Honey provides a wide array of health benefits

New review[i] finds honey may aid in cardiometabolic risk factors, cough in children, wound healing and improved glucose intolerance when it replaces other sweeteners

Study Overview: Honey is a natural whole food that has been associated with health benefits in previous research studies particularly regarding its phenolic compounds. A new comprehensive review of honey consumption examines the current evidence of its effects on human health and finds positive effects on cardiovascular risk factors, improved glucose tolerance, decreased upper respiratory tract infections (URTIs) symptoms in children, reduced side effects from cancer treatment and improved wound healing. Despite its sugar content, the research teams concluded that honey's beneficial effects outweigh neutral or negative effects, especially when honey replaces other sweeteners.

Method in Brief: This review paper examined 48 clinical trials of 3,655 subjects (at least 1,803 were women; average age for both men and women was 29.51+/- 21.51 years) from 1985 to 2022 to investigate the results of honey supplementation on human health for a variety of conditions. The subjects included healthy people, children with cough or gastroenteritis, people with overweight or diabetes, and people undergoing cancer treatment. Doses of more than 30 types of honey also varied by intervention where the average amount eaten was 40.71 +/- 30.39g/day (or 1.38+/- 0.59g/kg/day) and the topical dose was 12.50+/- 10.61g. The average study duration was 8.5 +/-8.9 weeks. Although this is not a systematic review, the PEDro score is indicates "good methodological quality."

Findings: The researchers found health benefits associated with honey consumption for different cardiovascular or metabolic risk factors (including glucose tolerance) in subjects of healthy weight, overweight or obese, with diabetes and hyperlipidemic subjects. The below chart outlines the main findings and references noted in the study and it is worth reviewing the cited references for more study specifics. It is important to note that the effect on wound healing should only be considered an adjunctive therapy and is not a replacement for conventional treatments.

Table 9. Main effects of honey on human health.

Condition	Subjects	Parameter	Effect	References
Cardiovascular risk factors	Healthy subjects Diabetic subjects Subjects with hyperlipidaemia	FBG	↓	[12,13,18,19,20,21]
		TG	↓	
		TC	↓	
		LDL	↓	
		HDL	↑	
Glucose tolerance	Healthy subjects Diabetic subjects	Increase in BGL	↓	[21,23,24,25]
		Increase in BIL	↓	
Alcohol metabolism	Healthy subjects	Intoxication time	↓	[27,28]
Cancer	Patients with acute myeloid leukaemia Patients with head and neck cancer	Mucositis severity	↓	[29,30,31,32,33,34,39]
		Body weight	↑	
URTIs	Children with URTIs	Cough frequency and severity	↓	[42,43,44,45,46]
		Combined symptom score	↓	
		Sleep quality	↑	
		Parent's sleep quality	↑	
Wounds	Children with pyomyositis abscesses Women with episiotomy wound Patients with diabetes	Wound healing	↑	[51,52,53,54]
		Discharge	↓	

FBG: fasting blood glucose; TG: triglycerides; TC: total cholesterol; LDL: low-density lipoproteins; HDL: high-density lipoproteins; BGL: blood glucose level; BIL: blood insulin level; ↑: increase; ↓: decrease.

Limitations: The reviewers note that more study is required about different types of honey, varying doses, and trial protocols in order to establish causals relationships. More evidence is needed to establish a cause-and-effect relationship between consuming honey and these health benefits.

Conclusions: The findings provide evidence that honey may have positive effects on health including improved cardiovascular risk factors, glucose tolerance in healthy people and in people with diabetes, symptoms of cough and sleep quality in children with URTIs, and other health benefits. Despite its sugar content, more health benefits for honey have been observed than null or negative effects, which suggests that honey has potential benefits as part of a healthy diet.

---

[i] Palma-Morales M, Huertas JR, Rodríguez-Pérez C. A Comprehensive Review of the Effect of Honey on Human Health. *Nutrients*. 2023; 15(13):3056. https://doi.org/10.3390/nu15133056