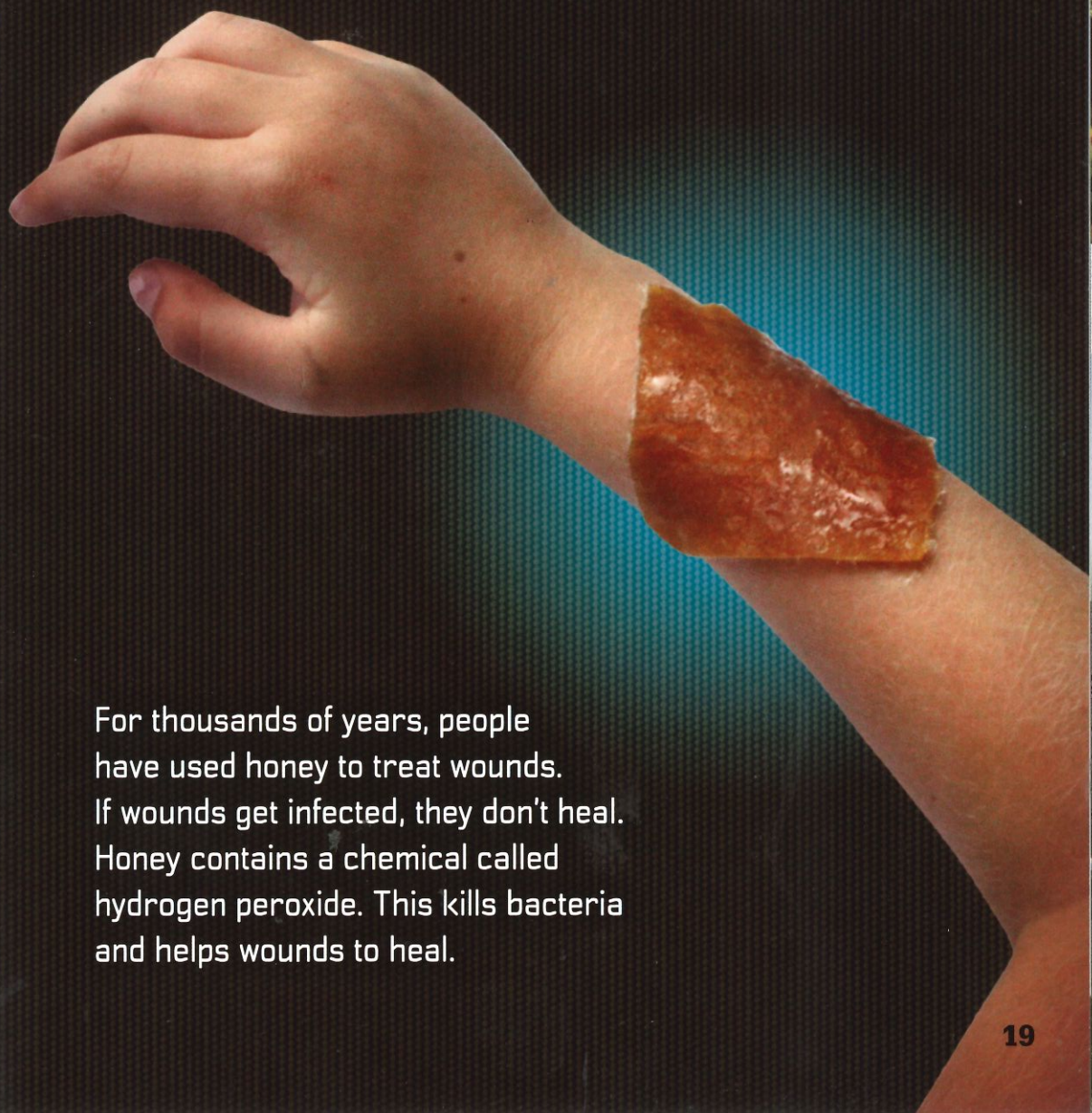


# HEALING HONEY

BY PHILIPPA WERRY



For thousands of years, people have used honey to treat wounds. If wounds get infected, they don't heal. Honey contains a chemical called hydrogen peroxide. This kills bacteria and helps wounds to heal.





Mānuka flower

Mānuka tree

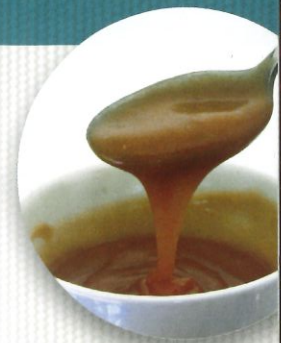
## + WHAT IS MĀNUKA HONEY?

Mānuka honey is made from nectar collected by bees from the mānuka plant. Mānuka is a native shrub or small tree, common throughout New Zealand. You might even have some in your garden. It has sharp, prickly leaves and small white or pinky-red flowers. Mānuka grows in many different habitats all over New Zealand. It is very hardy and can cope with heat, cold, drought, poor soil, rain, wind, and frost.

Māori used mānuka for building and for making items like paddles, bird spears, and fighting sticks. They used the bark to make water carriers. Early European settlers used the leaves to make tea, which is why mānuka is sometimes called tea-tree. Mānuka also makes good firewood.

## Rongoā

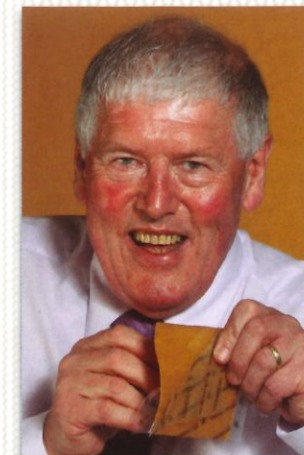
Māori brought with them knowledge of how to treat many sicknesses. They learned that tea made from mānuka leaves was a healthy tonic. They put a bandage of crushed leaves on the skin to cure skin diseases such as ringworm and eczema and to help wounds to heal.



Mānuka honey is thick and dark brown. It contains an ingredient that makes it much more able to kill bacteria than ordinary honey. For a long time, scientists weren't sure what this special ingredient was. Now that they have identified it, mānuka honey can be tested to measure how much of the special ingredient it contains.

## + INVENTING A HONEY BANDAGE

Professor Peter Molan investigated the natural antibacterial substance in mānuka honey. With other scientists at the Honey Research Unit at The University of Waikato, he proved that mānuka honey had healing properties that other honey didn't have. They invented a mānuka honey bandage (also called a dressing) to apply honey to a wound and keep it there.



Professor Molan with the new honey dressing.



What would happen if you put some honey on your leg? It would be sticky and messy, and the honey would slide off when the heat of your skin warmed it up. It works better if a dressing is soaked with honey and then wrapped around a sore or a wound.

First, the scientists injected honey into ordinary bandages. They were easy to put on a wound, but wounds ooze fluid, and the fluids washed all the honey away.

Next they tried a dressing that was made of fibres from seaweed. The fluids from the wound turned the seaweed fibres into a gel, so the honey didn't get washed away.

This gave them an even better idea. They used a gelling agent to make the honey solid and produced a dressing that looks like a piece of rubber. It feels dry and it's flexible, so it sits easily over wounds. It absorbs any fluids that come out of a wound. No matter how much fluid oozes from a wound, the honey dressing stays in place.

Honey dressings are now used in hospitals all around the world. They are made from natural ingredients, and they are easy to handle and are safe and effective.



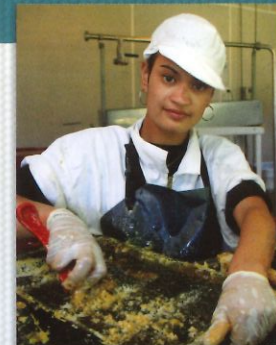
Honey dressing

## + ORA HONEY

Thousands of hectares of mānuka trees grow in remote areas of the East Coast of the North Island. About 10 years ago, Māori from three East Coast tribes, Ngāti Awa, Te Whānau-ā-Apanui, and Ngāti Porou, banded together to set up a bee company. Today this company is called Whakaari International, named after Whakaari (or White Island), and it produces Ora mānuka honey. Ora is the Māori word for "well" or "healthy".

Ora mānuka honey comes from the nectar of mānuka flowers growing between Ruatōria and Waihou Bay. The company has over 1200 beehives, and the bees produce 20–40 tonnes of honey each year.

Mānuka honey helps to heal people's wounds. It now also provides jobs for the local people who harvest and bottle this useful product.



Worker scraping honeycomb off hive frames for honey extraction



Ora beehives are checked and then moved.

