❑ Examples:
 - ❑ Calorie-Free: Less than 5 calories per serving. (Spray cooking oils)
 - ❑ Light or Lite: $\frac{1}{3}$ fewer calories or 50% less fat or sodium than comparison food
 - ❑ Healthy: Low in fat, cholesterol and sodium and provides at least 10%DV of Vitamin A, C, Protein, Calcium, Iron or Fiber
 - ❑ Low-Fat: 3 grams of fat or less per serving.
 - ❑ Fat-Free: Less than 0.5g per serving
 - ❑ Trans Fat-Free: Less than 0.5g per serving of both Trans and Sat. Fats
 - ❑ Low in Sodium: 140mg or less per serving
 - ❑ Reduced Sodium: At least 25% lower in sodium than the regular product
 - ❑ Very Low Sodium: 35mg or less per serving

Health Claims

- ❑ Claims that the nutritional profile of a food is linked to a reduced risk of a particular disease must follow strict rules put in place by the FDA.
- ❑ Manufacturers are only allowed to claim that the food “may” or “might” reduce the risk of a certain disease and must be written so the consumer can understand the relationship between the nutrient and the disease.
- ❑ Examples:
 - ❑ Eating a healthful diet low in total fat may help reduce the risk of some types of cancers.
 - ❑ Diets low in sodium may reduce the risk of high blood pressure.
 - ❑ Diets low in saturated fat and cholesterol and high in fruits, vegetables and grain products that contain fiber may lower blood cholesterol levels and reduce your risk of heart disease.



So what should we eat??

- ❑ Include at least 6-8 servings of a VARIETY of fruits and vegetables per day
- ❑ Most of your diet should come from WHOLE/NATURAL food sources, limit the amount of processed/refined food sources.
- ❑ Choose HEALTHY OILS/FATS like Ghee and Olive, Avocado or Coconut Oil, nuts, nut butter, seeds and fatty fish.
- ❑ Minimize intake of unhealthy oils/fats like vegetable, canola, corn, soy and sunflower oils, margarine, fatty meats and dairy.
- ❑ Eat breads, pastas and cereals that are made from WHOLE GRAINS which contain a HIGHER FIBER content.
- ❑ MINIMIZE SUGAR intake and pick natural sweeteners when using them like raw honey, maple syrup, coconut sugar, dates and bananas.
- ❑ Eat lean protein and DRINK LOTS OF WATER!!!

Listen to your body!!

References

- ❑ https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.nytimes.com%2F2016%2F05%2F02%2Fbusiness%2Fquaker-oats-100-natural-claim-questioned-in-lawsuit.html&psig=AOvVaw0N7dPXtgt9qUpraHe9eyhS&ust=1587232494029000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCOCn_vuD8OgCFQAAAAAdAAAAABAJ
- ❑ <https://www.fda.gov/food/food-ingredients-packaging/overview-food-ingredients-additives-colors#qa-natural>
- ❑ Boyle, M. A. (2016). *Personal nutrition* (9th ed.). Boston, MA: Cengage Learning.