

The Effect of Sodium Bicarbonate on the Mg and P Concentrations in Turkish Black and Green Tea

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Abstract : Tea is one of the most consumed beverages all over the world. Especially, black and green teas are preferred to consume. In Turkey, some local tea houses use sodium bicarbonate (SB) to obtain more infusion by using less amount of tea. Therefore, the addition of SB to black and green teas affects element concentrations of these teas. In this study, determination of magnesium (Mg) and phosphorus (P) contents in black and green teas is aimed for conscious consumption, after the addition of SB. Inductively coupled plasma optical emission spectrometry (ICP-OES) was used for these analysis. The results of this study showed that the concentrations of Mg and P decreased by adding SB from 11.020, 21.915 to 10.009, 17.520 in black tea and from 12.605, 14.550 to 8.118, 9.425 in green tea, respectively. The addition of SB on analyzed teas is not recommended as it reduces intake percentages of Mg and P from the essential elements.

Keywords : elements, ICP-OES, sodium bicarbonate, tea

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