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Review Article

The Benefits of Honey in Holy Quran

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Abstract

Honey contains a wide variety of vitamins, minerals, amino acids and antioxidants. The vitamins found in honey include niacin, riboflavin and pantothenic acid; minerals present include calcium, copper, iron, magnesium, manganese, phosphorus, potassium and zinc. In addition honey contains a variety of flavonoids and phenolic acids which act as antioxidants, scavenging and eliminating free radicals. Honey has had a long history in human consumption, and is used in various foods and beverages as a sweetener and flavoring. It also has a role in religion and symbolism. Medicinal importance of honey has been documented in the world's oldest medical literatures, and since the ancient times, it has been known to possess antimicrobial property as well as wound-healing activity. More than 1,400 years ago, honey is described as a source of healing in the Quran and it is also mentioned as one of the foods of Paradise.

Key Words: Benefits, Honey, Quran.

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Introduction

Honey is a sweet syrupy substance produced by honeybees from the nectar of flowers and used by humans as a sweetener and a spread. Honey is comprised of 17-20% water, 76-80% glucose, and fructose, pollen, wax, and mineral salts. Its composition and color is dependent upon the type of flower that supplies the nectar. For example, alfalfa and clover produce a white honey, heather a reddish-brown, lavender an amber hue, and acacia and sainfoin a straw color (1).

History of honey

Honey collection is an ancient activity. Humans apparently began hunting for honey at least 8,000 years ago, as evidenced by a cave painting in Valencia, Spain (2). The painting is a Mesolithic rock painting, showing two honey-hunters collecting honey and honeycomb from a wild bee nest. The figures are depicted carrying baskets or gourds, and using a ladder or series of ropes to reach the wild nest.

The Greater Honey guide bird guides humans to wild bee hives (3) and this behavior may have evolved with early hominids (4,5).

So far, the oldest remains of honey have been found in Georgia. Archaeologists have found honey remains on the inner surface of clay vessels unearthed an ancient tomb, dating back to some 4,700–5,500 years ago (6,7). In ancient Georgia, honey was packed for people's journeys into the afterlife. And more than one type, too – along for the trip were linden, berry, and a meadow-flower variety (8).

Over four thousand years ago, honey was used as a traditional ayurvedic medicine, where it was thought to be effective at treating material imbalances in the body.
- In pre-Ancient Egyptian times, honey was used topically to treat wounds.
- Egyptian medicinal compounds more than five millennia ago used honey.
- The ancient Greeks believed that the consuming honey could help make you live longer.
- Even the Prophet Mohammed glorified the healing powers of honey.
-The Quran also praises honey's healing ability.

Properties of honey

Honey has had a long history in human consumption, and is used in various foods and beverages as a sweetener and flavoring. It also has a role in religion and symbolism. Flavors of honey vary based on the nectar source, and various types and grades of honey are available. It has also been used in various medicinal traditions to treat ailments. Honey is made up of glucose, fructose, and minerals such as iron, calcium, phosphate, sodium chlorine, potassium, magnesium.

Below is a typical honey profile, according to Bee Source:

- Fructose: 38.2%
- Glucose: 31.3%
- Maltose: 7.1%
- Sucrose: 1.3%
- Water: 17.2%
- Higher sugars: 1.5%
- Ash: 0.2%
- Other/undetermined: 3.2% .

The slightly acidic pH level of honey (between 3.2 and 4.5) is what helps prevent the growth of bacteria, while its antioxidant constituents cleans up free radicals. The physical properties of honey vary depending on the specific flora that was used to produce it, as well as its water content. Indeed, medicinal importance of honey has been documented in the world's oldest medical literatures, and since the ancient times, it has been known to possess antimicrobial property as well as wound-healing activity (9-15).

The use of traditional medicine to treat infection has been practiced since the origin of mankind, and honey produced by *Apis mellifera* (*A. mellifera*) is one of the oldest traditional medicines considered to be important in the treatment of several human ailments. Currently, many researchers have reported the antibacterial activity of honey and found that natural unheated honey has some broad-spectrum antibacterial activity when tested against pathogenic bacteria, oral bacteria as well as food spoilage bacteria. In most ancient cultures honey has been used for both nutritional and medical purposes. The belief that honey is a nutrient, a drug and an ointment has been carried into our days, and thus, an alternative medicine branch, called apitherapy, has been developed in recent years, offering treatments based on honey and other bee products against many diseases including bacterial infections.

Honey is an ancient remedy for the treatment of infected wounds, which has recently been 'rediscovered' by the medical profession, particularly where conventional modern therapeutic agents fail. The first written reference to honey, a Sumerian tablet writing, dating back to 2100-2000 BC, mentions honey's use as a drug and an ointment. Aristotle (384-322 BC), when discussing different honeys, referred to pale honey as being "good as a salve for sore eyes and wounds". Manuka honey has been reported to exhibit antimicrobial activity against pathogenic bacteria such as *Staphylococcus aureus* (*S. aureus*) and *Helicobacter pylori* (*H. pylori*) making this honey a promising functional food for the treatment of wounds or stomach ulcers.

There are many reports of honey being very effective as dressing of wounds, burns, skin ulcers and inflammations; the antibacterial properties of honey speed up the growth of new tissue to heal the wound. The medihoney and manuka honey have been shown to have *in vivo* activity and are suitable for the treatment of ulcers, infected wounds and burns (16,17).

Traditional medicine

Historically, honey has been used by humans both orally and topically to treat various ailments including gastric disturbances, ulcers, wounds, and burns. Honey was used medicinally by ancient Greeks and Egyptians and has been traditionally used in Ayurveda in India and in Traditional Chinese Medicine (18,19). The Quran mentions honey as medicine (19,20). Honey-producing and consuming countries: In 2012, China, Turkey, and Ukraine were the top producers of natural honey(Table.1) (21).

Table 1: Top Five Natural Honey Producing Countries
(in metric tons)

Rank	Country	2010	2011	2012
1	China	401,000	431,000	436,000
2	Turkey	81,115	94,245	88,162
3	Argentina	59,000	74,000	75,500
4	Ukraine	70,873	40,311	70,134
5	United States	80,042	67,294	66,720
—	World	1,222,601	1,169,441	1,260,229

Honey is a viscous concentrated solution of sugars produced by bees (*Apis-mellifera*) that collect and process the blossom nectar (flowers or floral honey) or sweet juices on certain plant species (honeydew or forest honey). Honey is one of the most complex and valuable natural biological products used since ancient times, both in nutrition and medicine (through internal and external means). Among other medical uses, honey has served in wound care since ancient times (22-25):

- Sumerian civilization (fragments of pottery, 2100-2000 BC)
- Ancient Egyptian civilization (The Edwin Smith Papyrus, 2600-2200 BC)
- Ayurveda and Chinese medicine
- Ancient Greek civilization (Dioscorides "*de materia medica*", for treating fistulising wounds; Hippocrates)
- Ancient Rome civilization (Pliny, for treating infected wounds)
- Mentions in the Bible and the Quran.

Randomized trials have shown that honey is more effective in controlling infection in burn wounds than silver sulphadiazine, the antibacterial ointment most widely used on burns in hospitals.

Supports blood formation

Honey provides an important part of the energy needed by the body for blood formation. In addition, it helps in cleansing the blood. It has some positive effects in regulating and facilitating blood circulation. It also functions as a protection against capillary problems and arteriosclerosis.

Does not accommodate bacteria

This bactericide (bacteria-killing) property of honey is named "the inhibition effect." There are various reasons of this anti-microbial property of the honey. Some examples are: the high sugar content that limit the amount of water microorganisms need for growth, its high acidity (low pH) and composition which deprive bacteria from nitrogen necessary for reproduction. The existence of hydrogen peroxide as

well as antioxidants in the honey prevents bacteria growth.

Antioxidant

Everyone who wants to live a healthier life should consume antioxidants. Those are the components in cells that get rid of harmful byproducts of normal metabolic functions. These elements inhibit destructive chemical reactions that cause spoilage of food and many chronic illnesses. Researchers believe food products rich in antioxidants may prevent heart problems and cancer. Strong antioxidants are present in honey content: *Pinocembrin, pinobaxin, chrisin and galagin. Pinocembrin* is an antioxidant that merely exists in the honey (26).

Vitamin and mineral depot: Honey is composed of sugars like glucose and fructose and minerals like magnesium, potassium, calcium, sodium chlorine, sulphur, iron and phosphate. It contains vitamins B1, B2, C, B6, B5 and B3 all of which change according to the qualities of the nectar and pollen. Besides the above, copper, iodine, and zinc are also present, albeit in small quantities.

Honey is used in healing wounds

When used in treatment of wounds, thanks to its ability to absorb moisture from the air, honey facilitates healing process and prevents scarring. This is because honey stimulates the growth of epithelial cells that form the new skin cover over a healed wound. In this way, even in case of large wounds, honey may eliminate the need for tissue transplantation.

- Honey stimulates the regrowth of tissue involved in the healing process. It stimulates the formation of new blood capillaries and the growth of fibroblasts that replace the connective tissue of the deeper layer of the skin and produce the collagen fibres that give strength to the repair.

- Honey has an anti-inflammatory action, which reduces the swelling around a wound. This improves circulation and thus hastens the healing process. It also reduces pain.

- Honey does not stick to the underlying wound tissues, so there is no tearing away of newly formed tissue, and no pain, when dressings are changed.

- Thanks to its aforementioned antimicrobial property, honey provides a protective barrier to prevent wounds becoming infected. It also rapidly clears any existing infection from wounds. It is fully effective, even with antibiotic-resistant strains of bacteria. Unlike antiseptics and antibiotics, there is no impairment of the healing process through adverse effects on wound tissues (27).

The Miracle of Honey in Quran

More than 1400 years ago Allaah and His messenger told us that honey can heal a variety of medical problems. Honey is described as a source of healing in the Quran: "And the Lord inspired the bee, saying: Take your habitations in the mountains and in the trees and in what they erect. Then, eat of all fruits and follow the ways of your Lord made easy (for you)'. There comes forth from their bellies a drink of varying colors wherein is healing for men. Verily in this is indeed a sign for people who think" (28,29).

It is also mentioned as one of the foods of Paradise: "The description of Paradise which the pious have been promised is that in it are rivers of water the taste and smell of which are not changed; rivers of milk of which the taste never changes; rivers of wine delicious to those who drink; and rivers of clarified honey, clear and pure..."(30).

Allaah Says (what means): Although there is healing in honey for a variety of medical disorders, certain precautions should be taken:

1- Children under the age of one year should not be given honey due to the possibility of infant botulism. This type of food poisoning can be deadly, however, it only seems to affect infants under one year of age.

2- If you have any known allergies to specific plants, then you should make sure the honey you are using is not produced from that plant.

3- People with allergies to bee stings should be careful when using other bee-related products such as propolis or royal jelly.
If these precautions are followed, then honey may provide healing for you.

Conclusion

Honey can be the new antibiotic for the 21 st century! Thousands of studies and experiments proved this. The Holy Quran, however, proved it 14 centuries back. This is undoubtedly one of the miracles of the Qur'an Allah, who is exalted in power, has revealed. Allah Almighty's Divine Claim about honey containing healing and medicine to mankind was indisputably proven to be true! The Noble Quran is filled with scientific statements and notions. What's most amazing is that all of these scientific statements and notions had been proven to be in perfect agreement with science and our modern-day scientific discoveries.

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