



PHYTOCHEMICAL AND MICROBIOLOGICAL ANALYSIS OF DEVELOPED FREEZE DRIED WATERMELON AND TOMATO POWDER

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ABSTRACT

Fruits and vegetables are the prominent source of various nutrients as well as phytochemicals. Due to their higher water activity, they are prone to deterioration. The present study was conducted to prepare freeze dried powder mix of Watermelon (*Citrullus vulgaris*) and Tomato (*Lycopersicon esculentum Mill*). Freeze drying or lyophilization is a method of food dehydration to make high quality food products without altering their colour, texture, flavour and nutritive contents. In this study, the phytochemical (qualitative and quantitative), microbiological and antioxidant capacity and lycopene content have been evaluated. For this analysis the variations of 10%, 20%, 30%, 40% and 50% were prepared. Result shows a gradual increase in TPC, antioxidant capacity and lycopene content. The microbiological (bacterial and fungal) load for each variation was found to be constant for 45 days during 15 days interval.
