

## Physicochemical and microbiological quality of selected noncarbonated bottled drinking water sold in Southern province of Sri Lanka

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Bottled drinking water from southern province of Sri Lanka, representing the three districts, was characterized by means of their physicochemical and microbiological composition. Six different commercial brands of bottled water samples were collected on regional and popularity basis. In order to assess the effect of different storage conditions (sun exposure, refrigeration and normal, and storage time), different commercial bottled water brands were analyzed to determine the quality parameters described below. These parameters were compared against International (WHO - World Health Organisation) and National (SLS - Sri Lanka Standards) standards. The microbiological parameters (total coliform) and seven out of eight physicochemical parameters such as turbidity, electrical conductivity, hardness etc. of all brands of bottled water were within the permissible range for local and international standards, except pH as it was determined to be lower than the accepted standard. This study also revealed that there is a considerable amount of variation in the quality parameters of bottled water, though within the accepted range, when the storage conditions and storage times are considered, for different commercial brands of water bottles.

Key words: Bottled drinking water, physicochemical and microbiological composition, WHO standards & SLS standards

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