

Correspondence

Honey - A nutrient with medicinal property in reflux oesophagitis

Sir,

We read with interest the article by Singh and colleagues¹ which showed that Ginseng (*Panax quinquefolium*) ameliorated experimentally induced reflux oesophagitis (RE) in rats in a dose dependent manner. This study shows that the Ginseng offers protection against experimentally induced RE in rats by subsiding the inflammatory responses and oxidative stress. Honey has been used as a nutrient and a medicine since ages^{2,3}, and has cytoprotective function and is also used for wound healing. This is likely to be due to its anti-inflammatory activity and stimulation of local wound responses⁴. Honey has phenolic compounds and flavonoids⁵, and has been used in chronic sinusitis⁶. Antimicrobial activity of honey is due to its osmotic effect⁷. Honey leads to fast healing in patients with oral mucositis⁸ and is used in treating otorhinolaryngeal infections⁹.

Oxygen derived free radicals are likely to be mediators in generation of RE¹⁰. Honey has antioxidant and radical scavenging activity; it reduces intracellular reactive oxygen species (ROS) generation and restores intracellular glutathione¹¹. Honey may reduce inflammation by inhibiting nitric oxide and prostaglandin E2 production¹². Honey has high density, high viscosity, and low surface tension, and therefore, can stay longer in the oesophagus as a coating on the mucus membrane¹³⁻¹⁵. Honey is useful in treatment of RE because of non peroxide antibacterial activity¹⁶. Honey can be used in treating reflux oesophagitis along with conventional therapy.

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Authors' response

Sir,

we agree that honey has been used as a nutrient and medicine to cure a number of diseases by acting through various mechanisms and may be useful in treating RE because of non peroxide antibacterial

activity but direct evidence is to be generated by conducting various *in vivo* and *in vitro* experiments in animal models to find out the mechanism of action. Further, for that a proper experimental protocol has to be generated and experiments conducted to know the source, purity, effective dose and the results are to be compared with standard clinical drug, only then one can claim the efficacy of honey in RE. There is no harm to give honey for this condition but how much dose/quantity is to be given and for what duration?

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