



Manuka Honey and Wound Care: How and Why It Works



Honey has been used as a wound healing agent for thousands of years, with mention in some of the oldest books in history: the Qur'an and the Bible. Early civilizations like ancient Egyptians mixed honey with other ingredients to create topical wound dressings. In ancient Greece, Hippocrates, the father of modern medicine, used honey to manage wounds, among other infections. During World War I, the Russians used honey to speed wound healing and prevent wound infection, while the Germans mixed it with cod liver oil to treat boils, burns, ulcers, and fistulas. [1] Today honey maintains its reputation as a go-to for wound healing. Furthermore, with the advent and acceleration of antibiotic resistant bacteria, there is new research focused on finding natural approaches to meet the fast changing demands that the pharmaceutical companies are unable to keep pace with.

Manuka honey is beneficial in wound healing due to its antibacterial properties and unique pH balance. It has been widely investigated as a wound healing alternative because of its strong and rare antibacterial properties and was even approved by the FDA in 2007 as a possible wound treatment. [2] This article investigates how it works and its effectiveness as a wound-healing agent.



What Makes Manuka Honey a Great Wound Healing Agent?



1. Manuka honey contains antibacterial and healing properties.

Honey, in general, has antibiotic properties that are beneficial in killing bacterial biofilms like *Pseudomonas aeruginosa* (PA) and *Staphylococcus aureus* (SA). [3] In a 2009 study, researchers reported that using honey for wound treatment might be beneficial in individual wound care. Their results demonstrated that honey has a bactericidal effect against wound pathogens grown in the laboratory as biofilms. [4]

Manuka honey has more superior antibacterial properties when compared to other types of honey. This is attributed to the presence of methylglyoxal which is normally formed through the conversion of dihydroxyacetone (DHA) during Manuka honey's maturation process. [5] Research shows that Manuka honey maintains its effectiveness even after substantial dilution with wound exudate. [6]

2. Manuka honey has a low pH.

Normally, honey has an acidic pH of between 3.2 and 4.5. The high acidity promotes the release of oxygen from the blood, thereby reducing the presence of proteases which are detrimental to the wound-healing process.

3. Manuka honey has a high sugar concentration.

The high sugar content creates an osmotic effect that draws out water from the wound, thus minimizing swelling and encouraging lymphatic outflow. [7] The negative pressure created around the wound promotes wound healing by depriving bacterial cells of water which keeps them from multiplying. According to Peter Molan's research in 2009,



honey's osmotic effect promotes autolytic wound debridement, which discourages bacterial growth and promotes healing. [8]

4. Manuka honey contains low water content.

Honey generally has a water activity of about 0.6 - 0.75. This makes it uninhabitable for many microorganisms as they depend on water for survival. [9] Low water activity promotes fluid flow, which flushes bacteria and debris out of the wound and carries nutrients and oxygen from the body into the wound area. [7]

5. Manuka honey is rich in polyphenols and flavonoids.

Manuka honey has a wide range of flavonoids and phenolic acids which contain immunostimulant properties. [9] These compounds are instrumental in promoting tissue growth for wound repair and suppressing inflammation. Flavonoids, in particular, scavenge free radicals and help control inflammation, thereby preventing tissue damage. [7]

6. Manuka honey is a thick covering agent.

Manuka honey has a high viscosity, a property that helps it form a thick barrier between the wound and the environment. This is useful as it protects against bacteria and keeps the wound moist, a requirement for accelerated healing. [7]

Manuka Honey and Different Types of Wounds





1. Chronic non-healing wounds.

Chronic wounds are hard to treat, and for many people, they are a constant expense and source of pain. Resistant bacteria is one of the most common factors that delay the healing process. Chronic wounds are characterized by multiple bacterial species living in complex biofilms. The biofilm forms a barrier that protects bacteria from the body's immune response and antibiotics, leading to a chronic non-healing wound.

Manuka honey breaks down biofilms and promotes wound debridement, which is important in wound healing. It also reduces inflammation by suppressing the production of inflammatory cells and encourages the release of proinflammatory cytokines, which are beneficial in wound healing. [9] In a 2008 study investigating the effectiveness of Manuka dressings on chronic wound infections, researchers reported that they were able to use honey-impregnated dressings successfully for more than a year in the maxillofacial ward. [10]

2. Leg Ulcerations

Manuka honey has been shown to be effective in healing leg ulcerations. In a 2005 study, researchers reported that Manuka honey helped reduce wound size, and pain, and eliminate odor. [11] This was also confirmed in another study that reported, "ulcer pain and size decreased significantly, and odorous wounds were deodorized promptly." [12]

3. Diabetic Wounds

For diabetic wounds there is no clear consensus. Some research points to the effectiveness of Manuka honey on diabetic wounds, while other reports indicate it is not recommended for diabetic patients.

According to a 2004 study investigating honey's effectiveness in managing diabetic foot ulcers, the researchers reported that "the use of honey and normal saline protocol appeared to reduce the time of healing, hospital stay, and the need for amputation. It is non-irritant, has an antimicrobial effect and debriding action. It also promotes healing and is cost-effective in the management of diabetic foot ulcers." [13]

4. Bed Sores

Immobilized patients are likely to suffer from bed sores as a result of lying on their side or back. In a 2012 study, researchers reported that honey might be beneficial in relieving pain and accelerating wound healing in cancer patients with bed sores. [14]



5. Other Types of Wounds: Scratches, Burns, Cuts

While there may be limited research on the effectiveness of Manuka honey on scratches, burns, and cuts, there is plenty of anecdotal evidence that supports that Manuka honey is beneficial in these types of wounds.

Here are some testimonials we've received from our customers after using our Manuka honey.

"...I also had a scratch on my arm from my dog. I applied the honey to the wound once a day for 4 days, and it was healed! I'm so impressed because I have a connective tissue disease, and wounds take forever to heal on my skin. If you haven't tried this honey, you're missing out on the world's best..." - Cindy Lawson.

"...Shortly after I received this high activity Manuka, I severely burned my wrist while cooking. A quick internet search led me to a great recipe for burns: I put a couple of drops of lavender oil on the burn (which stung like heck and was red as a beet) and, covered the lavender oil with the Manuka 550+ and wrapped it with gauze for the night. I expected to have to change my bandage in the morning, but when I unwrapped my wrist, it looked totally normal! No red, no pain, no sign at all that I had burned it severely. I've used Manuka honey for years in lower grades, but now I'll always keep some of the high-grade medicinal Manuka on hand for medical purposes..." - Dawn Anstine.

This Manuka honey is the best I've ever had, and I highly recommend it! It works for a sore throat, it helped heal a cut I had on my finger, and I have it every morning on my toast to keep me healthy from all the virus that is going around. It truly is a miracle. - Andrea Sanders.



How to Apply Manuka Honey On Wounds



If you have a wound that doesn't heal, we advise you to consult your healthcare provider before applying honey to the wound. You can also ask your doctor or nurse to guide you on adequately dressing your wound with Manuka honey. This is because the application of the dressing and the amount of honey used directly affect how well your wound heals.

When applying Manuka honey by yourself at home:

1. Wash your hands.
2. Apply honey to the dressing and then apply the dressing to your skin. We recommend doing it like this in order to reduce messiness.
3. Apply a dry dressing over the honey to seal it in. This can be sterile gauze pads or an adhesive bandage.
4. Replace the dressing frequently and keep the area clean.
5. Finally, remember to wash your hands every time you dress the wound.



Conclusion



Manuka honey may very well be the answer to combat antibiotic resistance due to its strong antibacterial properties. Finding an alternative healing method can be a godsend for people who cannot tolerate antibiotic medications. Manuka honey has been shown to be effective both in laboratory conditions and in some clinical studies. However, further high-quality randomized controlled trials need to be conducted to verify its effectiveness as an alternative treatment method. Before you try Manuka honey on your wound or open sore, check with your doctor to ensure it's safe.

Grab your jar of [authentic, fresh, hive-to-jar Manuka honey](#) and begin enjoying its benefits today.

FAQ:

1. Can You Use Manuka Honey For Pet Wounds?

Yes, you can. A high MG Manuka honey has a strong antimicrobial effect potent enough to eliminate the most common wound pathogens. It also has osmotic debridement action which helps remove debris from the wound area.



References:

1. Traditional and Modern Uses of Natural Honey in Human Diseases: A Review - PMC
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3758027/>
2. 510(k) Premarket Notification
<https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm?ID=K133729>
3. Effectiveness of honey on Staphylococcus aureus and Pseudomonas aeruginosa biofilms
<https://pubmed.ncbi.nlm.nih.gov/19559969/>
4. a study of the effects of honey on 'planktonic' and biofilm-embedded chronic wound bacteria
<https://pubmed.ncbi.nlm.nih.gov/19308800/>
5. Identification and quantification of methylglyoxal in Manuka honey - Magritek
<https://magritek.com/2021/01/29/identification-and-quantification-of-methylglyoxal-in-manuka-honey/>
6. Honey: A Biologic Wound Dressing
<https://pubmed.ncbi.nlm.nih.gov/26061489/>
7. Honey-Based Templates in Wound Healing and Tissue Engineering - PMC
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6027142/#:~:text=Manuka%20honey%20has%20been%20shown%20to%20be%20especially%20useful%20against,but%20also%20sterilize%20the%20wound.>
8. Debridement of wounds with honey
<https://researchcommons.waikato.ac.nz/handle/10289/6252>
9. Manuka honey: A promising wound dressing material for the chronic nonhealing discharging wounds: A retrospective study - PMC
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8386265/>
10. Manuka honey dressing: An effective treatment for chronic wound infections
<https://pubmed.ncbi.nlm.nih.gov/17113690/>
11. Case series of use of Manuka honey in leg ulceration
<https://pubmed.ncbi.nlm.nih.gov/16722850/>



12. Acceptability to patients of a honey dressing for non-healing venous leg ulcers
<https://pubmed.ncbi.nlm.nih.gov/15160574/>
13. https://scholar.google.com/scholar_lookup?hl=en&volume=11&publication_year=2004&pages=20-2&journal=JRMS&issue=%00null%00&issn=%00null%00&author=SK.+Hammouri&title=The+role+of+honey+in+the+management+of+diabetic+foot+ulcers&pmid=%00empty%00&doi=%00null%00
14. The role of honey in healing of bedsores in cancer patients - PMC
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3876612/>