

WHAT IS HONEY AND WHY DO BEES MAKE HONEY?



Collecting Nectar



Filling combs

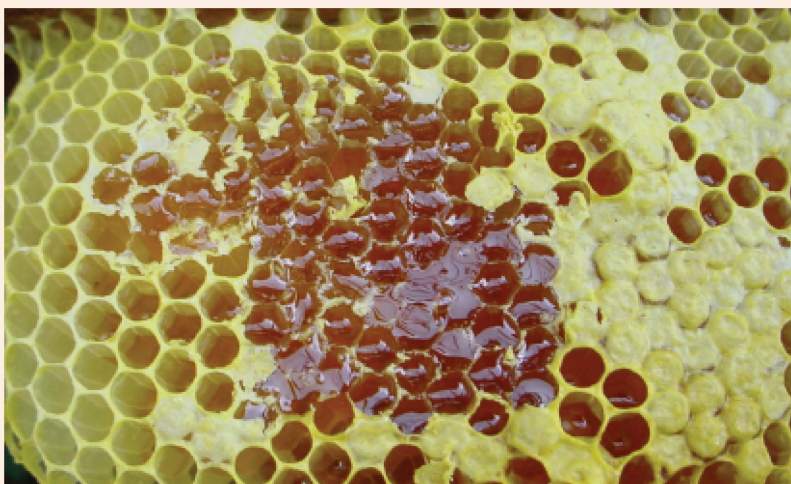


Water Evaporation



Final Honey

Honey is a sweet and viscous liquid prepared from nectar of flowers or extra floral nectarine. Honey is made by *Apis* species such as *Apis dorsata*, *A. laboriosa*, *A. cerana*, *A. karinjodian*, *A. florea*, *A. andreniformis*, *A. nigrocincta*, *A. mellifera*.



What is honey made of?

Predominantly made of sugars (approximately 80–85% carbohydrates).

The carbohydrates present are monosaccharides – fructose 38–39% and glucose 31% and disaccharides – sucrose– 5%.

15–17% water, 0.3% proteins, 0.2% ashes and minor quantities of amino-acids, phenols, pigments and vitamins.

Vitamins are found in trace amount– B vitamins riboflavin, niacin, folic acid, pantothenic acid and vitamin B6.

It also contains ascorbic acid (vitamin C), and the minerals calcium, iron, zinc, potassium, phosphorous, magnesium, selenium, chromium and manganese.

Why do bees make honey?

They store the nectar as honey in the cell and use it during lean period or when they are unable to forage and there are fewer flowers to gather food.

Process of making honey

Bees collect nectar from flower or extra floral nectarines. The worker bee sucks up the nectar through a long, thin tube called proboscis and keeps it in a special honey stomach, known as the crop. The nectar gets broken down into simple sugars and stored inside the honeycomb. The bees constantly keeps fanning of causes evaporation, creating sweet liquid honey.

Honey's colour and flavour vary based on the nectar collected by the bees.

FACTS:

- A single bee will create about one 12th of a teaspoon (0.8g) of honey during her lifetime.
- A honeybee's wings beat about 11,400 times per minute. They beat their wings to regulate the temperature in the hive.
- The colour of honey can be golden, amber, yellow, or brown. The colour of the honey can be different depending on the type of flowers the nectar was collected.
- Honey has anti-bacterial, anti-inflammatory, antioxidant, and probiotic properties.
- Flavonoids and polyphenols, which act as antioxidants, are two main bioactive molecules present in honey.
- Crystallization is a natural process and not a sign of adulteration or spoilage.



Food and Agriculture
Organization of the
United Nations

