

FOREWORD

Faced with serious and worsening clinical problems caused by bacteria resistant to commonly used antibiotics, microbiologists are energetically investigating alternative approaches. One of these is the use of honey. Although associated with health from the very earliest times, it has been studied scientifically only comparatively recently. Two contributors to *Honey: A modern wound management product*, have made particularly significant contributions to this new understanding. Rose Cooper and colleagues at the University of Wales Institute in Cardiff, UK, have, for example, studied twenty strains of *Burkholderia cepacia* that were resistant to several different antibiotics. They isolated the bacteria from cystic fibrosis patients who were opportunistically infected with this bacterium, and found that all of the strains were susceptible to honey (Cooper *et al*, 2000).

More recently, in collaboration with Peter Molan at the University of Waikato in New Zealand, they found that eighteen strains of methicillin-resistant *Staphylococcus aureus* (MRSA), and seven strains of vancomycin-sensitive *Enterococcus faecalis* were also sensitive to Manuka and pasture honey (Cooper *et al*, 2002). All of these organisms came from infected wounds, and represent categories of bacteria that are responsible for some of the most challenging problems faced by clinicians trying to deal with intractable wound infections.

This, and other work, highlight the considerable potential of using honey to decontaminate wounds colonised by antibiotic-resistant bacteria. The prospect is doubly appealing since honey, in contrast to certain other topical antimicrobial agents, does not adversely affect human tissues. It is also inexpensive — and unlikely to create selective conditions that facilitate the emergence of further resistant strains.

These developments make the appearance of this book especially timely. Its compass, however, is far wider, covering a range of significant advances in both understanding and exploiting the actions of honey on wounds. Incorporating several groups of case histories, the book describes

not only the antimicrobial action of honey, but also its capacity to combat prolonged, inappropriate inflammation, and to promote healing and tissue regeneration. These properties are especially notable in the context of the management of chronic, intractable wounds. The contributors deal with both the underlying science of the modes of action of honey and its practical applications. Also included is an account of the criteria for medical grade honey, which is important since the introduction in 2003 of the first Medical Devices impregnated with honey.

Honey is not a magic potion or universal panacea. Moreover, as Andrew Kingsley points out, it does have certain 'downsides'. Yet, its potent activities, together with its conspicuous safeness, amply justify the medical interest it is now attracting. While some of the health claims made for honey in the past appear fanciful in light of today's knowledge, this book clearly establishes that in one area, at least, it seems destined to find a significant niche in routine medical practice.

Dr Bernard Dixon, OBE, DSc

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References

- Cooper RA, Wigley P, Burton NF (2000) Susceptibility of multiresistant strains of *Burkholderia cepacia* to honey. *Lett Appl Microbiol* **31**: 20
- Cooper RA, Molan PC, Harding KG (2002) The sensitivity to honey of Gram-positive cocci of clinical significance from wounds. *J Appl Microbiol* **93**: 857