FRAICRES UPDATED EXCHANGE WILES

Convenience Food Facts

Help for the Healthy Meal Planner Arlene Monk, R.D. and Marion J. Franz, R.D., M.S.



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Convenient Nutrition for Everyone

In our busy, hustle-and-bustle society, convenience can be one of the biggest influences on how we order our lives. This is certainly true of our eating habits. If we're not grabbing a bite at a fast food restaurant, we're looking for a meal that is quick and easy to prepare so we can spend as much time as possible with interests other than cooking.

Convenience foods offer just that — convenience. They are the fastest growing processed food group because they give us what we demand — quick, easy to prepare, good tasting, and relatively inexpensive meals.

Consumers also are becoming more knowledgeable about nutrition and the effects different foods have on health. We eat not only for the energy that we need to fully enjoy our daily activities, but also to ensure our health throughout a long and productive life.

Unfortunately, the goals of convenience and good nutrition are not always easily achieved together. This is not to say that good nutrition is inconvenient. It is just that you need to know about the nutrients in the foods you buy, so you can plan a healthy diet which offers the convenience you appreciate. *Convenience Food Facts* will give you that information.

This book is designed to help convenience food users meet many different nutritional needs and desires. You may want to achieve one or more of the following goals, and the Convenience Foods product nutrition tables can help you.

Limit Calories to Reduce Weight

If you are trying to lose weight, a safe and reasonable weight loss goal is 1 to 2 pounds of fat per week. Each pound of fat contains approximately 3,500 calories. This means that you must increase you energy expenditure (exercise) and cut back on your calorie intake for a total of 3,500 to 7,000 calories per week (or 500 to 1,000 calories per day) less than the calorie intake at which you maintain your weight.

A weight control program that is nutritionally safe as well as low in calories should provide 1,200 to 1,500 calories per day. It is important to spread these calories throughout the day, rather than skip breakfast and lunch, thus consuming all 1,200 or 1,500 calories late in the day. About 400 to 500 calories, or one-third of the total, should be consumed at each meal.

For weight maintenance, adults usually require approximately 1,800 to 2,400 calories per day, or approximately 600 to 800 calories at each meal. Calorie values of convenience foods can help you decide on your portion sizes.

Foods that contain fewer than 20 calories per serving can be used as "free foods" up to two or three times per day, for a total of not more than 50 to 60 calories per day. These foods are good snacks to help curb hunger and reduce total calories.

Knowing the number of calories per serving will help you decide if and how a product might fit into your meal plan. The first column next to the product name in the nutrition tables contains the portion sizes on which the nutritional information is based. The next column indicates the number of calories contained in that portion size of the product.

Reduce Fat Content of Diet

A high fat diet, especially one high in saturated fats and cholesterol, is related to increased risk of heart disease, which is America's number one killer disease. Saturated fats and cholesterol are found in meats, dairy products, and eggs. The *Dietary Guidelines for Americans* recommend that the diet contain no more than 30 percent of total calories from fat, 50 to 60 percent of the total calories from carbohydrates ("naturally occurring" sugars and starches), and 15 to 20 percent from protein.

To the right of the calorie column are three columns that list the carbohydrate, protein, and fat content of the product. The column listing grams of fat can help you judge the amount of fat in the product. To achieve the goal of 30 percent or less of your calories from fat, follow these guidelines: On a weight loss diet, one meal should contain 15 to 18 grams of fat. On a weight maintenance diet, one meal should contain 20 to 28 grams of fat.

Fifteen grams of protein for women and 19 grams for men per meal will supply one-third of the day's requirements for protein.

Reduce Salt Content of Diet

Many convenience foods are high in salt. Salt is usually added not to preserve the food, but to satisfy the public's desire for salty tasting foods. It is wise to cut back on the salt in your diet, because salt is 40 percent sodium, and too much sodium has been linked to high blood pressure (hypertension). The average American eats 10 to 60 times the 200 milligrams of sodium the body needs per day. It has been recommended that Americans limit their daily sodium intake to approximately 1,000 to 3,300 milligrams. At one meal, sodium intake should not exceed 1,000 milligrams; people on sodium restricted diets should consume less than 700 milligrams per meal.

Sodium content in milligrams per serving is listed in the column second from the right.

Use Exchange Lists for Meal Planning

The column labeled "Exchange Values" is intended for people who use the exchange system of meal planning. This system was designed to take the guesswork and calorie counting out of meal planning.

Two other bits of information on the nutrition tables are intended specifically for people with diabetes. A † next to the exchange value indicates a recommendation that this product be used with caution in a diabetic meal plan because it contains a moderate amount of sugar. A ** in the exchange column indicates a recommendation that this product be avoided by people with diabetes because it contains a high amount of sugar. If you do not have diabetes but want to cut down your consumption of refined sugar, these recommendations will help you also.

This book was written by staff at the International Diabetes Center in Minneapolis, Minnesota. You may wonder why health professionals concerned with care and education for people with diabetes are distributing nutrition information to everyone else to use. The answer is that one of the most important ways to control diabetes and prevent the most common type of diabetes is to follow a well-balanced and nutritious meal plan. Many people who have diabetes also need to lose weight. So you see, the goals of people who have diabetes are goals that you may share.

The next brief section is specifically for people who have diabetes. If you do not have diabetes, you may wish to go to page IV for some helpful hints on wise shopping strategy.

If You Have Diabetes

All of the information in this book can be just as helpful to you as to everyone else. Of course, you will want to pay special attention to the exchange values and the recommendations to avoid or use certain products with caution.

If you do not have an individualized meal plan and do not know how to use the exchange system, we encourage you to see a dietitian or nutritionist who is familiar with diabetes nutritional management. Ask your doctor for a referral. The exchange system allows maximum flexibility and variety while helping you control your diabetes.

If you already have an individualized meal plan, become familiar with the foods you can eat. Then outline your weekly menu so when you shop, you can choose foods that fit into your planned exchanges for meals and snacks. High sugar foods often contain calories without many other valuable nutrients. It is wise to avoid them. If you do eat foods containing moderate amounts of sugar, eat them with a

meal, when absorption of the sugar will not be as rapid. It also may help to eat them before exercise, because exercise can help lower blood glucose levels. For weight control, pay special attention to calorie values and avoid high fat, high sugar, and/or high calorie foods.

This book will help you learn the nutritional value of convenience food products. This information plus the exchange values will help you make wise food choices. Generally, nutritional adequacy can be ensured by eating a variety of foods throughout the day.

For products that are not contained in this book, the guide on page XII will help you compute exchange values from a product's nutritional label. Especially important are the sections on shopping strategy and product labeling.

Shopping Strategy

One of the hardest things about grocery shopping is to come home with only the foods you wanted to buy. Try the following general recommendations for food purchasing:

- **Plan Ahead!** The food you buy on your weekly shopping trip will determine your food choices throughout the week.
- Outline Your Weekly Menu. Occasional meals from convenience foods are not a problem, nor do they compromise the nutritional quality of your food intake. But overuse of any food, including convenience foods, can be a problem. Use the product nutrition tables to plan convenience meals that will not jeopardize your nutritional goals.
- Make Your Grocery List from Your Menu Outline. Your menu will help you avoid impulse eating, and your grocery list will help you avoid impulse buying.
- Shop for Groceries When Your Stomach is Full. You will be most likely to shop carelessly when you are hungry, and will tend to buy foods you don't need or shouldn't have. Purchase ONLY those items on your grocery list.
- Avoid Buying Foods You Tend to Overeat. Certain foods are just too tempting once they are in your cupboard. Avoid buying these and other foods you know are not appropriate for your nutritional goals.
- **Be Aware of Distractions.** Attractive displays and advertising can tempt you to buy without thinking. In addition, products the grocer is trying hardest to sell will often be placed at eye level. Remember—your grocer's choices are not always your best buy!
- **Keep Costs Down.** Good nutrition is not expensive. In fact, making wise food choices can help you eat better and save money. The most dramatic savings will

occur when you cut back on simple sugar items, such as soft drinks, candy, sweet baked goods, and presweetened cereals. Lean cuts of beef, chicken, or turkey are usually less expensive than high fat meats, such as prime beef or processed luncheon meats. Margarine is less expensive than butter. Reducing your use of salad dressing, catsup, and sauces can also cut expenses. And remember, home-prepared meals are often less expensive than meals of convenience foods. Decide when convenience foods can help you without ruining your budget and nutritional goals.

• Learn to Read Labels. Lists of ingredients and nutritional labeling can help you make wise food choices. However, food labels frequently do not tell the whole story. Many of the terms used on labels have not been regulated and can be misleading, while other terms are regulated and can be helpful. You need to know what labels really tell you in order to be able to use them. The next section will help you do just that.

What Is REALLY in the Food You Are Buying?

There are several specific regulations regarding food labeling. For example, ingredients must be listed in descending order according to the percentage of weight they contribute to the total weight of the product. If a manufacturer makes a nutrition claim or adds nutrients to a food, the package must contain a complete nutrition label substantiating the claim. Misleading photographs are unlawful. And a few terms, such as "low sodium" or "low calorie," are specifically defined by federal regulations.

However, there still is a considerable amount of information manufacturers do not tell us: Many of the almost 3,000 additives in current use do not need to be specifically named; a so-called natural food can still contain artificial ingredients; foods "with no salt" can still contain a lot of sodium; "light" may refer to a product's color or density, not necessarily its calorie or fat content; "sugar-free" products need not contain fewer calories than their counterparts with sugar.

Let's take a closer look at food labeling terms and regulations and how they can help you purchase nutritious products.

Food Labeling Terms Can Be Both Helpful and Misleading

Two federal agencies are responsible for food labels. The Food and Drug Administration (FDA) is responsible for all food labeling except meat and poultry. The U.S. Department of Agriculture (USDA) regulates meat and poultry products. Some terms such as "light" or "leaner" may be regulated by one agency but not by the other.

Below are some common terms used on food labels with the FDA and USDA regulations that apply to them. Some food labeling terms are well regulated, while others can be confusing or misleading to the consumer.

Low Calorie: These foods may contain no more than 40 calories per serving or no more than .4 calorie per gram. (Serving size can, however, vary.) Foods naturally low in calories, such as vegetables, cannot be called "low calorie," but they may be labeled "vegetables, a low-calorie food."

Reduced Calorie: These foods must have one-third fewer calories than the standard product and must include on the label a comparison of calorie content of the standard and reduced-calorie versions. USDA regulations, on the other hand, require that "reduced calorie" foods have a 25 percent reduction in calories.

Diet or Dietetic: These foods must meet the same requirements as "low calorie" or "reduced calorie" foods. They must contain no more than 40 calories per serving or have at least one-third fewer calories than the regular product. However, this does not always mean that they will be truly low in calories, just lower than the regular product. In addition, "diet" or "dietetic" may mean that a product is lower in sodium, but not calories. In this case, it will still be labeled "diet," but the product does not need to meet the requirements of "low calorie" or "reduced calorie" foods.

Sodium Free: Foods must have less than 5 milligrams of sodium per serving. **Very Low Sodium:** Foods that have no more than 35 milligrams of sodium per serving.

Low Sodium: Foods that contain no more than 140 milligrams of sodium per serving.

Reduced Sodium: Sodium levels of these products have been reduced by at least 75 percent. The label must compare the sodium level of the "reduced sodium" product with the regular product.

Low Fat: Dairy products (low-fat milk, yogurt, cottage cheese) must, according to the USDA regulations, contain between .5 and 2 percent milk fat. Low-fat meat will have no more than 10 percent fat by weight (same as "lean" meat).

Lean: When lean refers to meat and poultry products, the USDA regulations state that it will have no more than 10 percent fat by weight. "Extra lean" meats must have no more than 5 percent fat. "Leaner" may be used if a meat product has at least 25 percent less fat in comparison with USDA standards. Actual fat content must appear on the label, along with a comparison of the fat content of the product and the standard. However, if "lean" or "light" is part of the brand name of a frozen dinner used to suggest that the product may help promote weight loss, the only requirement is that the product have a nutrition label.

Enriched or Fortified: These products contain added vitamins, minerals, or protein. The label must include full nutritional disclosure; "per serving" amounts of nutrients must be given.

Imitation: These products are nutritionally inferior—that is, lower in protein, vitamins, or minerals—to the standard product. Foods that are lower in calories, fat, or cholesterol are the exception; they are not considered imitation.

The following terms are not regulated, and they can be misleading as you read labels:

Light or Lite: These terms can mean anything from a lighter color or texture than the regular product to less sodium, calories, or fat. The FDA has not defined "light" food products. The USDA, on the other hand, which regulates meat and poultry products, defines "light" (also "leaner" and "lower fat") as meat with at least 25 percent less fat than regular products. "Light" may also mean 25 percent less sodium, calories, or breading. The label must indicate what nutrient has been reduced to earn the claim "light." These restrictions do not apply to frozen dinners.

Sugar-free or Sugarless: Although these foods cannot contain sucrose (table sugar), they can include other sweeteners such as honey, corn syrup, fructose, sorbitol, or mannitol. If a food labeled "sugar-free" is not low in calories, the label must tell the consumer that it is not a reduced-calorie food.

Be wary of ice cream, candy bars, and cakes that are labeled "sugar-free" or "sugarless." Many of these products can be higher in calories than the products they are replacing. They are often made with sorbitol, which is the alcohol form of glucose. It contains four calories per gram, just as any other carbohydrate. Because sorbitol is not soluble in water, the fat content of these products is usually higher in order to dissolve the sorbitol. Products containing sorbitol can also cause diarrhea.

Sugar-free products that might be useful are artificial sweeteners, diet soda pop, dietetic gelatin or pudding, and fruit canned without added sugar. Products that may be useful as free foods (a free food contains less than 20 calories per serving) include diet syrup, diet jam or jelly, diet hard candy, and sugar-free gum.

Low Salt: Since salt is not the only ingredient that contains sodium, a food that is low in salt is not necessarily low in sodium. Terms such as "unsalted," "salt-free," "no salt," "no salt added," "without added salt," or "no salt added during processing" refer to salt, but the food could still contain significant levels of sodium, either naturally or from substances added for preservation, leavening, palatability, or other purposes.

No Cholesterol: These food products do not contain cholesterol. Remember, however, that only foods from animal sources contain cholesterol. Vegetable sources never contain cholesterol. In addition, "no cholesterol" does not mean that the food is low in fat or in saturated fat.

Natural: This term provides no guarantees unless the product is meat or poultry, because the FDA does not regulate the word "natural." The USDA does, and "natural" on meat and poultry means there are no artificial flavors, colors, preservatives, or synthetic ingredients of any kind, and the food and its ingredients are not more than "minimally processed." For any other food, such as baked goods, beverages, or processed foods that do not contain meat or poultry, the term means anything the manufacturer wishes it to mean.

Organic: This term has no legal meaning and can be used without any guides. The USDA, however, does not allow its use on meat or poultry products.

Ingredients List Is the Second Clue

An important part of your shopping strategy should involve looking at the ingredients list on the foods you buy. Of course, you can't look at every label, but if you are considering a new product or just want to familiarize yourself with foods you eat regularly, take the time to read and understand the ingredients list.

Ingredients are listed in descending order according to the percentage of weight they contribute to the weight of the product. For example, if sugar is the first, second, or third ingredient on the label, the product probably contains a large amount of sugar. When sugar is near the end of a list of four or more ingredients, the amount of sugar is probably not significant.

Sometimes the manufacturer will list on the label all the ingredients that are similar to sugar, but the word "sugar" may never appear. If these ingredients were grouped together and labeled as sugar, they might be the first ingredient on the list. Check to see how many items on the label are similar to sugar, and then notice their position in the ingredients listing. Words ending in "ose" are generally a form of sugar. Table and baking sugar is sucrose. Other sugars include dextrose, fructose, levulose, lactose, and glucose.

Another phrase used for sugar-type ingredients is "nutritive sweetener." This identifies a sweetener that contains calories. Examples of nutritive sweeteners besides sugar are invert sugar, corn syrup, corn sugar, dextrin, molasses, sorghum, honey, and maple or brown sugar.

Especially if you have diabetes, remember the sources of sugar:

brown sugar	corn syrup	dextrose	invert sugar
fructose	glucose	honey	
lactose	levulose	mannitol	
maple syrup	molasses	sorbitol	
sorghum	sucrose	xylitol	

The phrase "non-nutritive sweetener" identifies a sweetener that contains few or no calories. Examples are saccharin and aspartame. (You may know aspartame by the brand names Equal $^{\circ}$ or NutraSweet $^{\circ}$.)

In addition to sugar, you should be aware of ingredients that are high in saturated fat. High fat items that may appear on food labels are:

animal fat	lard
bacon fat	meat fat
beef fat `	milk chocolate
butter	palm or palm kernel oil
chicken fat	pork fat
cocoa butter	shortening
coconut	turkey fat
coconut oil	vegetable fat or often will be palm vegetable oil or coconut oil
cream and cream sauces	
egg and egg-yolk solids	vegetable shortening
hardened fat or oil	whole milk solids
hydrogenated fat or oil	

If you have been advised to or want to limit your sodium intake, watch out for the following high sodium ingredients:

```
broth salt (sodium chloride)
baking soda (sodium bicarbonate) brine (salt and water)
monosodium glutamate or MSG soy sauce
```

In summary, note the following as you check the ingredients list:

- 1. The order of ingredients.
- 2. Ingredients by any name that you want to limit or avoid.

Clue Three: Take Advantage of Nutritional Labeling

In addition to food labeling terms and the list of ingredients, many food labels include "nutrition information per serving." This information can help you fit the product into your meal plan. It can also help you meet the nutritional goals of controlling fat, sugar, and sodium intake.

Nutritional labeling is voluntary for most food products, but it is required on any product for which special nutritive claims are made or to which extra nutrients are added. Manufacturers making any nutritional claim for their product must by law include the following information:

- 1. Serving size. The amount of food for which nutrition information is given, such as 1 slice, 1 cup, or 3 ounces. The number of servings per container is also given.
- 2. The amount of food energy in total calories.
- 3. The grams of protein, carbohydrate, and fat furnished by one serving of the food as it comes from the container. (One gram of carbohydrate or protein supplies four calories; one gram of fat supplies nine calories.)
- 4. Milligrams of sodium per serving.
- 5. Percentages of the U.S. Recommended Daily Allowances (RDA) for protein, vitamin A, vitamin C, three B vitamins (thiamin, niacin, and riboflavin), calcium, and iron in a serving of the food as it comes from the container.
- 6. Other nutrient information, such as amounts of cholesterol or grams of saturated or polyunsaturated fat, is optional. This information is usually included only if a specific nutritional claim has been made, such as "low cholesterol product."

The following nutrition labeling format is currently being used:

NUTRITION INFORMATION (per serving) Serving size=1 cup
Servings per container=2
Calories
Percentage of U.S.
Recommended Daily
Allowances (U.S. RDA)
Protein2
Vitamin A
Vitamin C
Thiamin
Riboflavin
Niacin25
Calcium4
Iron4

The following are examples of nutritional labeling on specific products:

ENRICHED HARD ROLLS

Nutrition Information (per serving)

Percentage of U.S. Recommended Daily Allowances (U.S. RDA)

Vitamin A0 Vitamin C0	Niacin 8 Calcium 2 Iron 6
Thiamin (B ₁)10	
Riboflavin (B ₂)6	

DRY ROASTED PEANUTS

Nutrition Information (per serving)

Serving size=1 ounce Servings per container=8

Calories160
Protein7 gms.
Carbohydrate6 gms.
Fat (71% of calories)
from fat14 gms.
Polyunsaturated 5 gms.
Saturated 2 gms.
Cholesterol 0 mg.
Sodium250 mg.

Percentage of U.S. Recommended Daily Allowances (U.S. RDA)

Protein10	Niacin20
Vitamin A 0	Calcium0
Vitamin C0	Iron2
Thiamin (B ₁)0	
Riboflavin (B ₂)2	

If you do not use exchange lists for meal planning, go on to page XIV for an introduction to the convenience food nutrition tables.

Using Nutritional Labeling in Diabetic Meal Planning

Nutritional labeling is especially valuable if you have diabetes. But in order to effectively use the information on product labels, you must first understand the basis for grouping foods into exchange lists. Each list is comprised of a group of foods in amounts that all contain approximately the same number of calories and grams of carbohydrate, protein, and fat per serving.

By looking at the nutritional label on a food product, you can estimate how many exchanges are in a serving of that food. This will help you decide if and how you can include it in your meal plan. Exchange conversions have already been done for all of the convenience foods in the tables starting on page 1. But for other foods, you can use the table below to convert nutritional labeling information to the exchange system. (It is important to correctly convert calories and grams of carbohdyrate, protein, and fat into exchanges, but don't worry about variations of a few calories or grams.)

Exchange	 Calories	Carbohydrate	Protein	Fat
1 starch/bread	80	15 gms.	3 gms.	trace
1 lean meat	55	Ō	7 gms.	3 gms.
1 med.fat meat	75	0	7 gms.	5 gms.
1 high fat meat	100	0	7 gms.	8 gms.
1 vegetable	25	5 gms.	2 gms.	0
1 fruit	60	15 gms.	0	0
1 milk (skim)	 90	12 gms.	8 gms.	trace
1 fat	45	Ö	0	5 gms.

Steps for Converting Nutritional Labeling to Exchanges. The following information is from a 10-ounce box of frozen pizza.

Nutrition Information Per Serving	
Serving size	½ pizza (5 oz.)
Servings per container	2
Calories	350
Protein	18 gms.
Carbohydrate	33 gms.
Fat	16 gms.

To convert label information into the exchange system, follow these steps:

1. Check the label for the information you need to convert to the exchange system. You need:

serving size: 1/2 pizza

protein: 18 grams

calories: 350

fat: 16 grams

carbohydrate: 33 grams

- 2. Check for serving size. Is this a reasonable size for your use?
- 3. Compare the label information with the carbohydrate, protein, fat, and calories on the exchange table. First, convert grams of carbohydrate in your serving size to exchanges. In this case, 33 grams of carbohydrate would be 2 starch exchanges:

	Carbohydrate	Protein	Fat
½ pizza	33 gms.	18 gms.	16 gms.
2 starch exchanges	30 gms.	6 gms.	_

4. Next subtract the grams of protein you used in converting the carbohydrate to exchanges. Then convert the remaining grams of protein to meat exchanges. Use the medium fat meat exchange values.

	Carbohydrate	Protein	Fat
½ pizza	33 gms.	18 gms.	16 gms.
2 starch exchanges	30 gms.	_6 gms.	
		12 gms.	16 gms.
2 med. fat meat exchanges		14 gms.	10 gms.

5. Next, subtract the grams of fat in the meat exchanges from the fat contained in the serving size. Then convert the remaining grams of fat to fat exchanges.

	Carbohydrate	Protein	Fat
½ pizza	33 gms.	18 gms.	16 gms.
2 starch exchanges	30 gms.	–6 gms.	
		12 gms.	16 gms.
2 med. fat meat exchanges		14 gms.	-10 gms.
			6 gms.
1 fat exchange			5 gms.

- 6. If you eat ½ of this 10-ounce pizza, you use the following exchanges from your meal plan: 2 starch, 2 medium fat meat, 1 fat
- 7. Final check:

	Carbohydrate	Protein	Fat	Calories
½ pizza Exchanges:	33 gms.	18 gms.	16 gms.	350
2 starch, 2 med.				
fat meat, 1 fat	30 gms.	20 gms.	15 gms.	355
	44 44	1		

Once again, do not worry about small discrepancies in the final figures. These calculations are accurate enough to use in your meal plan.

8. If the difference between the grams per serving and the grams accounted for by the exchange system is less than one-half an exchange, you do not need to count those extra grams.

How Everyone Can Use the Convenience Foods Nutrition Tables

The nutrition information contained in the following tables was solicited and received in 1987 from a wide variety of food processing companies. The convenience food products are grouped according to major food categories that represent the way you would be most likely to use the product. Within each food category, brand names are in alphabetical order, with the parent company shown