

**PRESERVATION OF TOMATO (*Lycopersicon
esculentum*) BY DEHYDRATION FOR PRODUCT
DEVELOPMENT AND UTILIZATION**

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ABSTRACT

Dehydrated tomatoes (*Lycopersicon esculentum*) present a special interest, because some bioactive antioxidants are found in their composition at concentrated state. Lycopene is the main bioactive compound found in tomato. The efficiency of using dehydrated tomatoes as foods with health claims or bioactive food supplements is conditioned by the degree of maintaining the bioactive components. In this study dehydrated tomato toppings of the brix values of 20, 25 and 30 were developed using dehydrated tomato. Just ripen stage of tomato variety 'Pathma' was selected for the study. Selected tomato samples were treated with concentration series of salt and assigned for the pre-dehydration processes. Treatments were arranged into a Complete Randomized Block Design (CRD). Dehydrated tomato samples were evaluated for microbial counts, moisture content and physical appearances to select the best dehydrated tomato sample. Selected best tomato sample was used to develop the dehydrated tomato topping. The treatments were arranged into a Complete Randomized Block Design (CRD). Three recipes were evaluated using sensory analysis and dehydrated tomato topping with brix value of 25 was selected as the most preferable sample with highest overall acceptability. Selected sample was checked for physicochemical properties, microbial counts, sensory evaluation and proximate composition. The product was checked for the organoleptic properties for a period of three weeks. During 21 days of storage at 4°C, microbial counts, acidity and pH were within the standards specified by the Sri Lankan Standard Institute and the organoleptic qualities were not deteriorated after 21 days of storage. Therefore, the developed product could be stored safely for 21 days at refrigerated temperature (4°C). The Dehydrated tomato topping with brix value of 25 could be recommended as a fat free vegetarian product for future needs.

Key words: Dehydrated tomato, Product development, Tomato topping