

Health Benefits of Honey, Antiviral Treatment for the Therapy of Respiratory Viral Infections

By Bruna Costa Ferreira da Cruz, Ludimilla Ronqui, Priscila Scharnoski, Patrícia Scharnoski, Marina Peruzzolo, Pedro da Rosa Santos, André Halak, Priscila Wielewski, Juliana Mosconi Magro and Katlin Fernanda de Araujo

Submitted: January 23rd 2019 Reviewed: June 25th 2019 Published: July 23rd 2019

DOI: 10.5772/intechopen.88211

Abstract

In addition to being used as food, honey has been used as an alternative medicine for thousands of years. Honey has a great potential to be used as a medicine because it is not suitable for micro-organisms, it is very acidic and has a very high sugar content, which causes an osmotic effect that prevents the growth of some micro-organisms, moreover, in some honey, hydrogen peroxide is found, which has a strong antibacterial effect.

Respiratory syncytial virus is the most common cause of viral respiratory infections in infants and young children, also seriously affects adults, the elderly and immunocompromised, causing deaths mainly in the elderly [50, 51]. The antiviral activity of honey was tested for its action against the respiratory syncytial virus. A variety of tests using cell culture was developed to assess the susceptibility of respiratory syncytial virus to honey. The results confirmed that treatment with honey promoted inhibition of viral replication [50]. Attempts to isolate the antiviral component in honey demonstrated that sugar was not responsible for the inhibition of respiratory syncytial virus, but could be methylglyoxal; this component of honey may play a role in the increased potency of Manuka honey against respiratory syncytial virus [50]. Thus, honey may be an alternative and effective antiviral treatment for the therapy of respiratory viral infections, such as respiratory syncytial virus; however, other measures, such as an effective vaccine, are still necessary for the control of this disease [50, 52].