



Jr. Chef Club II Making the Most of Convenience Foods - Lesson 8



Educator Information Preparing to Teach the Lesson

Introduction

At first glance you may wonder why a Jr. Chef series has a lesson on convenience foods. In reality, many families depend on convenience foods for the evening meal one or more times during the week. Therefore, it is helpful for students to learn:

- Label reading to choose healthier convenience foods.
- Ways to make convenience foods healthier, such as reducing or changing the amount/type of fat called for, adding vegetables that are not on the boxed instructions, etc.
- Foods to serve with a convenience food to make a balanced meal.

Convenience Foods

Convenience foods can be a time-saver, but there's a trade-off for a quick meal on the table. These types of foods are usually highly processed, which means they may be:

- low in fiber
- high in fat or sugar
- high in sodium
- high in calories
- low or lacking in vitamins and minerals
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So, where would they be on MyPyramid? (Pyramid tip foods)

For instance, as foods are processed, they often lose potassium, the heart-healthy mineral, and salts containing sodium are added. Manufacturers add salt because it enhances flavor and extends the shelf life of food products. Sodium is a mineral nutrient that is a key electrolyte in the body. But too much can lead to health problems for some people. Sodium is a part of salt molecule. Salts are hydrophilic (water loving). Salt attracts water and can cause the body to hold on to extra water instead of flushing it out through the kidneys. This can lead to a rise in blood pressure in those people who are sensitive to it (estimated to be about one-third of the adult population); and cause weight gain (remember water is heavy—1 gallon weighs 8 lbs). Learning how to read labels is important—both the nutrition facts and ingredient labels—for identifying and choosing a healthier version of a convenience food.

Label Reading

Reading food labels can help students make smart food choices and impact their overall diet and nutritional quality. This lesson starts with students learning the basics of label reading such as the product name, brand name, health claim, etc. Teach them to search for clues such as “frosted,” which will mean the product will have more sugar than a version of the food that is not frosted. Additional tips are given in the lesson script.

Careful comparing of two similar products—one high in certain ingredients and one low in certain ingredients will help students realize that they can enjoy the foods they want without adversely impacting their health.

The following information on food labels will give you a complete background on the topic. It is not expected that you will share all of this information with the students. However, it may provide the background information that may be useful to answer students’ questions. This information comes from the National Library of Medicine and the National Institutes of Health:

<http://www.nlm.nih.gov/medlineplus/ency/article/002459.htm#Definition>

The U. S. government requires food labels on most packaged foods. The label offers complete, useful and accurate nutrition information. The government encourages food manufacturers to improve the quality of their products and help the consumer make healthier food choices. They provide a consistent format to help you directly compare the nutritional content of various foods. Food labels have the title "Nutrition Facts."

INGREDIENTS

Food manufacturers are required to list ingredients in descending order by weight, from the most to the least. People with food sensitivities can obtain useful information from the ingredient list on the label.

The ingredient list will include, when appropriate:

- FDA-approved color additives
- Sources of protein hydrolysates
- Caseinate as a milk derivative in foods that claim to be nondairy (such as coffee whiteners)

Most manufacturers offer a toll-free number to answer questions about specific food products and their ingredients.

NUTRITION FACTS PANEL

Serving size:

Serving Size is based on an average portion size. Similar food products have similar serving sizes to make comparison between products easier.

Amounts per serving:

The Calories and the calories from fat are listed. These numbers will help consumers make decisions about fat intake. The list of nutrients (total fat, saturated fat, cholesterol, sodium, total carbohydrate, dietary fiber, sugars, protein) includes those most important to the health of today's consumer. The amount, in grams (g) or milligrams (mg), per serving of these nutrients is listed to their immediate right.

Vitamins and minerals:

Only 2 vitamins (A and C) and 2 minerals (calcium and iron) are required on the food label. Food companies can voluntarily list other vitamins and minerals in the food. When vitamins or minerals are added, or when a vitamin or mineral claim is made, those nutrients must be listed on the nutrition label.

Percent daily value:

The amounts of vitamins and minerals are listed as a Percent Daily Value on the nutrition label. The Percent Daily Value for vitamins and minerals gives a general idea of how much of a vitamin or mineral a serving contributes to the total daily diet. For example, if the Percent Daily Value for [vitamin C](#) of all the foods you eat in a day adds up to 100%, your diet meets the recommendation for vitamin C.

The Daily Values section shows how a food fits into the overall daily diet. The value of the nutrient is given in percentages. The Percent Daily Value gives the food's nutritional content based on a 2,000-calorie diet. You can use this to quickly compare foods and see how the amount of a nutrient in a serving of food fits into a 2,000-calorie diet.

For example, a food that has 13 grams of fat with a Percent Daily Value of 20 percent means that 13 grams of fat is 20 percent, or one-fifth, of the total daily fat recommended for a person who eats 2,000 calories per day.

Near the bottom of the label you will see a list of 6 nutrients and the recommended daily intakes. The daily values are listed for 2,000 and for 2,500 calories. Your daily values may be higher or lower depending of your calorie needs.

The amounts of the first 4 nutrients—total fat, saturated fat, cholesterol, sodium -- are maximum amounts. That is why the list says "less than" before the number. The amounts of total carbohydrate and dietary fiber are minimum amounts. This is exactly the same on all food labels that carry it. You can use it as a reference.

NUTRIENT CONTENT CLAIMS

A nutrient content claim is a word or phrase on a food package that makes a comment about the nutritional value of the food. The claim will mean the same for every product. The following are some approved nutrient claims.

Calorie terms:

- Low-calorie
 - 40 calories or less per serving
- Reduced-calorie
 - At least 25% fewer calories per serving when compared with a similar food
- Light, Lite
 - One-third fewer calories or 50% less fat per serving; if more than half the calories are from fat, fat content must be reduced by 50% or more

Sugar terms:

- Sugar-free
 - Less than 1/2 gram sugar per serving
- Reduced sugar
 - At least 25% less sugar per serving when compared with a similar food.

Fat terms:

- Fat-free
 - Less than 1/2 gram fat per serving
- 100% fat free
 - Meets requirements for fat free
- Low-fat
 - 3 grams or less per serving
- Reduced-fat
 - At least 25% less fat when compared with a similar food

Cholesterol terms:

- Cholesterol-free
 - Less than 2 milligrams cholesterol per serving and 2 grams or less saturated fat per serving.
- Low-Cholesterol
 - 20 milligrams or less cholesterol per serving and 2 grams or less saturated fat per serving

Sodium terms:

- Sodium-free
 - Less than 5 milligrams sodium per serving
- Salt-free
 - Meets requirements for sodium-free

HEALTH CLAIMS

For the first time, you will see FDA approved and regulated health claim phrases. A health claim is a food label message that describes the relationship between a food or food component, such as fat, calcium, or fiber, and a disease or health-related condition.

The government has authorized health claims for 7 diet and health relationships that are backed by extensive scientific evidence.

1. Calcium and osteoporosis
2. Fiber-containing grain products, fruits, vegetables and cancer
3. Fruits, vegetables, and cancer
4. Fruits, vegetables, and grain products that contain fiber and coronary heart disease
5. Fat and cancer
6. Saturated fat and cholesterol and coronary heart disease
7. Sodium and hypertension

An example of a valid health claim you may see on a high-fiber cereal product food label would be: "Many factors affect cancer risk; eating a diet low in fat and high in fiber may lower the risk of this disease."

For further information on specific health claims refer to the information on diet and health.

FOODS EXEMPT FROM FOOD LABELING

Many foods do not have information on them. Some foods are exempt from food labeling. These include:

- Restaurant foods
- Hospital cafeterias
- Airline foods
- Food service vendors (such as mall cookie vendors, sidewalk vendors, and vending machines)
- Ready-to-eat food prepared primarily on the site
- Bulk food that is not resold
- Food produced by small businesses
- Medical foods
- Plain coffee and tea
- Flavor extracts
- Food colors

- Spices
- Other foods that contain no significant amounts of any nutrients

Stores may voluntarily list nutrients for many raw foods. The 20 most commonly eaten raw fruits and vegetables and seafood will display nutrition information in the store. Nutrition labeling for single-ingredient raw products, such as ground beef and chicken breasts, is also voluntary.

A toll-free consumer hot line of the American Dietetics Association National Center for Nutrition and Dietetics is available to answer questions on the new food Labels. They operate between 10 AM and 5 PM Eastern time, Monday through Friday. The number is 1-800-366-1655.

Update Date: 9/2/2005

The following information is for background use only. It is not included in the lesson unless students have questions. It is from the USDA Food Safety and Inspection Service,

http://www.fsis.usda.gov/Fact_Sheets/Food_Product_Dating/index.asp

Food Product Dating

"Sell by Feb 14" is a type of information you might find on a meat or poultry product. Are dates required on food products? Does it mean the product will be unsafe to use after that date? Here is some background information which answers these and other questions about product dating.

What is Dating?

"Open Dating" (use of a calendar date as opposed to a code) on a food product is a date stamped on a product's package to help the store determine how long to display the product for sale. It can also help the purchaser to know the time limit to purchase or use the product at its best quality. It is not a safety date.

Is Dating Required by Federal Law?

Except for infant formula and some baby food (see below), product dating is not required by Federal regulations. However, if a calendar date is used, it must express both the month and day of the month (and the year, in the case of shelf-stable and frozen products). If a calendar date is shown, immediately adjacent to the date must be a phrase explaining the meaning of that date such as "sell by" or "use before."

There is no uniform or universally accepted system used for food dating in the United States. Although dating of some foods is required by more than 20 states, there are areas of the country where much of the food supply has some type of open date and other areas where almost no food is dated.

What Types of Food Are Dated?

Open dating is found primarily on perishable foods such as meat, poultry, eggs and dairy products. "Closed" or "coded" dating might appear on shelf-stable products such as cans and boxes of food.

Types of Dates

- A **"Sell-By"** date tells the store how long to display the product for sale. You should buy the product before the date expires.
- A **"Best if Used By (or Before)"** date is recommended for best flavor or quality. It is not a purchase or safety date.
- A **"Use-By"** date is the last date recommended for the use of the product while at peak quality. The date has been determined by the manufacturer of the product.
- **"Closed or coded dates"** are packing numbers for use by the manufacturer.

Safety After Date Expires

Except for "use-by" dates, product dates don't always refer to home storage and use after purchase. But even if the date expires during home storage, a product should be safe, wholesome and of good quality—if handled properly and kept at 40° F or below. See the accompanying refrigerator charts for storage times of dated products.

Foods can develop an off odor, flavor or appearance due to spoilage bacteria. If a food has developed such characteristics, you should not use it for quality reasons.

If foods are mishandled, however, foodborne bacteria can grow and cause foodborne illness—before or after the date on the package. For example, if hot dogs are taken to a picnic and left out several hours, they wouldn't be safe if used thereafter, even if the date hasn't expired.

Other examples of potential mishandling are products that have been: defrosted at room temperature more than two hours; cross contaminated; or handled by people who don't use proper sanitary practices. Make sure to follow the handling and preparation instructions on the label to ensure top quality and safety.

What Do Can Codes Mean?

Cans must exhibit a packing code to enable tracking of the product in interstate commerce. This enables manufacturers to rotate their stock as well as to locate their products in the event of a recall.

These codes, which appear as a series of letters and/or numbers, might refer to the date or time of manufacture. They aren't meant for the consumer to interpret as "use-by" dates. There is no book which tells how to translate the codes into dates.

Cans may also display "open" or calendar dates. Usually these are "best if used by" dates for peak quality.

In general, high-acid canned foods such as tomatoes, grapefruit and pineapple can be stored on the shelf 12–18 months; low-acid canned foods such as meat, poultry, fish and most vegetables will keep 2–5 years—if the can remains in good condition and has been stored in a cool, clean, dry place.

Dates on Egg Cartons

If the egg carton has an expiration date printed on it, such as "EXP May 1," be sure that the date has not passed when the eggs are purchased. That is the last day the store may sell the eggs as fresh.

On eggs which have a Federal grade mark, such as Grade AA, the date cannot be more than 30 days from the date the eggs were packed into the carton.

As long as you purchase a carton of eggs before the date expires, you should be able to use all the eggs safely in three to five weeks after the date you purchase them.

Making a Convenience Food More Healthfully

Remind students that they can read the directions for the convenience food and use their knowledge from Jr. Chef to change how a food is prepared. For instance,

- use less fat than is called for
- use a more healthful type of fat, for instance use canola oil instead of butter
- for cake mixes, use applesauce instead of oil
- use egg whites instead of whole eggs
- use less sugar than is called for
- leave off frosting if possible, or use just part of it
- add vegetables to
 - o foods like macaroni and cheese
 - o hamburger/tuna helper or other casserole type dishes
 - o pasta or rice salads or side dishes
 - o packaged soups
 - o frozen pizzas
- do not add any additional salt
- use half of the flavoring packet that accompanies packaged grain-based products
- use herbs and spices instead of more salt and/or fat for flavor
 - o onion and garlic powder (not onion or garlic salt!)
 - o herb-spice seasonings without added salt
 - o individual dried or fresh herbs

Making a Complete Meal with a Convenience Food

Before the lesson, collect a few examples of convenience foods (either box/package labels or look up the product on the Internet and print off a picture of the food). Using

MyPyramid, ask students for suggestions of foods that could be served with the convenience food to make sure all food groups are represented.

Often a convenience food may be the only thing prepared for dinner that night. It may contain foods from more than one food group in itself (e.g. beef and noodles). But it's easy and takes very little more time to make the meal complete: open a can of vegetables, add a slice of whole grain bread and a glass of milk, and open a can of fruit for dessert. In its simplest form, a balanced meal is formed. Of course there are other options such as making a salad, using fresh or frozen vegetables and fruit, etc. The idea is to help students remember to use at least one food from each section of MyPyramid when they make a convenience food meal and when possible, surround a convenience food with more foods from the base of MyPyramid.