

Honey is composed of sugar (about 76%), water (18%) and other ingredients that make up about 6%. Sugar gives the main characteristics of honey (sweetness), water follows (the liquid), and components that are found in small quantities determine the differences between various types of honey. These differences are the color, aroma and taste.

### Sugars

Sugar in honey is not a single species, but consists of three kinds of sugar. These are the fruit sugar (fructose), which has among the highest (41%), grape sugar (glucose), which has about 34% of ordinary sugar (sucrose) which is between 1 and 2%. The ratio of one type of sugar to other depends of the source, ie flower pasture, and to some extent on enzyme invertase, which breaks down regular sugar in grape and fruit. This enzyme is located in the flower from which the bees collect nectar, but it is also present in the bees body.

**Other ingredients** The other ingredients include: minerals, proteins, acids and undetermined matter. The ratio of these components varies from one type of honey to another.

### Minerals

Minerals has about 3.68%. Although this part of the honey does not make a large amount, minerals in honey raise the value of honey for human consumption. Honey contains most of the minerals: potassium, chlorine, sulfur, calcium, sodium, phosphorus, magnesium, silicon, iron, manganese and copper. When the observed mean value, dark types of honey are richer in minerals than lighter. Of course, singles can find a darker species that are poorer than some lighter species.

### Proteins

Proteins come in honey from nectar and pollen as a integral parts of plants. Proteins in honey may be in the form of a very complex structure or in the form of simple compounds, ie amino acids.

### Acids

Acids are also components of honey. Before it was believed that bees by stomach insert bee venom into the cell honeycomb with honey and make it so conserved. Given that one of the main components of bee venom is formic acid, it was thought that the honey has a formic acid. Even some people urged to other not to use honey because of that. Studies have shown that they are completely different acids that are composed in honey, mostly apple and lemon acid.

### Vitamins

Vitamins in honey has a very modest quantities, insufficient for the needs of the organism. In between are vitamn C and some B complex vitamins (riboflavin, pantothenic acid, pyridoxine,

biotin, nicotinic acid).

### Essential oils

Essential oils give the characteristic aroma of honey. These substances are very unstable and quickly evaporates by heating honey.