

The Honey Trap

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Introduction:

Food and Agriculture Organization's (FAO's) Codex Alimentarius Commission says honey is "the natural sweet substance produced by honeybees from the nectar of plants or the secretions of living parts of the plants or excretions of plant sucking insects on the living parts of the plants, that bees collect, transform by combining with specific substances of their own, deposit, dehydrate, store and leave in the honeycomb to ripen and mature". It is one of the most appreciated and valued natural products introduced to humankind since ancient times. It is used not only as a nutritional product but also in health described in traditional medicine and as an alternative treatment for clinical conditions ranging from wound healing to cancer treatment. The ingredients have been reported to exert antioxidant, antimicrobial, anti-inflammatory, antiproliferative, anticancer and antimetastatic effects. On the other hand, honey is also susceptible to adulteration with cheaper sweeteners; those that have been detected in adulterated honey include sugar syrups and molasses inverted by acids or enzymes from corn, sugar cane, sugar beet and syrups of natural origin such as maple. A recent investigation by "Down to Earth" has found that honey is the most adulterated food in the world with the main source of adulteration of golden syrup, invert sugar syrup and rice syrup. These syrups for the most part are imported from China. Moreover, the report has clearly mentioned that the culprit is not solely China but it is at our end too – The Indian Importers.

This business of adulteration has constantly evolved to beat laboratory tests. It has become so sophisticated in the country that there are products available to cheat the tests that Indian food testing labs conduct to measure the purity of honey. A study has exposed the rampant adulteration of packaged honey sold in Indian markets. It claims that 13 of the biggest Indian brands have failed a key test NMR (Nuclear Magnetic Resonance) which is considered the gold standard for testing the quality of honey.



The main concern is not just that the honey we eat is adulterated, but that this adulteration is difficult to catch. In fact, it's been found that the sugar syrups are designed so that they can go undetected and the major role in designing these sugar syrups to bypass the standards is played by Chinese companies. These companies have informed the country's authorities that even if 50-80 percent of the honey is adulterated with syrup, it would pass all stipulated tests.

Especially, during the ongoing Covid-19 pandemic, Indians are consuming more honey because they believe in its intrinsic goodness, antimicrobial and anti-inflammatory properties and to build immunity against the virus. But if it is adulterated honey, what we are really eating is sugar, which will add to the challenge of overweight and obesity, which in turn makes us more vulnerable to severe COVID-19 infection. Honey adulterated with sugar will not make us well. Hence, it is time to outwit the business of adulteration and need of enforcement in India through public testing, so companies can be held responsible. The government should get samples tested using advanced technologies and make this information public so that consumers are aware and our health is not compromised.