



Kingdom of Saudi Arabia  
Saudi Food & Drug Authority



**honey**

## Honey

A natural sweet food substance made by honeybees from pollen, the secretions of plants and the secretions of insects feeding on plant juices. Although honey of all types are considered beneficial and safe, some consumers may develop adverse reactions including allergy and the risk of hyperglycemia in diabetic patients.



### Facts pertaining to Honey

- Honey shouldn't be given to a child younger than one year as it is likely to be contaminated with infant poisoning bacteria.
- A food source high in carbohydrate and other nutrients including vitamins, proteins and minerals





## Composition:

Honey consists mainly of water, monosaccharides (fructose, and glucose), and other compounds including organic acids. The composition of honey varies according to the plant on which bees feed.

## Description of honey

- **Color varies** from colorless (transparent) to dark brown depending on where the nectar is collected, how long is the honey stored and under what conditions. However, the level of brightness is determined by the number of suspended particles (e.g.: pollens).
- **Density** liquid, viscous, or partially/completely crystalized depending on a great multitude of various substances of different compositions and water contents.
- **Taste and flavor** vary according to the origin of the plant on which bees feed.
- **Crystallization** occurs under natural crystallization conditions in which fine and smooth crystals formulate as a result of the crystallization of glucose. The crystallization can be either homogenous or non- homogenous in which case crystals deposit at the bottom.



## Chemical properties

- **Acidity** The acid content is relatively low in honey, but is important for taste. The main acid present is gluconic acid which is the product of glucose oxidization by glucose oxidase.
- **pH** Honey is commonly acidic which means a pH value of less than 7.
- **Fermentation** fermentation in honey may present a problem. The main factors causing fermentation are high moisture content, high temperature and yeast.



## Classification of honey

### ■ Classification of Honey According to Origin:

- **Blossom honey or Nectar honey;** honey which originates from nectar of plant flowers.
- **Monofloral;** a single plant-based honey whose name is derived from its botanic source, e.g.; Citrus honey, Monaco honey, Acacia honey.
- **Mutlifloral;** a multiple plant-based honey, such as meadow and forest honey.
- **Honeydew;** honey which is obtained from the secretions of insects and syrup sucking hemiptera, or the secretion of live plants.

### ■ Classification of Honey According to shape or extraction methods:

- **Comb honey:** honey stored by bees in hexagonal-shaped beeswax cells, and are sealed and sold in whole beeswax capsules (with its protective layer intact).
- **Cut comb in honey:** honey containing one or more beeswax capsules.
- **Extracted honey;** honey extracted from beeswax cells after removing their protective wax layer by means of centrifuging techniques.

## Storage Methods

Honey products shall be kept in containers which preserve product's properties, prevent cross contamination and interaction with other products. They shall be kept away from sunlight or any heat source.

## Labelling:

Honey products shall have the following information on the label:

- 1.**Product's name.
- 2.**Country where honey is produced, packed and the name of the manufacturing or packing company.
- 3.**Additional information:

The origin of the honey in terms of geography (if it is specific to a certain geographical area), or/and terrain (mountain, desert), botanical source (if shown by physical, chemical, microscopical, or other organoleptic properties). The product's name shall be followed by the common, or botanical name.

- Honey can be described according to extraction method as:
  - Extracted
  - Compressed
  - Filtered
- honey can be described according to shape as:
  - Liquid, crystalized, or both.
  - Wax honeycomb.
  - wax honeycomb cuts
- “honey dew” must be indicated on the front label if applicable.
- “a mixture of flower honey and honey dew” must be indicated on the label when blending flower honey or nectar with honey dew.

