

### What is Honevo?

Honevo is a topical medical-grade kanuka honey formulation, developed as a treatment for various skin diseases.

### Is Honevo an effective treatment for rosacea?

Yes. In a pilot study it was found to be well tolerated and most patients reported an improvement<sup>1</sup>. In a large study of 137 people presented at the American Academy of Dermatology meeting in 2015, and published in the British Medical Journal Open, 65% of people had an improvement with Honevo, 34% had a large improvement and in 13% the disease disappeared completely<sup>2-3</sup>. The results were statistically and clinically significant and at least as good, if not better, than those that have been achieved for standard prescription-only treatments such as topical metronidazole.

### How long does it take to work?

In the study, improvements were seen within 2 weeks and had increased when the study ended at 8 weeks.

### How long does the treatment last?

Honevo should be used until symptoms have disappeared, and restarted if symptoms reappear.

### Is it a cure or will the rosacea come back?

In around 1 in 8 participants in the study, the condition completely disappeared. However, participants were only followed for 8 weeks and so we do not know if/when symptoms reappeared.

### Is it better than using antibiotics?

The Honevo study was vs. placebo, not antibiotics, so it is not possible to state this definitively. But when we compare how both treatments perform vs. placebo in controlled studies, Honevo has better results. In addition, as well as potentially causing side effects, long-term antibiotics can contribute to antibiotic resistance, which the World Health Organization has declared to be a threat to global health security.

### How do patients use it?

Honevo is applied as a mask twice a day and then easily washes off. It should be applied for at least 15 minutes twice a day, but the longer it is applied the better the results are likely to be - it can be applied for several hours at a time if that is convenient. As well as treating rosacea, it is an excellent moisturiser.

### Why Honevo rather than another medical honey product?

There are 3 main reasons:

1. All honeys have different properties, and only the Honevo formulation has been proven in clinical studies to be an effective treatment for rosacea.
2. Honevo is medical-grade (see below for why this is important).
3. Honevo contains a small amount of another natural product, glycerine, which improves its physical characteristics, making it less sticky than regular honey. It is also far more temperature stable and remains consistently fluid when warm or cold.

### Who did the research, was it independent?

The study was undertaken independently by the Medical Research Institute of New Zealand, who are based in Wellington and led by Professor Richard Beasley. Patients on the studies were seen by MRINZ staff, but mostly by General Practitioners in Tauranga and Auckland. In addition, the study protocol was peer-reviewed by a New Zealand dermatologist and also the world-famous Mayo Clinic in Minnesota, USA.

### Who funded the research?

The research was funded by HoneyLab, with support from Callaghan Innovation.

<b>What is kanuka honey?</b>	Honey is classified according to its floral source, and it can either be monofloral, if it is made predominantly from the nectar of one type of flower, or polyfloral. Honevo is created from kanuka honey which is sourced from hives that are located in dense kanuka plantations.
<b>How is it different to manuka honey?</b>	All honeys have different properties. We use kanuka as we found that it has very high antibacterial activity compared to other honeys. Kanuka honey also has anti-inflammatory activity whereas manuka and others do not.
<b>How does it work?</b>	<p>Honey has a number of physicochemical characteristics which give it unique properties that are responsible for its effectiveness in treating some medical conditions:</p> <ul style="list-style-type: none"> <li>• Osmotic effect – honey is a concentrated sugar solution predominantly consisting of fructose and glucose. Few water molecules are available for micro-organisms and therefore it is a poor environment for their growth.</li> <li>• Hydrogen peroxide – this is slowly released when the honey comes into contact with body fluids and has antiseptic properties.</li> <li>• Acidity – honey is very acidic with a pH of 3.2 to 4.5, as acidic as some vinegars, which also makes micro-organism growth difficult.</li> <li>• Antioxidants - it contains bioflavonoids and other antioxidants which may contribute to its activity.</li> </ul>
<b>What is “medical-grade” honey?</b>	Honey applied to the skin should be “medical-grade”, also known as “pharmaceutical-grade”. Application of untreated or raw honey often causes local inflammation which can be quite severe, as it often contains many impurities from bees and hives; it literally contains "bees' knees". Medical-grade honey is made by purifying and sterilizing raw honey in a two-step process involving super-filtration and pasteurization.
<b>Who can I contact for more information?</b>	For information on the science - Dr Shaun Holt: <a href="mailto:shaun@honeylab.co.nz">shaun@honeylab.co.nz</a> For information on orders/supplies -Julie Hayes: <a href="mailto:julie@honeylab.co.nz">julie@honeylab.co.nz</a>
<b>How long does it last?</b>	A 50ml tube will last for several weeks, depending on the extent of the rosacea.
<b>What other conditions can Honevo treat?</b>	Pilot studies have shown that Honevo is potentially also effective for acne, nappy rash, molluscum contagiosum and cold sores. In a pilot study of patients with psoriasis it was as effective as aqueous cream.
<b>Who are HoneyLab?</b>	HoneyLab are a New Zealand pharmaceutical company with several platforms of clinical research, including dermatology, pain, and nutrition. HoneyLab are running the world's largest programme of medical honey research. The research programme is directed by Dr. Shaun Holt. Shaun has both Pharmacy and Medical degrees from the UK, lectures at Victoria University of Wellington and is one of New Zealand's most experienced clinical researchers.
<p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Fingleton, James, et al. "Topical kanuka honey for the treatment of rosacea." <i>Focus on Alternative and Complementary Therapies</i> 18.4 (2013): 221-222.</li> <li>2. S Holt, I Braithwaite, A Hunt, J Riley, M Holliday, R Beasley. A topical kanuka honey formulation is an effective treatment for rosacea. <i>Annual Meeting of the American Academy of Dermatology</i> 2015. Poster 871</li> <li>3. Fingleton J et al. A single-blind randomised controlled trial of topical kanuka honey for the treatment of rosacea. <i>British Medical Journal Open</i> 2015;5 : e007651</li> </ol>	