

Serving Sizes for Special Diets

If you have special dietary needs, the nutrition information on food labels can help you to:

- improve your health
- manage your weight, diabetes, hypertension or cardiovascular disease
- reduce your risk for other chronic diseases
- avoid products that cause food sensitivities
- follow a therapeutic diet from a physician, nutritionist or registered dietitian

IT'S ON THE LABEL

Nutrition information about a food can be found under the "Nutrition Facts" panel, which is usually on the side or back of the package. The top section of this label contains product-specific information. This includes serving size, calories, and nutrient information, which varies with each food product.

Serving Size: This uniform measurement is the amount of a particular food or beverage that is considered one serving. Serving sizes are generally consistent for similar types of foods, with the exception of cereal and a few others.

Because serving size is uniform, you can easily compare the nutrients and calories (food energy) available in similar foods. Uniformity in size means that the serving size must be about the same for the same types of products, such as different brands of frozen yogurt. In addition, the serving size must be uniform for similar products within a food category. An example is ice cream, ice milk, and sherbet within the category of frozen dairy-type desserts.

Serving size reflects the amounts that most people actually eat rather than the portion YOU usually eat or the recommended amount. Pay close attention to this information and compare this to how much YOU actually eat. There may be several servings in the container.

The serving size is expressed in familiar kitchen measures (e.g. cup, tablespoon, teaspoon, piece, slice) as well as metric amounts such as grams (g) and milliliters (mL). Ounces (oz.) may be used only if a common household unit does not apply, and an appropriate visual unit must be given (e.g. 1 oz. (28g/about ½ pickle). Other serving size units include cookies, rolls, sliced products, etc.

Servings Per Container: This is the total number of servings in the product. Remember that the nutrient information is based on a serving size, or the amount in one serving, not necessarily on all the food in the package.

To find out the calorie and nutrient amounts you are getting, compare your portion to the label's serving size. For example, if a serving size of a beverage is 8 ounces and you consume an entire 20-ounce bottle, then you are getting 2½ times the amount of calories and other nutrients listed.

Serving size identified on the package determines all the nutrient amounts listed on the label. Note that serving size on the "Nutrition Facts" label may be different from the serving size recommended in MyPyramid, the USDA's food guide pyramid.

Calories: This is a measure of how much energy is in a serving of food. On the food label, calories are listed below serving size and servings per container.

You can manage your weight by knowing how many calories per serving are available in a product, then increasing or decreasing the total number of calories you consume. Eating too many total calories per day is linked to obesity and overweight. It doesn't matter whether the calories are from fat, protein, or carbohydrate.

Calories from Fat: The “Nutrition Facts” label also lists how many of the calories in one serving of a product come from fat. Remember that eating two servings of a food means that you consume twice as many calories from fat.

Do not confuse calories from fat with the dietary advice that applies to your overall food choices. The *2005 Dietary Guidelines for Americans* recommend that fat be only 20 to 35% of total calories, which depends on your age. This is 65 grams for the 2,000-calorie intake level used in the Daily Value.

Sodium: You should consume less than 2,300 mg of sodium per day, which is approximately one teaspoon of salt. People with chronic diseases such as hypertension, diabetes, and kidney disease should consume less. The minimum sodium required is 250-500 mg per day.

Foods high in sodium do not always taste salty. Look for these salt or sodium-containing compounds on the list of ingredients: Na (symbol for sodium); monosodium glutamate (MSG); baking soda; baking powder; disodium phosphate; sodium alginate; sodium nitrate.

Potassium: On the top part of the “Nutrition Facts” label, potassium may be listed voluntarily just below sodium. Its % Daily Value is based on a recommended intake of 3,500 mg a day. Consuming too much potassium can be harmful to people with kidney problems, because they are unable to get rid of the excess.

Total Carbohydrate: Nutrition experts recommend that 45-65% of your total daily calories come from carbohydrates. This part of the label lists the values for all carbohydrates, including dietary fiber and sugars. It is voluntary to list the number of grams of sugar alcohols (polyols) per serving.

Dietary Fiber helps fight some diseases and promotes bowel regularity. Recommended intake is 14 grams per 1,000 calories consumed. Dialysis patients should eat 20 to 25 grams (G) daily to prevent constipation.

Sugars include both naturally occurring sugars and added sugars, so check the ingredients list to identify the types of sugar in the product. The label can claim “no sugar added,” yet a beverage or food can contain naturally occurring sugar, like fructose

in fruits or lactose in milk. Sugar in vegetables, cereals, grains, and legumes also may be present.

A few names for added sugars include: table sugar (sucrose), corn syrup, maple syrup, fruit juice concentrate, honey maltose, dextrose and other caloric sweeteners.

Protein: This is a nutrient that most Americans get more of than they need. Protein is restricted in the diets of people with certain medical conditions, such as kidney and liver disorders.

Other Vitamins and Minerals: Along with the required listing of vitamins A and C, iron and calcium on the “Nutrition Facts” label, other vitamins and minerals may be included voluntarily. Amounts are only presented as percentages of the Daily Value.

INGREDIENTS LIST

This list is usually located under the “Nutrition Facts” panel or on the side of a food label. An ingredients list is required when a food is made with more than one ingredient. Listed in order by weight, the ingredient in greatest amount is listed first and the least amount last.

NUTRIENT AND HEALTH CLAIMS

If you have special dietary needs, nutrient claims provide optional information that tells you a food contains desirable levels of certain nutrients (e.g. “good source of fiber,” “low-sodium,” or “high in calcium”). That same claim warns a person to avoid the product when a certain nutrient is detrimental to their health. For example, a person following a low-potassium diet should avoid a product that claims to be “an excellent source of potassium.”

Health claims, which must be authorized by FDA, describe a relationship between a nutrient or food and a disease or health-related condition. A few examples are: calcium and a lower risk of osteoporosis; fruits and vegetables and a reduced risk of cancer; fat and a greater risk of cancer; sodium and a greater risk of high blood pressure.

SPECIAL DIETS

Many people on special diets must base their daily diet on a set amount of one or more nutrients specific to their needs (e.g. 60 grams (g) of protein or 2,000 milligrams (mg) of sodium). Therefore, it is most important to have the amount of the nutrient

listed by weight in grams or milligrams in the top part of the “Nutrition Facts” panel.

When following a special diet, be aware that the serving size on the label may not be the same as that recommended for your specific needs. For example, the label serving size for cooked fish is 3 ounces (84 grams). If you are following a 60-gram protein diet, then only 1 ounce (28 grams) of fish per meal may be allowed. So, in this case, the nutrient values would have to be divided by three to determine the nutritional content of the one-ounce portion eaten.

Information on food labels can help individuals choose foods to meet special dietary needs as determined by a physician, registered dietitian or nutritionist. Some medical conditions, such as the ones below, require special attention to diet.

Kidney Disease: Protein, potassium, sodium, and frequently phosphorus are restricted in the diets of people with kidney failure. Dialysis patients may be encouraged to eat 20 to 25 grams (g) of fiber daily to prevent constipation due to lack of exercise, fluid restrictions and some kidney medications.

Liver Disorders: A high-calorie, low-protein diet can help rejuvenate a liver damaged by hepatitis, cirrhosis, and other liver diseases. Increasing intake of minerals and vitamins (especially folic acid, vitamin B12, and thiamin) may be beneficial, also.

Food Sensitivities: The most common food allergens are milk, eggs, wheat, soy, peanuts and other nuts, according to the Food Allergy Network. Read labels to discover if any of these allergens are in a food product.

Celiac Disease: This is a genetic disorder that causes the body not to tolerate gliadin, the protein in gluten. All products containing any wheat, barley, rye, and oats must be avoided. This includes foods with even the smallest amounts of gliadin, such as vinegar, bouillon, and flavorings containing alcohol. Intolerance of this protein leads to poor absorption of all nutrients.

Cancer: Since weight loss is common, many cancer patients need to increase calories and protein intake during cancer treatments. More fiber may be needed when constipation is a problem, but less fiber

should be eaten if the bowel is obstructed from surgery, radiation or a tumor. Following treatment, choose foods and nutrients that reduce risk of developing cancer again.

Bowel Disease: Often fiber should be increased if chronic constipation, irritable bowel syndrome or diverticulosis is a problem. On the other hand, a low-fiber diet may be required during flare-ups of bowel diseases, including Crohn’s disease and ulcerative colitis.

Osteoporosis: A low-calcium diet throughout life is a risk factor for osteoporosis, the disease in which bones become brittle and bone mass decreases. Calcium builds stronger bones and teeth and maintains bone mass. Vitamin D helps the body absorb calcium.

The Dietary Reference Intake (DRI) for calcium is between 1,000 and 1,300 milligrams (mg) per day, depending on gender and age. The % DV for calcium on food labels is calculated using 1,000 mgs per day for all ages. The Daily Value for vitamin D is 400 International Units (IUs).

Please consult with your physician or a registered dietitian for more information about special dietary needs.

For more information on food labeling request: [HGIC 4056 Reading the New Food Labels](#); [HGIC 4057 Determining Nutritional Value of Foods](#); [HGIC 4058 Food Labels: Fat and Cholesterol](#); [HGIC 4059 Food Labels: Carbohydrates](#); [HGIC 4061 Nutrient Claims on Food Labels](#); and [HGIC 4062 Nutrient Density](#).

Sources:

1. U.S. Food & Drug Administration. *The New Food Label: Better Information for Special Diets*. Revised January 1998. www.fda.gov/fdac/foodlabel/special.html
2. U.S. Food & Drug Administration. *How is “Serving Size” on the Nutrition Label Determined?* May 1999. www.cfsan.fda.gov/~dms/qa-lab18.html
3. Duyff, Roberta Larson. *American Dietetic Association Complete Food and Nutrition Guide, 3rd Edition*. 2006.

This information has been reviewed and adapted for use in South Carolina by J. G. Hunter, HGIC Information Specialist, and K. L. Cason, Professor, State EFNEP Coordinator, Clemson University.

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