



Manuka Honey for Cold & Flu Season, & COVID-19



With seasonal temperatures starting to dip and the persistent threat of COVID-19 infections, it's time to prepare for the cold and flu season. You can do many things to help prevent colds and flu, including keeping your body warm (bundle up!), taking Vitamin C, taking cough medicine, and eating your fruits and vegetables to keep yourself in overall good health. You can also consume Manuka honey daily to support your immune system and help ward off infections. When that cough or cold seems to make its way into life anyhow, turn to nature to help you nip it in the bud. A growing body of research strives to understand how Manuka honey works to kill bacteria, viruses, and support overall wellness.

2022 Update

When we first published this article in early fall of 2020 there was very little, science work that had been done on the subject of honey and COVID-19. We are adding this study [\[1\]](#) to our article as it is fairly comprehensive on the subject. If you plan to open any of the links in our appendix to delve into the science, this is the one that we'd recommend you start with.

While the paper is about honey in general, it is full of references to Manuka honey, and methylglyoxal (MG), the key ingredient in Manuka honey that correlates with its wellness and healing benefits. This article is approachable for a non-science person, and even a scan of it will provide some helpful perspective on the subjects that we explore further in our article. Section 4 of the paper delves specifically into the potential role of honey in treating COVID-19 patients.



Taken directly from section 4, “Therefore, it is hypothesized that honey might be beneficial for SARS-CoV-2 infected patients through several major mechanisms such as direct virucidal properties, regulating/boosting host immune signaling pathways, and curing and/or improving comorbid conditions Figures [1] and [2].” [1]

We strive to provide accurate information to help our customers make informed decisions about incorporating Manuka honey into their personal wellness or healing strategies. We hope this update to our previously published article furthers this goal.

Manuka Honey Properties and Benefits



Manuka honey, produced in New Zealand from the flowering native Manuka tree, is becoming a healing and wellness staple for consumers worldwide. The scientific interest and consumer attraction are rooted in the unique properties of Manuka honey that set it apart from all other kinds of honey. Manuka honey was first recognized for its antibacterial properties, and these properties have been the most extensively researched. [2] Part superfood, part medicine, Manuka honey has been embraced by mainstream medicine for topical use as a wound care treatment. [3] There have been numerous success stories that I have personally heard of or witnessed with regard to healing of cuts, skin ailments, burns, and infected wounds.

A growing body of scientific research coupled with anecdotal evidence supports a number of potential benefits for Manuka honey when consumed, used topically, and as part of a nasal irrigation solution.

In clinical settings, Manuka honey has been credited with saving limbs [4] and is especially effective when dealing with antibiotic-resistant bacteria like MRSA. [5] Research studies have been carried out to explore Manuka honey’s antibacterial properties as a treatment for cystic fibrosis, [6] clostridium difficile (c-diff), [7] and gastrointestinal diseases. [8]



Recent research has focused on Manuka honey's anti-inflammatory [9] properties and ability to mitigate oxidative stress. The implications of this research are far-reaching, as it is widely believed that chronic inflammation and oxidative stress in the body is an underlying root cause of heart disease, arthritis, neurological disease (including dementia), autoimmune disease, and cancer. [10] Overall, honey's properties have the potential to be an immunomodulatory agent – a substance that stimulates or suppresses the immune system to help the body fight viral infections or diseases. Honey's antioxidant property inhibits oxidative stress and results in stopping harm to the vital cellular components (lipids, amino acids/protein, and DNA) [11], which promotes and activates white blood cells to fight against viral loads or diseases.

The subject of research into [potential uses of Manuka honey](#) as a cancer treatment or the supportive role it can play in traditional drug treatments warrants a full separate discussion. One study looking at Manuka honey in treating colon cancer [12] showed very promising results. Other links to studies on the subject of cancer can be found here [13] on our website.

Research has also been carried out looking at the antiviral properties of Manuka honey. A research team in 2014 published results of their work on the effect of Manuka honey on a variety of strains of influenza A and influenza B viruses. [14] They studied Manuka honey alone, and in combination with the most common class of antiviral drugs known as neuraminidase inhibitors or NAIs (Tamiflu is an example of a NAI). NAIs block virus replication analogous to the effect researchers believe Remdesivir is having on the Coronavirus causing COVID-19. This first study concluded that Manuka honey had a “potent inhibitory activity against the influenza virus” as well as synergistic effects with NAIs. Later work by this same team published in 2016 studied Manuka honey and its key ingredient Methylglyoxal's (MGO) effect on influenza B virus strains. This study's conclusions included “MGO exhibited a broad spectrum of inhibitory activity against influenza B viruses” and importantly “against NAI resistant influenza B strains”.

Another study found Manuka honey effective against the Varicella Zoster [15] Virus (VZV), known to cause Chicken Pox, Shingles, and Herpes. Levan, in honey, seems to be a promising compound in additionally treating a variety of RNA viruses that have the potential to become global pandemics. Also, one study on *B. subtilis* – isolated bacteria present in honey showed that levan (β -2,6-fructan), produced by these bacteria, have antiviral activity against pathogenic respiratory RNA virus, avian influenza (HPAI), low pathogenic avian influenza (H5N1) and the generic DNA adenovirus type 40. [16]



Manuka Honey for Colds



The common cold and influenza are both caused by viruses. The significant body of research-based evidence cited above, as well as a lot of anecdotal evidence, support the hypothesis that Manuka honey can kill viruses as well as stop them from spreading in your system. Additionally, significant health risks associated with cold and flu viral infections result from secondary bacterial infections. [17] These are also referred to as opportunistic secondary bacterial infections. These infections are able to take root in the upper and lower respiratory tracts as well as in your lungs. These are termed “opportunistic” because these bacteria may be living in your body and are being kept in check by your immune system. Viral infections take your immune system down and enable bacterial infections to take root. The initial infection could be from a common cold (common coronavirus), flu (influenza A or B strain virus), sinus infections (rhinovirus), or COVID-19 (novel coronavirus).

Upper and lower respiratory infections are the fourth highest cause of global mortality (Lozano et al., 2012). [18] Staphylococcus aureus (the SA in MRSA) is one of the three most common bacteria associated with these respiratory infections, which often lead to pneumonia.

Good hygiene, wearing a mask, and getting a flu shot are steps you can take to avoid picking up a virus that could lead to serious illness. Eating Manuka honey regularly may help protect you from a cold by creating an inhospitable environment in your mouth, throat, and lower respiratory system for invading viruses, as well as the bacteria that can cause secondary infection. In fact, a recent study concluded that Manuka honey may have an immune system stimulatory [19] effect on the body's ability to sense microbial infections. There is an abundance of anecdotal evidence that Manuka honey helps with cold and flu symptoms and can help mitigate the severity or avoid illness completely. Additionally, one study found that Manuka honey is the most potent antiviral candidate against influenza virus A/WSN/33 (H1N1) in the cultured Madin-Darby canine kidney (MDCK) cell line, [20], which is a model mammalian cell line used to see what could happen in human cells. One in vitro study examined Manuka honey's antiviral



activity against the Respiratory Syncytial Virus (RSV). The study showed Manuka honey had a significant inhibitory effect on the progression of infection by honey through the inhibition of viral replication and the mRNA copy numbers of two viral genes. [21]

Additionally, Manuka honey's methylglyoxal compound served as an antiviral agent for HIV. This study's findings further the possibility that Manuka honey is a viable additional treatment against a variety of viruses. Researchers have also examined the potential antiviral effects of nitric oxide (NO). It has been reported that honey elevates NO, an essential cellular neurotransmitter in several physiological processes. [22] Some studies have seen that NO has effective properties against viral infections, leading many to suspect that NO's natural immunity will further promote research of honey's antiviral properties.

My personal experience and that of my family is at the onset of symptoms, a couple of teaspoons per day can often head off a cold or greatly mitigate its symptoms. We also use manuka honey dissolved in a saline solution to irrigate sinuses with a Neti Pot or nasal rinsing system. A clinical trial for chronic rhinosinusitis [23] (sinus infection), and the cystic fibrosis study referenced above both were focused on the nasal irrigation effects of Manuka honey.

Is Manuka Honey Good for COVID?



We hope the answer is yes, and we'd like to think there is strong potential here. We are not medical professionals and can't give you medical advice. What we do know from scientific research and anecdotal evidence is that Manuka Honey shows inhibitory activity and potential medicinal value on a number of viruses. There is a study published in October 2020 looking specifically at this question of the role of honey, and notably Manuka honey for COVID. We recount some of those findings below. This thesis is further supported by the paper published in December of 2020 and included below in our appendix, and noted in our 2022 update to this article. [1]



Patients infected with COVID-19, who have died, have shown low lymphocyte counts. Lymphocytes are white blood cells that help protect the body from infection. In this recent study, it was found that COVID-19, in the human body, produces high counts of pro-inflammatory cytokines – cell signaling proteins that imbalance and inflame the immune system. Honey stimulates anti-inflammatory cytokines, which counteract pro-inflammatory cytokines, suggesting that honey is anticipated to play a vital role in boosting the immune system as a supportive treatment for patients infected with COVID-19, and also for preventative measures for healthy individuals. [24]

Various studies have also shown that antioxidants, present in honey, can modulate the signal transduction pathways crucial to cellular responses including inflammation, survival, cellular proliferation, and death, that are affected by oxidative stress. [25] This means honey's antioxidant property is capable of influencing the process in which a cell responds to substances outside the cell that can manipulate cellular responses, mentioned above, that are present in COVID-19 patients under high oxidative stress. Antioxidants from honey act as potential immune boosters, inducing lymphocytes proliferation and activation and inhibiting the production of pro-inflammatory cytokines. [24] Honey's antioxidant property also helps promote and activate white blood cells and inhibit the production of pro-inflammatory proteins. Therefore, these immune responses from honey's antioxidants suggest a promising, all-natural treatment in the fight against COVID-19.

As of early 2020, author Heba Hashem, conducted an in silico analysis (molecular docking) to assess the potential effects of natural phenolic chemical compounds from honey against SARS-CoV-2. [26] This study suggests that multiple compounds of honey have potential to impede the viral 3-chymotrypsin-like cysteine protease (3CLpro) enzyme, and thus hinder replication in viruses. Another study showed when honey containing caffeic acid (Caf), CAPE, galangin (Gal), and chrysin (ChR) is being consumed, those compounds could enter the infected cells and inhibit 3CLpro. [24] 3CLpro is the main enzyme present in coronavirus, involved in breaking down proteins. The inhibition of the 3CLpro enzyme, by honey, fails to further protein replication, thus respiratory viruses like severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) replication will cease in the human body.

Some honey combinations with other rich natural products (such as cinnamon, garlic, and ginger) have shown stronger antimicrobial and immune booster activities. [27] This finding can help promote honey as an additional, complementary and all natural treatment to COVID-19, in contrast to poor performing drugs. Overall, honey's antiviral and immune boosting properties may help reduce the severity of COVID-19 based on its antiviral effects against SARS-CoV-2 or by its immune responses in humans. Honey's medicinal properties in fighting COVID-19 are heavily associated with honey's innate antioxidant phenolic compounds. There is strong evidence that shows the correlation between the Methylglyoxal (MG) content in Manuka honey and its wellness and healing properties. This recent study demonstrated that not only MG acting



alone, but MG in synergy with the phenolic compound 3-phenyllactic (3-PLA), which is one of the 5 key Manuka honey markers tested to authenticate Manuka honey, enhances the antibacterial activity of Manuka honey. This finding validates the idea that there is a complex interaction between the components of Manuka honey that contributes to its effectiveness. [28]

Reasonably, if Manuka honey is effective when used to treat the common cold, it could also be effective with this new virus that causes COVID-19. Additionally, honey is a natural product, and accepting diabetic concerns over sugar intake, will not hurt you, and just might help.

Why Bees & Trees Manuka Honey



Manuka honey is expensive and you want to make sure you are buying one that is going to give you the wellness and healing benefit you are after. You should only look at brands that are labeled with the actual MG content and/or the correlated UMF value. MG (or MGO) stands for methylglyoxal, which is the naturally occurring organic compound found in true Manuka honey, and MG is the primary marker for its wellness and healing properties. MG is measured in mg/kg and you should look for values of at least 250 MG (correlates to 10+ UMF). At Bees & Trees, we offer three ranges of MG— a [mid-activity honey \(350+ MG\)](#), a [high-activity honey \(550+ MG\)](#), and our most potent [Founder's Reserve \(830+ MG\)](#)

Our honey is raw, minimally processed, produced in small batches, from our own hives. Our honey comes from the prized Taranaki region, known to produce some of the highest quality Manuka honey in New Zealand. We are the only US manuka honey brand that owns our own hives, our own processing facility, packs in glass jars, and imports specifically for the US market.



Ways to Use Manuka Honey During Cold & Flu Season



Since Bees & Trees Manuka honey is so delicious, it's easy to fit it into your health and wellness regimen. It can help support treatment and relieve symptoms so you can get back to normal in no time.

Here are some ways to take your Manuka honey for flu.

Preventative Measures:

- Take 1-2 teaspoons per day right out of the jar for immune support.
- Sweeten hot tea, coffee, or just water with lemon or ginger.
- Sweeten plain yogurt or other foods to incorporate Manuka honey into your day.

At Onset of Symptoms:

- Take 2-3 teaspoons per day out of the jar. Use a 500+ MG Manuka or higher if you have it.
- To soothe a sore throat, let a teaspoon of Manuka honey coat your throat as you swallow.
- For dry cough, honey is a powerful all-natural cough elixir eaten right from a spoon.
- For sinuses, dilute 1 teaspoon in a saline solution (distilled water) and rinse out your sinuses using a nasal irrigation device (e.g. Neti Pot, Nasaline syringe, etc).
- Add a teaspoonful to a glass of warm water. Consume this mixture every morning to help soothe throat irritation caused by cold symptoms.
- Try Manuka honey, ginger and lemon drink. Combine 3 tps of Manuka honey with a squeeze of lemon juice, grate an inch of fresh ginger, add warm water and let it stand for 20 minutes. Mix well and enjoy the healthy goodness of Manuka honey.

I wish you and your family health and happiness as we head into the winter months. As always, if you have any questions about Manuka honey, you can reach out to us by clicking [here](https://www.beesandtrees.com/blogs/news).



Mike Everly – Founder
Bees & Trees Manuka Honey

FAQs

1. Is Manuka honey good for cough?

Taking Manuka honey when sick may offer relief for cold and flu symptoms. Its natural antibacterial properties can soothe sore throats, while its antioxidants support the immune system. Consuming a teaspoon of Manuka honey or adding it to warm water with lemon can potentially provide relief from symptoms.

2. How to take Manuka honey for cough

For cold and flu symptoms, mix a teaspoon of Manuka honey into warm water or herbal tea, or eat a teaspoon directly a couple of times per day or as needed. For COVID-19, follow medical guidelines, and consider Manuka honey to help with symptom relief.

3. Can Manuka honey be used in combination with other natural cold remedies?

Yes, Manuka honey can be combined with lemon, ginger, or herbal teas for enhanced benefits. Always ensure compatibility and consult a healthcare professional if you have concerns.

4. What Manuka honey strength should you use for a cough?

For the best outcome, we recommend using [high-activity honey \(550+ MG\)](#) or our most potent [Founder's Reserve \(830+ MG\)](#). These two grades of honey have higher methylglyoxal content, and in turn, more potent medicinal properties.

Research

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[4] Manuka honey pilgrim meets his benefactors <https://www.nzherald.co.nz/nz/manuka-honey-pilgrim-meets-his-benefactors/SLR7JCHQGXCXWHJSKTRNIXBMUY/>

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