

# Using and Storing Butter

Barbara J. Willenberg and Karla Vollmar Hughes  
Department of Food Science and Human Nutrition, University of Missouri-Columbia

---

## Buying butter

Butter is made from the sweet or soured cream of cow's milk by agitation or "churning." After churning, the mass of butter is washed and salted. It is worked to distribute the salt and remove extra water. To be sold in stores, butter must contain at least 80 percent milk fat. Water and milk solids make up the other 20 percent. Salt and coloring may be added if desired. Some unsalted butter is sold as sweet butter, but most people prefer the salted product.

Butter is sold in one-pound blocks or in cartons containing four sticks, each weighing 1/4 pound. Some stores still allow customers to purchase a single stick of butter that weighs 1/4 pound. Commodity butter is distributed as blocks.

The USDA grade label on the butter carton or wrapper means the butter has been tested for quality by a government grader and has been produced under sanitary conditions. The highest possible grade is AA. Grade AA butter is delicate and sweet-flavored with a creamy texture and good spreadability. Most butter sold is grade AA or A.

## Butter in the diet

Because of its high fat content, butter belongs to the food group called Fats, Sweets and Alcohol. Foods in this group contain many calories but few nutrients such as protein, vitamins and minerals. Fats are considered a concentrated source of energy or calories, because ounce for ounce, they have more than twice the calories as proteins or carbohydrates. For example, a tablespoon of butter adds about 100 calories to your diet. Although butter does contain varying amounts of vitamin A, other foods such as fruits and vegetables are higher in vitamin A and much lower in calories than butter.

# Choosing fats wisely

The main function of fat and high-fat foods, like butter, in the body is to provide energy. Extra fat in the body is stored in special fat cells and is the body's chief storage form of energy. A certain amount of stored body fat is normal and necessary. Excess amounts of stored body fat from any source can lead to obesity, which is a risk factor in many diseases.

In addition to providing energy, fats perform many other important functions in the body. Sufficient amounts of fat in the daily diet are necessary for several important reasons:

- to provide the essential fatty acid necessary for proper growth and health and for keeping skin smooth and healthy;
- for absorbing and using the fat-soluble vitamins A, D, E and K;
- to provide padding to protect vital organs and the skeleton against bumps and falls;
- to insulate the body from temperature variations;
- as important parts of every body cell; and
- to make eating more enjoyable by adding variety, flavor and aroma to foods.

Although fat performs many important functions in the body, most Americans eat too much fat. Fat makes up about 35 percent to 40 percent of the calories in a typical American diet. Most nutritionists agree that Americans should lower their total fat intake to 30 percent to 35 percent of their daily calories. In most cases, this could be achieved by cutting down on visible fat used. Examples of visible fats are margarine, butter, salad oil and the fat surrounding a cut of meat.

## Storing butter

Because of its high fat content, butter contains many calories and should be used sparingly in the diet. Storing butter properly lengthens its shelf-life so it can be used over a longer period of time. Butter in one-pound blocks can be cut into smaller portions, repackaged and frozen for future use.

To prevent a type of spoilage called rancidity, protect butter from heat, light and air. Rancid butter has an unpleasant taste and smell. To prevent rancidity, never store butter at room temperature. For ease in spreading, remove butter from the refrigerator 10 to 15 minutes before using it.

Butter absorbs odors from other foods rapidly. To prevent flavor changes, keep butter wrapped in moisture, vapor-proof material or in tightly covered containers.

For refrigerator storage, leave butter in its original wrapper. It can be stored one to two weeks at refrigerator temperature (below 40 degrees F). Higher temperatures cause off-flavors and unpleasant odors to develop. Opened portions of butter should be refrigerated in a covered dish. Butter should not be stored in a butter keeper longer than two days. For holding longer than two weeks, butter should be frozen.

To store butter in the freezer, use moisture, vapor-proof freezer packaging material to keep butter from absorbing odors from other foods and to prevent freezer burn. Butter in its original carton can be over-wrapped. One-pound blocks can be cut into smaller portions that can be used in a short time. Wrap tightly in moisture, vapor-proof wrap, label and freeze. If properly wrapped and held at 0 degrees F or lower, butter will keep well in the freezer for 6 to 9 months. Thaw butter in the refrigerator.

## Using butter

Butter adds flavor to a variety of foods:

- delicious spread on hot breads;
- can be substituted for part of the fat in cookies, cakes and pastry;
- spread thin on bread, it keeps sandwich fillings from soaking in and making bread soggy;
- makes a flavorful white sauce.

In spite of its good flavor, butter is not a suitable fat to use for frying or deep-fat frying. Butter begins to break down and smoke when heated to temperatures used for frying.

Small amounts of butter can be used to saute' or brown food over moderate heat.

To measure butter for cooking, use one of these methods:

- measure butter according to sticks:
- 1 pound = 4 sticks = 2 cups = 32 tablespoons
- 1 stick = 1/2 cup = 8 tablespoons
- 1/2 stick = 1/4 cup = 4 tablespoons
- press butter firmly into individual measuring cups or spoons and level with a knife.

## Quick facts about butter

- Butter and margarine are both about 80 percent fat. The fat in butter comes from milk, while the fat in margarine is usually from a vegetable source.
- Butter and margarine add the same amount of calories to your diet. Each furnish about 100 calories per tablespoon.
- There are two cups in a pound of regular butter. Whipped butter contains three cups per pound because air has been stirred into it for ease in spreading and to reduce calories.
- Whipped margarine, like whipped butter, is lower in calories than an equal measure of regular margarine.
- Diet or light spreads have more water and less fat than regular margarine to reduce calories. Their cooking and spreading properties differ from regular margarine.
- Whipped and flavored butters are more expensive than butter.
- Whipped butter becomes rancid quicker than butter because the air that is present helps cause rancidity.

---

University of Missouri. Published by University Extension, University of Missouri-Columbia. Issued in furtherance of Cooperative Extension Work Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. Ronald J. Turner, Director, Cooperative Extension Service, University of Missouri and Lincoln University, Columbia, Missouri 65211. • University Extension does not discriminate on the basis of race, color, national origin, sex, religion, age, disability or status as a Vietnam-era veteran in employment or programs. If you have special needs as addressed by the Americans with Disabilities Act and need this publication in an alternative format, write ADA Officer, Extension and Agricultural Information, 1-98 Agriculture Building, Columbia, MO 65211, or call (573) 882-7216. Reasonable efforts will be made to accommodate your special needs.