

Classification of Honey by Packaging and Processing

Generally, honey is bottled in its familiar liquid form. However, honey is sold in other forms, and can be subjected to a variety of processing methods.

- **Crystallized honey** is honey in which some of the glucose content has spontaneously crystallized from solution as the monohydrate. Also called "granulated honey." Honey that has crystallized over time (or commercially purchased crystallized) in the home can be returned to a liquid state if stirred in a container sitting in warm water at 120 °F (approx 49 °C).
- **Pasteurized honey** is honey that has been heated in a pasteurization process. Pasteurization destroys yeast cells. It also liquefies any micro-crystals in the honey which delays the onset of visible crystallization. However, excessive heat-exposure also results in product deterioration as it increases the level of hydroxymethylfurfural (HMF) and reduces enzyme (e.g. diastase) activity. Heat also affects appearance, taste, and fragrance, darkening the natural honey colour (browning).
- **Raw honey** is honey as it exists in the beehive or as obtained by extraction, settling or straining without adding heat (although some honey that has been "minimally processed" is often labeled as raw honey) Raw honey contains some pollen and may contain small particles of wax. Local raw honey is sought after by allergy sufferers as the pollen impurities are thought to lessen the sensitivity to hay fever .
- **Strained honey** is honey which has been passed through a mesh material to remove particulate material (pieces of wax, propolis, other defects) without removing pollen, minerals or valuable enzymes.
- **Ultra filtered honey** is honey processed by very fine filtration under high pressure to remove all extraneous solids and pollen grains. The process typically heats honey to 150–170 °F (approx 65-77 °C) to more easily pass through the fine filter. Ultra filtered honey is very clear and has a longer shelf life, because it crystallizes more slowly because of the high temperatures breaking down any sugar seed crystals, making it preferred by the supermarket trade.
- **Ultrasonicated honey** is honey that has been processed by ultrasonication, a non-thermal processing alternative for honey. When honey is exposed to ultrasonication, most of the yeast cells are destroyed. Yeast cells that survive sonication generally lose their ability to grow. This reduces the rate of honey fermentation substantially. Ultrasonication also eliminates existing crystals and inhibits further crystallization in honey. Ultrasonically aided liquefaction can work at substantially lower temperatures of approximately 35 °C (95 °F) and can reduce liquefaction time to less than 30 seconds.
- **Whipped honey**, also called creamed honey, spun honey, churned honey, candied honey, and honey fondant, is honey that has been processed to control crystallization. Whipped honey contains a large number of small crystals in the honey. The small crystals prevent the formation of larger crystals that can occur in unprocessed honey. The processing also produces a honey with a smooth spreadable consistency.

- **Dried honey**, has the moisture extracted from liquid honey to create a completely solid, non-sticky honey. This process may or may not include the use of drying and anti-binding agents. Dried honey is commonly used to garnish desserts.
- **Comb honey** is honey still in the honeybees' wax comb. Comb honey traditionally is collected by using standard wooden frames in honey supers. The frames are collected and the comb cut out in chunks before packaging. As an alternative to this labor intensive method, plastic rings or cartridges can be used that do not require manual cutting of the comb, and speed packaging. Comb honey harvested in the traditional manner is also referred to as "Cut-Comb honey".
- **Chunk honey** is honey packed in wide mouth containers consisting of one or more pieces of comb honey immersed in extracted liquid honey.