

FSSAI Advisory on Standards for Honey and prohibition of antibiotics

Recently some reports have been appeared in the newspapers regarding the permitted levels of antibiotics in honey. The following advisory is issued by Food Safety and Standards Authority to clarify the issues involved.

Honey is the natural sweet substance produced by honey bees from the nectar of blossoms or from secretions of plants.

When visually inspected, the honey shall be free from any foreign matter such as mould, dirt, scum, pieces of beeswax, the fragments of bees and other insects and from any other extraneous matter.

The colour of honey vary from light to dark brown.

Standards for honey have been prescribed under Prevention Food Adulteration (PFA) Rules, 1955 as under.

(a) Specific gravity at 27°C	Not less than 1.35
(b) Moisture	Not more than 25 per cent by mass
(c) Total reducing sugars	Not less than 65 per cent by mass
(c-i) for Carbia colossa and Honey dew	Not less than 60 per cent by mass
(d) Sucrose	Not more than to 5.0 per cent by mass
(d-i) for Carbia colossa and Honey dew	Not more than 10 per cent by mass
(e) Fructose-glucose ratio	Not less than 0.95
(f) Ash	Not more than 0.5 percent by mass
(g) Acidity (Expressed as formic acid)	Not more than 0.2 per cent by mass
(h) Fiehe's test	Negative
(i) Hydroxy methyl furfural(HMF), mg/kg	Not more than 80

If Fiehe's test is positive, and hydroxy methyl furfural (HMF) content is more than 80 milligram/kilogram, then fructose: glucose ratio should be 1.0 or more.

Rule 44 D provides for restriction on sale of Carbia Collosa and Honey dew. Carbia Collosa and Honey dew shall be sold only in sealed containers bearing AGMARK seal.

Rule 45 specifies that food resembling but not pure honey cannot be marked as honey. No person shall use the word 'Honey' or any word, mark, illustration or device that suggests 'Honey' on the label or any package of, or in any advertisement for, any food that resembles honey but is not pure honey.

Violation of the provisions of PFA Act/Rules attracts penal action.

No pesticide residues or antibiotics are allowed in honey.

The maximum limits of heavy metals in various foods are prescribed under PFA Rules, 1955. Rule 57 of PFA Rules prescribes the limits of contaminants under category "Foods not specified" (which includes honey) as follows:-

1. Lead	Not more than 2.5 ppm
2. Copper	Not more than 30.0 ppm
3. Arsenic	Not more than 1.1 ppm
4. Tin	Not more than 250.0 ppm
5. Zinc	Not more than 50.0 ppm
6. Cadmium	Not more than 1.5 ppm
7. Mercury	Not more than 1.0 ppm
8. Methyl Mercury	Not more than 0.25 ppm

Standards of Honey under AGMARK

The Department of Agriculture and Cooperation has laid down standards of honey under the Grading and Marking Rules (AGMARK), which lays down the grades, designation of honey as Special, Grade-A and Standard to indicate the quality of honey for the purpose of certification. It specifies the method of packing, marking and labelling and conditions for grant of certificate for authorization. The standards of AGMARK are voluntary.

In the matter of admissibility of antibiotics in honey, safety standards in India are similar to those in European Union, Codex Alimentarius and USA where they are completely prohibited.