

Honey: A review of uses of natural honey in human diseases by modern and traditional method.

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***Abstract :**

1) Honey has a very complex chemical composition that varies depending on botanical source.

2) Honey is a byproduct of flower honey-bee which is concentrated through dehydration process inside the bee hive.

3) Honey is most appreciated and valued natural product introduced to human kind since ancient times.

4) Honey is used not only as a nutritional product but also in health described in traditional medicines, the ingredients of honey have been reported to exert antioxidant, antimicrobial, anti-inflammatory, antiproliferative, anticancer & antimetastatic effect.

5) In addition to the important role of natural honey in traditional medicine, during the past few decades, it has been subjected to laboratory and clinical investigation by several research groups and it has found a place in modern medicine.

6) Antioxidant capacity of honey is important in many disease conditions and is due to a wide range of compounds.

7) Honey has also been used in some gastrointestinal, cardiovascular, inflammatory & neoplastic states.

8) This review covers the modern and traditional uses of honey as medicine in human diseases.



***Keywords :**

Honey, use in human diseases by modern method & traditional method, therapeutic use, medicinal properties, health benefits.

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I. *Introduction

1) Honey is a natural product, it is formed by the nectar of a flower of honey bees. (*Apis mellifera*, belongs to family Apidae) [1]

2) Most ancient population consumes honey both for nutritional aims and for its medicinal properties. [2,3]

E.g. Romans, Greeks, Chinese, etc.

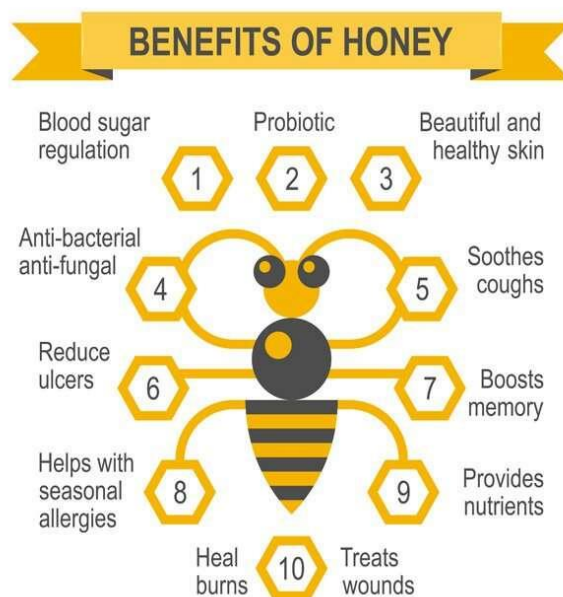
3) Honey is only insect-derived natural product and it has nutritional, cosmetic, therapeutic and industrial values. [3]

4) Honey does not need refrigeration because it never spoils and it can also be stored at room temperature. It is revived as a balanced diet & equally popular for male & female of all ages [4]

5) Nowadays, the usage of honey for the cure of many human diseases can be found in generally magazines, journals & natural product leaflets and suggesting a wide variety of unknown activities & also with evidence it indicates

that honey can exert several health-beneficial effect including, Gastrointestinal [3], antioxidant ,anti-Inflammatory, anti-bacterial etc.[4,5]

6) Although many investigation were done on honey, only afew are published . this study , which is a review on current situation & literature also a highlights therapeutic benefits of honey is management of a diseases.



***Therapeutic uses of honey :-**

1) Antiviral activity-

Natural honey has showed antiviral effects. Al-wali(2004) investigated the effects of topical application of a honey on a recurrent attacks of a herbs lesion and concluded that topical honey application was safe & effective in managmnet of sings &symptomps of recurrent lessions from labial & genital herps compounds to acyclovir cream (6,7) Honey has also been reported to have inhabitoryeffects on rubella virus activity (6)

2) Anti-Inflammatory effects of honey:-

In investigation it wasreported that honey reduces activities of cyclooxygenase -1 & cyclooxygenase-2 thus showing anti- inflammatory effects [6,8]in which it it honey was as effectives as prednisolone treatment in inflammatory model of colitis.Honey also demonstrates the immune modulatory activities.[10]

3) Anti- Oxidant Activity

Oxidant agent such as oxygen involved in preventing damage play as an anti- oxidant which is detected in foods & human body [3,4,9] The natural anti-oxidant function in human body has not fully understood however the investigation illustrated of function in effects of natural honey in many of aging & process highly reactive ingredient drive from oxygen which named free radiates & reactive oxygen species (ROS) are generated interact with lipids & protein components in the cell membrane, enzymes as well as DNA. This damaging reaction may lead to various diseases [11]

***Medicinal Properties :-**

1) Honey in Diabetes :-

There are strong evidence which indicator beneficial effects of honey in treatment of diabetes mellitus. Ina normal &hypelipidermic patients, it also reduces blood lipids, homocytatwne&c- Reactive protein contents [12]

The restriction associated with use in of antioxidant other interventions targeted at decresing ROS generation may also be used as an adjuncts to convetional therapy . In one of clinical trials of type 1 & type 2 diabetis mellitus , applications of honey was associated with aromatically lower glicemic index than with sucrose or glucosein type 1 diabetis& normal. Type 2diabetis has value similar for honey, glucose and sucrose . in diabetic patient honey can induce significantly a reduction in plasma glucose level versus dextrin [2,9]

2) Honey and wound :

Honey is oldest wound healing agent known to mankind when some modern chemicals have failed in this regard. [2,4]After any skin injury bacteria that live on your skin can infect and penetrate wound site. Honey has been found to destroy these bacteria. [6]

Honey induces leukocytes to release cytokines, which is what begins tissue repair cascades. Further it activates immune response to infection.[13]

3) Honey and cancer :

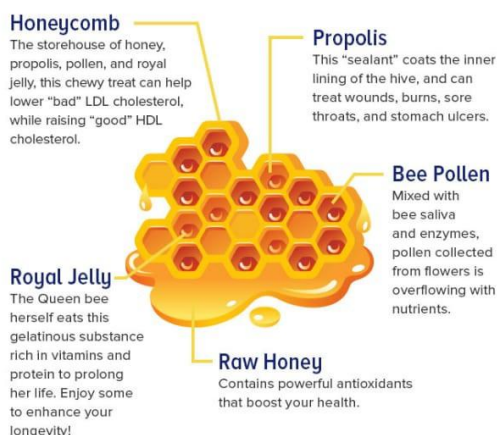
Current studies show honey may exert anticancer effects through several mechanisms. Investigations have indicated that honey has anticancer property through its interference with multiple cell signaling pathways, including inducing apoptosis, antimutagenic, antiproliferative, anti-inflammatory pathways. Honey modifies the immune response. [14]

Honey has been indicated to prevent cell proliferation, induces apoptosis, cell cycle progression and cause mitochondrial membrane depolarization in several types of cancer such as skin cancer(melanoma)[2,4] cervical cancer cells, liver cancer cells, prostate cancer cells, etc.

EATING THE WHOLE HONEYCOMB:

The Benefits of Propolis, Pollen, Royal Jelly & Raw Honey

Skip the processed honey and buy the whole honeycomb -- its rich in all kinds of amazing bee products that can heal your body from the inside out.

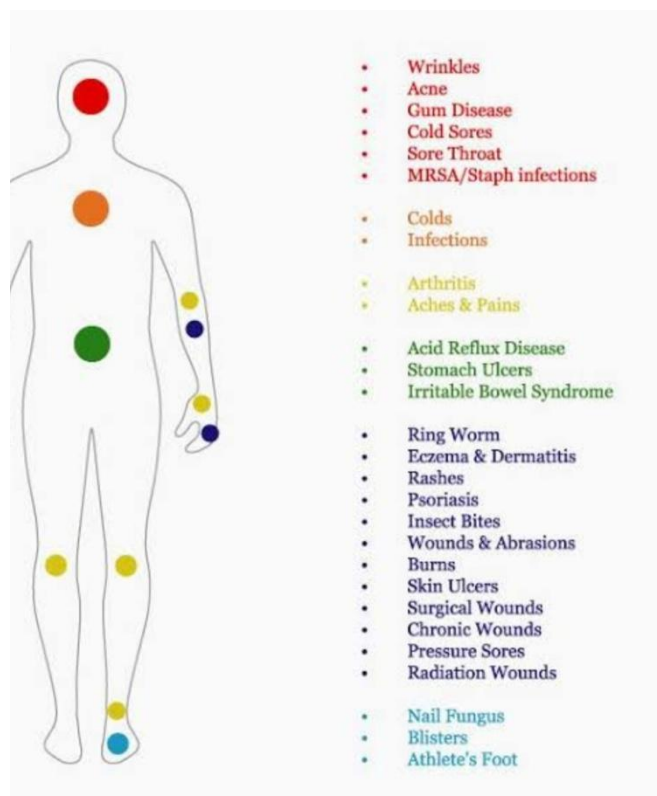


4) Honey and Asthma :

Honey is commonly used in folk medicine to treat inflammation, cough and fever. [15]The ability of honey to act in reducing asthma-related symptoms or as a preventive agent to preclude induction of asthma was showed. [15]

Chronic bronchitis and bronchial asthma were treated by oral honey consumption in animal modeling. [2] Furthermore, the study conducted by Kamaruzaman et. al. showed that treatment with honey effectively inhibited oval bumin-induced airway inflammation by reducing asthma-related histopathological changes in airway and inhibit induction of asthma.[16]

Future studies are needed to investigate these effects of honey to better understand mechanisms by which honey reduces asthma symptoms.



Overview of Health Benefits of Honey :

- Reduce weight faster.
- Strengthens immune system.
- Nourishes skin and face.(Natural moisturizer, Glowing face, Acne treatment, Protect from UV ray)
- Boosts your memory.
- Home remedy for cough.
- Reduces dandruff from hair.
- Acts as natural sleeping aid.
- Eases sinus issues.
- Helps with gum diseases.
- Natural energy drink.
- Antiseptic.
- Antibacterial.
- Antioxidant.
- Cancer prevention.
- Treat wounds.
- Heal burns.
- Antidiabetic.
- Antihypertensive.
- Anti-inflammatory.

II. Conclusion:

On the basis of too many studies and this review with the evidence exist in the management of disease conditions.Evidence confirming use of honey in all areas of clinical practice is needed. One f the most important natural product is honey, which has been used for different medicinal purposes since ancient times. The most well known effect of honey is antibacterial activity, as well as antioxidant activity and also anti-inflammatory.As well as there are too many benefits of honey for human health and honey is also useful for traditional and modern methods on human diseases treatment .Therefore, it is needed that the future researches should be investigate on various medicinal uses of honey.

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