

Mid-Atlantic Apicultural Research & Extension Consortium

Delaware, Maryland, New Jersey, Pennsylvania, West Virginia and the USDA cooperating

HONEY

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Honey, the world's oldest sweetener, was the major sweetener until sugar cane was cultivated on a large scale in the New World. In ancient literature honey and honey bees are mentioned with much feeling and gratitude for their bounty. The Bible speaks of a land "flowing with milk and honey."

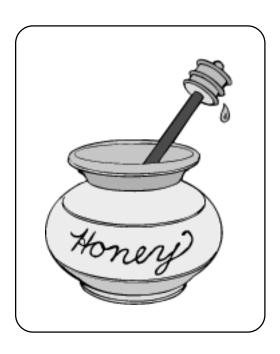
In the early days, honey was gathered from the hives of wild bees in rock crevices and trees. Later, bee-hives were part of every monastery, castle and farm garden. With honey the principal sweetener until the 19th century, almost every small rural house-hold kept bees. Old English books tell how hams were cured in honey, and fruits preserved in honey solutions. The rinsing of the combs were used to make mead, the ancient honey drink known to all the people of antiquity.

Through the centuries, honey has also been used for medicinal purposes, in ceremonials, and in worship. The wax from the honeycombs was equally important. Strips of clean linen dipped into melted wax were used to bind wounds, and smeared with honey to promote healing. The wax was used to waterproof leather, smooth sewing yarn, and even make a kind of primitive chewing gum.

TYPES OF HONEY

Honey is available year-round from local beekeepers and from sources around the world. The flowers from which bees gather nectar largely determine the color, flavor, and aroma of honey. Well known sources are orange blossom, blackberry, buckwheat, sage and clover. When a flower source is not identified, the honey is a blend of different floral types. Some beekeepers designate their blend as wildflower honey. Clover and alfalfa constitute well over half the honey produced in the U.S. Usually the lighter the color, the milder the flavor.

Honey is available in four forms: extracted, comb, chunk, and creamed. Extracted honey is liquid honey separated from the comb. It is the type most readily available and used. Comb honey is sections of the waxen comb filled with honey just as the bees stored it. Section-comb is sold from the hive in wooden frames usually weighing about 1 pound, or



in round plastic holders weighing 12 ounces. Honey in the comb is very fragile and hard to handle, so few stores stock it, but it is available at farm markets and roadside stands. Chunk honey consists of a chunk of honey-filled comb in a container filled with extracted honey around the comb chunk. Creamed honey is extracted honey that has been whipped into a semisolid state similar to the consistency of butter. It is very good and easy to spread on toast or rolls.

USES

Honey is often eaten as an energy food. Its simple sugars are absorbed directly into the bloodstream without digestion. Honey mixes well as a sweetener in hot and cold drinks. It goes with nearly all foods, from salad dressings to vegetable and meat glazes to casserole dishes. It's especially good in desserts and baked goods. The moisture-absorbing quality of honey helps breads, cakes, cookies and candies stay fresh longer. Honey wine can be served with or following dinner, and several after-dinner liqueurs include honey.

CONSUMPTION

Americans consume an average of 285 million pounds of honey every year, involving a fantastic amount of work for millions of honey bees. There are no harder workers in the world. The average life of a worker bee is about six weeks, after which the bee, its wings literally worn to shreds from flying, simply dies from exhaustion. It takes 556 worker bees flying 35,584 miles (over 3 times around the world) to produce 1 pound of honey! If honey were priced according to the effort that goes into its production, none of us could afford it!

TIPS ON USING HONEY INSTEAD OF SUGAR

When substituting honey for sugar, the following is recommended. Substitute honey for up to one-half of the sugar, though in certain recipes honey may be substituted for all of the sugar. Reduce the amount of liquid in the recipe by 1/4 cup for each cup of honey used in baked goods. Add 1/2 teaspoon baking soda for each cup of honey used in baked goods. Reduce oven temperature by 25°F to prevent over-browning of baked goods.

STORING HONEY

Honey keeps best when stored in a tightly covered container in a warm, dry place. It can also be kept in a freezer. Honey should NOT be stored in a refrigerator since it absorbs moisture and becomes very thick when cold.

LIQUIFYING GRANULATED HONEY

Granules may form in a jar of honey, since honey is a supersaturated sugar solution. This does no harm; in fact many people prefer to use it in this easy-to-spread form. To reliquify, place the jar in a pan of hot water (about 110° to 115°F) and stir gently until all the crystals melt (a few minutes to an hour).

MAAREC, the Mid-Atlantic Apiculture Research and Extension Consortium, is an official activity of five land grant universities and the U.S. Department of Agriculture. The following are cooperating members:

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New Brunswick, New Jersey University Park, Pennsylvania

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