

# Health Benefits of Honey

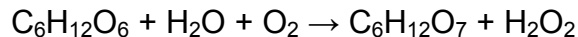
For at least 2700 years, honey has been used to treat a variety of ailments through topical application, but only recently have the antiseptic and antibacterial properties of honey been chemically explained. Wound Gels that contain antibacterial honey and have regulatory approval for wound care are now available to help conventional medicine in the battle against drug resistant strains of bacteria MRSA. As an antimicrobial agent honey may have the potential for treating a variety of ailments. Antibacterial properties of honey are the result of the low water activity causing osmosis, hydrogen peroxide effect, and high acidity.

## Osmotic effect

Honey is primarily a saturated mixture of two monosaccharides. This mixture has a low water activity; most of the water molecules are associated with the sugars and few remain available for microorganisms, so it is a poor environment for their growth.

## Hydrogen peroxide

Hydrogen peroxide in honey is activated by dilution. However, unlike medical hydrogen peroxide, commonly 3% by volume, it is present in a concentration of only 1 mmol/l in honey. Iron in honey oxidizes the oxygen free radicals released by the hydrogen peroxide.



When used topically (as, for example, a wound dressing), hydrogen peroxide is produced by dilution with body fluids. As a result, hydrogen peroxide is released slowly and acts as an antiseptic.

## In diabetic ulcers

Topical honey has been used successfully in a comprehensive treatment of diabetic ulcers when the patient cannot use other topical antibiotics.

## Acidity

The pH of honey is commonly between 3.2 and 4.5. This relatively acidic pH level prevents the growth of many bacteria.

## **Nutraceutical effects**

Antioxidants in honey have even been implicated in reducing the damage done to the colon in colitis. Such claims are consistent with its use in many traditions of folk medicine.

## **Other medical applications**

Some studies suggest that the topical use of honey may reduce odors, swelling, and scarring when used to treat wounds; it may also prevent the dressing from sticking to the healing wound.

Honey has also been used as a treatment for sore throats and coughs for centuries and according to recent research may in fact be more effective than most common medicines.

Honey has been shown to be an effective treatment for conjunctivitis in rats.

Honey (especially when combined with lemon) is often taken orally by pharyngitis and laryngitis sufferers, in order to soothe them.

Though widely believed to alleviate allergies, local honey has been shown to be no more effective than placebos in controlled studies. This may be because most seasonal allergies are caused by tree and grass pollens, which honeybees do not collect.