

# Manuka Honey Aids Symptoms of Ulcerative Colitis



Can Manuka honey help manage ulcerative colitis? How effective is it? These are some of the questions you might be asking yourself, and we understand.

Living with ulcerative colitis is a challenging and unpredictable journey involving constant abdominal pain, cramping, and urgent trips to the bathroom that can be physically and emotionally draining.

We also know that balancing a restrictive diet and medication regimen is crucial to managing symptoms and maintaining some sense of normalcy, and it's never easy. Additionally, the fear of flare-ups and the impact on daily activities can create significant stress and anxiety.

That's why we put together this blog. To offer you a scientific overview of Manuka honey and its potential for managing ulcerative colitis. Let's get started.



### What is Ulcerative Colitis?



Ulcerative colitis is a chronic, incurable bowel condition that causes inflammation in the digestive tract. Every year, 156 to 291 cases per 100,000 persons are reported. [1] The NHS states, "Ulcerative colitis is a long-term condition where the colon and rectum become inflamed." [2]

There is no cure for ulcerative colitis, but there are treatment options that can help you manage its symptoms. Mild, moderate, and severe symptoms.

#### What are the Causes and Symptoms of Ulcerative Colitis?



There is no clear cause for ulcerative colitis, but experts suggest that it might be an autoimmune condition where the immune system attacks healthy body tissues.

The most common theory purports that "the immune system mistakes harmless bacteria inside the colon as a threat and attacks the tissues of the colon, causing it to become inflamed." [2]



Some of the common symptoms associated with ulcerative colitis include:

- Recurring diarrhea, which may contain blood, mucus, or pus
- Stomach pain
- Frequent bowel movements
- Extreme tiredness (fatigue)
- Loss of appetite, and
- Weight loss

Something to note is the severity of the symptoms may vary depending on the severity of the inflammation and how much of the digestive tract is inflamed. This means the symptoms vary from mild to moderate to severe, with severe symptoms being experienced during a flare-up.

#### Symptoms of a flare-up

Flare-ups are when symptoms become particularly troublesome and are experienced in other places in the body besides the digestive tract. These are known as extra-intestinal symptoms.

They can include:

- Painful and swollen joints (arthritis)
- Mouth ulcers
- Swollen fat under the skin, causing bumps and patches
- Irritated and red eyes
- Problems with bones, such as osteoporosis

No specific trigger has been identified as the cause of flare-ups, but experts suggest stress or a gut infection can lead to flare-ups.

#### **Traditional Treatments and Medications For Ulcerative Colitis**





Before we get into Manuka honey and how it may help you manage your symptoms, let's look at some of the conventional treatments for ulcerative colitis.

### 1. Aminosalicylates

Aminosalicylates (5-ASAs) are the first treatment option used to manage mild or moderate ulcerative colitis. They are meant to help reduce inflammation and heal damaged tissue.

### 2. Corticosteroids

Corticosteroids, like prednisolone, are an alternative to aminosalicylates and are used to reduce inflammation, especially during flare-ups when 5-ASAs are no longer effective.

### 3. Immunosuppressants

Immunosuppressants have a different effect compared to aminosalicylates and corticosteroids. Instead of reducing inflammation, they are used to reduce the activity of the immune system.

They are used to treat mild and moderate flare-ups. And are mostly used in case you don't respond to other treatments.

### 4. Surgery

This is the last treatment option, and it involves permanently removing the colon (colectomy), especially if you have persistent and severe flare-ups that do not respond to medication. This is only explored as the last of defense and if the symptoms affect the quality of your life.

### What is Manuka Honey?





Manuka honey is a type of honey that is produced by bees that forage flowers of the Manuka tree, which is native to New Zealand. <u>Manuka honey is different from regular honey</u> because of its chemical composition and geographical qualities.

Compared to other types of honey, it has high concentrations of an organic compound known as methylglyoxal which correlates to its strong antibacterial and medicinal benefits. <u>Methylglyoxal</u> (MG/MGO) is created through the non-enzymatic conversion of dihydroxyacetone (DHA), a precursor organic compound in Manuka nectar.

Manuka honey also has a variety of micro and macronutrients, like vitamins, free amino acids, enzymes, sugars, essential minerals, proteins, phenolic acids, and flavonoids which give it unique antioxidant and inflammatory properties.

## **Benefits of Manuka Honey and Ulcerative Colitis**



Manuka honey, renowned for its therapeutic properties, has garnered attention as a potential natural therapy for managing ulcerative colitis. Recognized for its antibacterial attributes and believed to possess anti-inflammatory capabilities when applied topically, the question remains whether these same properties can be used to address the inflammation associated with ulcerative colitis, which affects the digestive tract.

Recent research, while not conclusive, has shed light on promising indications. Studies have shown that certain compounds present in honey may be bioavailable, meaning they can be utilized by the body to combat inflammation. This suggests that Manuka honey might hold potential as a valuable aid in managing conditions like colitis. [3]

### 1. Anti-inflammatory Properties

Research has unveiled the potential of Manuka honey as a valuable agent in reducing inflammation, a crucial aspect in managing ulcerative colitis. By down-regulating potent



pro-inflammatory cytokines, namely Th1 and Th17, Manuka honey exhibits promise in alleviating the inflammatory responses associated with this debilitating disease. A study conducted by Almasaudi et al. in 2017 [4] found that Manuka honey effectively down-regulates these pro-inflammatory cytokines, further supporting its anti-inflammatory properties.

In addition to the cytokine modulation, experimental models of colitis have demonstrated Manuka honey's efficacy in mitigating inflammation. Notably, intrarectal honey administration has proven as effective as prednisolone treatment in an inflammatory colitis model. [5] Moreover, oral administration of Manuka honey in doses of 5 g/kg and 10 g/kg body weight significantly reduced colonic inflammation in the same model, indicating its potential effectiveness in managing colitis in rats. [6] However, further investigation and confirmation through human studies are essential to translate these findings to human treatments confidently.

The versatility of Manuka honey as a complementary treatment is also evident. Combination therapy, where Manuka honey is used in conjunction with sulfasalazine, has exhibited notable results in reducing colonic inflammation. When combined, the therapeutic impact of Manuka honey is augmented, leading to the restoration of lipid peroxidation and improvement in antioxidant parameters. These findings underscore the potential of Manuka honey as an adjunct therapy to conventional treatments, offering hope for enhanced outcomes in ulcerative colitis management. [7]

In conclusion, the anti-inflammatory properties of Manuka honey, evidenced by its ability to down-regulate pro-inflammatory cytokines and effectively reduce colonic inflammation, hold promise as a valuable natural adjunct in the management of ulcerative colitis. While the findings in animal models are encouraging, further research is needed to validate these effects in human subjects and unlock the full potential of Manuka honey in treating this complex gastrointestinal disorder.

#### 2. Antioxidant Effects

Emerging studies show the antioxidant potential of Manuka honey is helpful in protecting colon cells from oxidative DNA damage, a critical factor that can worsen the condition of ulcerative colitis.

A study conducted by Zakhia Jubri in 2013 [8] demonstrated that Manuka honey plays a role in reducing oxidative damage in young and middle-aged rats. This effect is believed to be mediated through the modulation of antioxidant enzyme activities and the high total phenolic content present in the honey. These findings highlight Manuka honey's ability to counteract the harmful effects of oxidative stress, which can lead to DNA damage and inflammation in the colon.



Furthermore, the presence of antioxidants in Manuka honey offers a promising avenue for potential therapeutic applications in ulcerative colitis management. By neutralizing harmful free radicals and reactive oxygen species, Manuka honey may contribute to maintaining the integrity of colon cells and mitigating disease progression.

#### 3. Antibacterial Effects

The therapeutic potential of Manuka honey's antibacterial properties in managing ulcerative colitis has garnered significant attention in recent research. Methylglyoxal, which is present in Manuka honey, is lauded for its therapeutic effects on inflammatory bowel diseases, including ulcerative colitis. This crucial component is believed to play a key role in the honey's antibacterial properties, offering potential benefits in alleviating the symptoms and complications associated with this condition.

Interestingly, Manuka honey's antibacterial effects remain significant even when the hydrogen peroxide activity is blocked, distinguishing it from other types of honey. In previous studies, it has demonstrated remarkable antimicrobial activity against pathogenic bacteria, including Staphylococcus aureus (S. aureus) and Helicobacter pylori (H. pylori), suggesting its potential for treating wounds and stomach ulcers. [9]

The study by Adams et al. in 2008 further substantiates the importance of Methylglyoxal as Manuka honey's major antibacterial component, highlighting its therapeutic effects on inflammatory bowel diseases like ulcerative colitis. These findings open up exciting possibilities for the utilization of Manuka honey as a natural antibacterial remedy to complement conventional treatments for managing ulcerative colitis.



### How to Use Manuka Honey for Ulcerative Colitis

How much Manuka honey should you use per day to manage ulcerative colitis? There is no science that would back up a specific dosage recommendation. Our general advice to



customers for digestive health, in general, has been 1-2 teaspoons of honey per day. The key is finding out how much works for you, and you can do this by starting out with small dosages and then monitoring your body's reaction while raising the dose gradually.

While choosing what Manuka honey to buy, remember to check the <u>quality and grading</u>. We recommend going for pure Manuka honey with the actual Methylglyoxal (MG) concentration displayed on the label or the Unique Manuka Factor (UMF) rating. Also, Manuka honey with higher grading has more Methylglyoxal content, which results in greater medicinal benefits. We suggest a <u>550+ MG</u> rating or higher for a condition like Ulcerative Colitis.

Above all, talk to your doctor or gastroenterologist before incorporating Manuka honey into your diet to ensure it doesn't cause a flare-up or interact negatively with your prescriptions.



# **Conclusion**

Manuka honey may be beneficial in the management of ulcerative colitis based on encouraging research referenced above, and more generally based on the success people are having with other digestive health use of Manuka honey. As a natural product with no known side effects, it may be worth considering and incorporating into your daily diet.

If you are looking for good quality Manuka honey to try, we recommend either our 550+MG; or our 830+MG Manuka honey as a starting point. Let us know if it helps or what your experience is by posting a review on one of our product pages. This can be a great way to share your experience with others struggling with this health issue.



#### **References:**

- 1. Ulcerative Colitis StatPearls NCBI Bookshelf https://www.ncbi.nlm.nih.gov/books/NBK459282/
- 2. Ulcerative colitis NHS https://www.nhs.uk/conditions/ulcerative-colitis/
- Honey and its nutritional and anti-inflammatory value | BMC Complementary Medicine and Therapies -<u>https://bmccomplementmedtherapies.biomedcentral.com/articles/10.1186/s12906-020-03170-5#Sec15</u>
- Manuka Honey Exerts Antioxidant and Anti-Inflammatory Activities That Promote Healing of Acetic Acid-Induced Gastric Ulcer in Rats -<u>https://pubmed.ncbi.nlm.nih.gov/28250794/</u>
- Could Honey Have a Place in Colitis Therapy? Effects of Honey, Prednisolone, and Disulfiram on Inflammation, Nitric Oxide, and Free Radical Formation | Request PDF -<u>https://www.researchgate.net/publication/11181936\_Could\_Honey\_Have\_a\_Place\_in\_C\_olitis\_Therapy\_Effects\_of\_Honey\_Prednisolone\_and\_Disulfiram\_on\_Inflammation\_Nitric\_Oxide\_and\_Free\_Radical\_Formation
  </u>
- 6. Effect of different doses of Manuka honey in experimentally induced inflammatory bowel disease in rats <a href="https://pubmed.ncbi.nlm.nih.gov/18688794/">https://pubmed.ncbi.nlm.nih.gov/18688794/</a>
- Effect of Manuka honey and sulfasalazine in combination to promote antioxidant defense system in experimentally induced ulcerative colitis model in rats -<u>https://pubmed.ncbi.nlm.nih.gov/18814487/</u>
- 8. Manuka honey protects middle-aged rats from oxidative damage <u>https://pubmed.ncbi.nlm.nih.gov/24270958/</u>
- 9. Honey: its medicinal property and antibacterial activity PMC https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3609166/