

## Celebrate National Honey Month this September

September may prove to be a sweet month because it's National Honey Month which is sponsored by the National Honey Board. This special month was proclaimed by the U.S. Secretary of Agriculture and during this time, consumers are encouraged to try as many types of honey as possible and learn about the sweet, delicious and nutritious treat. Did you know that in the United States there are over 300 types of honey?

Honey has many uses to humans and we owe a debt of gratitude to the creatures that produce it. Honey bees have no easy task when it comes to making honey. It is a long process where the house bee and the field bee are both involved. The first step is for the field bee to go out and collect some nectar. The bee then brings the nectar back to the house bee and transfers it from tongue to tongue. The house bee then spreads a drop of the nectar on the roof of a cell in a comb. Over the next couple of days, other house bees fan their wings over the nectar drops so that the moisture evaporates. The last step is that more house bees cover every cell filled with modified nectar with a thin layer of wax.

For bees, honey is a source of protein and other nutrients. Humans also derive many uses from the sweet treat. Honey has many nutritional benefits. It is made up mostly of carbohydrates and water and is filled with lots of vitamins and minerals. Recently, it has been discovered that honey has high contents of antioxidants and a variety of flavonoids and phenolic acids. These eliminate free radicals from our bodies.

All-natural honey is also used to treat minor burns and scrapes. It has also been used for soothing sore throats and treating bacterial infections. A recent review of medical research documents its effectiveness as an antimicrobial agent. Honey is a natural source of energy that contains a unique mixture of glucose and fructose. It is said that the unique mixture of sugars in honey helps to prevent fatigue and enhance athletic performance. Honey is naturally hydrating and non-irritating making it an excellent ingredient in many hair and beauty products.

Honey has been used in various ways throughout history. For centuries it has been used by priests to sweeten cakes used in religious ceremonies. Romans used it like we use sugar today. Cleopatra most likely used it as a beauty product. In Biblical times, honey was a main food source and is mentioned many times in the *Holy Bible*.

Honey bees not only make honey they have other, extremely important functions to humans. The honey bee is essential for food production. As the worker bees land on flowers and take in nectar, tiny particles called pollen stick to their fuzzy hairs. When the bee visits another flower this pollen rubs off and the flower is pollinated. Many plants will not produce fruit without the help of these bees. In the United States alone, it is estimated that honeybees pollinate at least one quarter of all the fruit produced for food. That's about \$15 billion worth of work for these tiny creatures. Honey bees are certainly one of the most economically beneficial insects.

Unfortunately, honey bees have had a rough time lately. They have suffered such challenges as colony collapse disorder, new pathogens, small hive beetles, pesticides, genetically modified crops and parasitic mites.

This September, remember the honey bee and its usefulness and try some different types of honey! To get you started on your adventurous honey month, here are a few interesting facts about the sweet delicacy:

- Honey bees tap 2 million flowers and fly more than 55,000 miles to make 1 pound of honey.
- The average American consumes 1.29 pounds of honey a year.
- The mysterious Colony Collapse Disorder has killed more than 33% of U.S. commercial Honey Bees since 2006.
- Last year, 161 million pounds of honey were produced in the U.S.
- Häagen-Dazs has donated \$500,000 to Penn State and UC Davis for Bee research; 50% of its flavors are made with ingredients requiring bee pollination.
- Crops such as apples, cherries, and avocados are 90% dependent on honey bee pollination.
- California, which produces more than half of the world's almonds, needs almost 1 million colonies of Honey Bees to pollinate that crop.
- 1,600 commercial beekeeping operations produce 60% of American honey.
- 95% of American beekeepers are hobbyist with fewer than 25 hives.
- There are approximately 300 varieties of honey in the U.S. The darker the honey the higher the mineral content and antioxidant potential.
- Because of the floral sources from which honey originates, no two honeys are exactly alike in flavor or nutritional content.
- The world's most expensive honey is believed to be Trogthnan manuka honey from Britain. Only 100 4-ounce jars are made per year; each sells for \$80, about \$11 a teaspoon.
- The National Honey Board recommends consumers store honey at room temperature. When substituting honey for granulated sugar, begin by substituting honey for up to half of the sugar called for in a recipe. When baking, remember to reduce any liquid by one fourth of a cup for each cup of honey used. Add a half teaspoon of baking soda for each cup of honey used and reduce the oven temperature by 25 degrees to prevent over-browning.