

EFFECT OF HONEY SUPPLEMENTATION ON TOTAL ANTIOXIDANT CAPACITY OF HERBAL TEAS

Ş. Özdatlı¹, H. Sipahi¹, M. Charehsaz¹, A. Aydın¹, E. Yeşilada^{2*}

¹ Department of Toxicology, Faculty of Pharmacy,
Yeditepe University, Istanbul, Turkey

² Department of Pharmacognosy and Phytotherapy,
Faculty of Pharmacy, Yeditepe University, Istanbul, Turkey

Despite having many researches on antioxidant properties of either herbal teas or honeys known with positive health benefits, there are no valid data showing the combined effect of herbal teas and honey when used together. In this study, we examined the change in total antioxidant capacity (TOAC) of 9 different herbal teas with addition of 2 different honeys (flower honey and pine tree honey) all marketed in Turkey. In our study, herbal teas are extracted by infusing the teabags in fresh boiled water for 5 minutes. Then, 3 g or 7 g of flower or pine tree honey is added for each group and total antioxidant capacities are examined. While examining TOAC values with ascorbic acid method, the highest TOAC values in 100 ml tea (equivalent to 1 cup) are recorded for melissa, black tea and white tea samples, followed by green tea > sage > echinacea > chamomile > ginger/lemon > linden. We observed that antioxidant effects of herbal teas increased in consistent with the amount of honey added; addition of 7 g of honey exhibited higher increase than 3 g. As a result, our study demonstrated that honey addition to herbal teas provides significant increase in antioxidant activity and having at least a cup of honey added tea a day may provide protection against free radicals and also may be considered as a support for the treatment of diseases caused by oxidative stress. However, further studies are required to understand the protective mechanism of this combination.

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* Corresponding author: yesilada@yeditepe.edu.tr