# The Sweet Impact of Honey on Cardiometabolic Health

# Source: Oxford Academic

Honey, often celebrated for its natural sweetness and healing properties, has been a staple in traditional medicine for centuries. Recently, modern science has begun to unravel its potential benefits, particularly in the realm of cardiometabolic health. A comprehensive meta-analysis titled "Effect of honey on cardiometabolic risk factors: a systematic review and meta-analysis" provides an in-depth look at how honey consumption affects various health parameters, including glycemic control, lipid profiles, blood pressure, and more. Let's delve into the findings and their implications for incorporating honey into a healthy diet.

### **Understanding Cardiometabolic Risk Factors**

Cardiometabolic risk factors encompass a range of conditions and markers that increase the likelihood of cardiovascular diseases and metabolic disorders such as diabetes. Key factors include blood glucose levels, lipid profiles (cholesterol and triglycerides), blood pressure, and inflammatory markers. Managing these factors is crucial for preventing heart disease, stroke, and diabetes.

### Honey's Impact on Glycemic Control

One of the primary areas of interest is honey's effect on blood glucose levels. The meta-analysis reveals that honey consumption significantly reduces fasting glucose levels. This finding is particularly noteworthy given the global rise in diabetes and prediabetes cases. Although the reduction in fasting glucose is modest, it is consistent across various studies, indicating that honey can play a role in better glycemic control.

However, it is important to note that the certainty of evidence regarding this effect is low. This means that while the current data is promising, further research is needed to confirm these findings and understand the underlying mechanisms.

### Enhancing Lipid Profiles

Honey shows a favorable impact on lipid profiles, which are critical markers of cardiovascular health. The analysis highlights several key improvements:

- Total Cholesterol: Honey consumption leads to a significant reduction in total cholesterol levels. High cholesterol is a major risk factor for heart disease, making this a valuable benefit.
- LDL Cholesterol: Often referred to as "bad" cholesterol, elevated LDL levels are linked to increased heart disease risk. Honey helps reduce LDL cholesterol, contributing to better cardiovascular health.
- Triglycerides: High levels of triglycerides, a type of fat found in the blood, are associated with heart disease. Honey's ability to lower fasting triglycerides adds to its cardioprotective properties.
- HDL Cholesterol: Known as "good" cholesterol, HDL helps remove other forms of cholesterol from the bloodstream. Honey consumption increases HDL levels, with high certainty of evidence supporting this effect.

While these improvements in lipid profiles are encouraging, the overall certainty of evidence for reductions in total cholesterol, LDL cholesterol, and fasting triglycerides is low. This highlights the need for more robust studies to confirm these benefits.

## Blood Pressure and Inflammatory Markers

Blood pressure management is another crucial aspect of cardiometabolic health. The meta-analysis indicates that honey's effects on blood pressure are not consistently significant across studies. However, some evidence suggests a beneficial impact, warranting further investigation.

Inflammation plays a key role in many chronic diseases, including heart disease and diabetes. Honey consumption is associated with reductions in inflammatory markers, though the evidence is again of low certainty. Despite this, the potential anti-inflammatory benefits of honey are worth noting, as they may contribute to overall cardiometabolic health.

## Benefits for Liver Health

Nonalcoholic fatty liver disease (NAFLD) is a growing concern worldwide, linked to obesity and metabolic syndrome. The meta-analysis finds that honey reduces alanine aminotransferase (ALT) levels, a marker for liver health. Lower ALT levels indicate improved liver function, suggesting that honey could be beneficial for individuals with or at risk of NAFLD. However, as with other findings, the certainty of evidence is low.

## The Role of Honey Type and Processing

An interesting aspect of the analysis is the examination of different honey types and their specific benefits. The study identifies that certain types of honey, such as robinia, clover, and raw honey, have more pronounced positive effects on fasting glucose and total cholesterol. This suggests that the floral source and processing of honey can influence its health benefits.

Raw honey, which is unprocessed and retains more of its natural enzymes and nutrients, seems to offer greater advantages compared to processed honey. This finding emphasizes the importance of choosing high-quality, minimally processed honey to maximize health benefits.

### Practical Recommendations

Based on the findings of this meta-analysis, incorporating honey into a balanced diet can offer modest improvements in cardiometabolic health. Here are some practical tips for doing so:

- Choose Raw and Unprocessed Honey: Opt for raw honey from reputable sources to ensure you are getting the full spectrum of nutrients and benefits.
- Moderation is Key: While honey has health benefits, it is still a source of sugar and should be consumed in moderation, especially

for individuals with diabetes or those monitoring their carbohydrate intake.

- Combine with a Healthy Diet: Integrate honey into a diet rich in fruits, vegetables, whole grains, lean proteins, and healthy fats for optimal health outcomes.
- Consult Healthcare Providers: Individuals with existing health conditions should consult healthcare providers before making significant changes to their diet.

## Conclusion

The meta-analysis underscores honey's potential as a natural supplement for improving cardiometabolic health. Its beneficial effects on glycemic control, lipid profiles, and inflammation, combined with its natural sweetness, make it an attractive alternative to refined sugars. However, the varying certainty of evidence across different health parameters highlights the need for further research to fully understand honey's impact and establish clear dietary guidelines. As we continue to explore the benefits of natural foods, honey stands out as a sweet and promising option for enhancing overall health and well-being.