

Bee Harmony



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BeeHarmony.org



Honey

Honey is a supersaturated solution of sugars, mainly fructose and glucose, and over time the sugar (mainly the glucose) in most honey separates out to form crystals, a process called granulation. The coarseness of crystals gives the honey a gritty or sandy texture that is unpleasant to some, and no problem to others. The overall taste is unaffected. Also, partially granulated honey in a glass jar is

visually less appealing and harder to sell than a clear, ungranulated product.

Honeys from different flower sources vary considerably in their susceptibility to granulation: sage and tupelo honey are quite resistant and remain clear for years. A few honeys are very susceptible to granulation and start to granulate within a few weeks, or in the case of canola and blue curl honey, within days.

The crystals in granulated honey have a reduced moisture content, therefore the moisture content of the remaining liquid portion is increased. This increase in moisture makes the liquid portion more susceptible to fermentation, although this has not proved to be a significant problem.



Granulated Honey

Granulated honey can be easily reliquefied by heating. Placing a jar of granulated honey in a pan of warm water usually suffices. Putting a container of granulated honey in an enclosed car on a sunny day is another method. Using a microwave, with due caution, is also a solution.

When heating granulated honey, temperatures should be around 100° to 160°F. Keeping the granulated honey at 145° for half an hour is a frequent recommendation; however, the temperature should never exceed 160°F. High temperature and prolonged beating can impair both the flavor and antibacterial properties of honey.



Heating Honey

The granulation or crystallization process requires a starter particle on which crystals form and expand. For this reason, most commercial honey is filtered and strained to eliminate extraneous particles and to give a clearer final product. Honey must be heated to between 140° and 160°F in order to pass easily through filters. Commercial honey packers are careful not to overheat honey. Although filtered honey is very resistant to granulation, some consumers prefer unheated, unfiltered honey. Such honey is occasionally found in a health food store, but usually available only by direct purchase from a local beekeeper.

The granulation process can also be purposefully controlled to produce an excellent production called spun, creamed, whipped or churned honey. Spun honey is a solidified honey with creamy texture. The granulation process is spun honey is purposely initiated by introducing to liquid honey a very fine, honey particles (sometimes from a previous batch of spun honey). The resulting crystals are also extremely fine, giving the final product a smooth, creamy texture. Spun honey is an excellent product and more easily spread and less messy than regular honey.



Spun Honey

The optimum temperature for honey granulation to occur is between 55° and 57°F. Storage above or below this temperature retards granulation. Storage at cooler temperatures is recommended for the best retention of honey quality. Storing in a dark place or in an opaque container

reduces any harmful effects light may have on honey.

Granulation can be eliminated by storing honey at freezing temperatures (32°F).

If buying honey from a local source, ask for this year's crop. Buy no more than a six-month supply at one time, keep one jar on the table, one in the cupboard, one in the medicine chest, one in the bathroom and the rest in the freezer.

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Bee Harmony is a 501 (C) 3 Non-Profit Organization dedicated to confronting Colony Collapse Disorder (CCD) and providing the public with an opportunity to learn about Honey Bees and providing Honey Bees with bee hives in environmentally friendly locations safe from pesticides.