

Establishing relationship between vitamins, total phenolic and total flavonoid content and antioxidant activities in various honey types

ABSTRACT

Honey is a well-known natural sweetener and is rich in natural antioxidants that prevent the occurrence of oxidative stress, which is responsible for many human diseases. Some of the biochemical compounds in honey that contribute to this property are vitamins and phenolic compounds such as phenolic acids and flavonoids. However, the extent to which these molecules contribute towards the antioxidant capacity in vitro is inconsistently reported, especially with the different analytical methods used, as well as other extrinsic factors that influence these molecules' availability. Therefore, by reviewing recently published works correlating the vitamin, total phenolic, and flavonoid content in honey with its antioxidant activities in vitro, this paper will establish a relationship between these parameters. Based on the literature, vitamins do not contribute to honey's antioxidant capacity; however, the content of phenolic acids and flavonoids has an impact on honey's antioxidant activity.

Keyword: Honey; Antioxidant activities; Vitamin; Total phenolic content; Flavonoid content