



EFFECT OF POMEGRANATE (*PUNICA GRANATUM*) PEEL EXTRACT (PPE) IN INCREASING THE SHELF-LIFE OF HOME-MADE BUTTER

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ABSTRACT

Pomegranate (*Punica granatum*) fruit is known for its medicinal properties due to its various bio-active polyphenols and flavonoids which exhibit anti-microbial and anti-oxidant properties (Chaturvedula et. al, 2011). The extraction of these bio-active ingredients from fruit peels maximises fruit by-product utilisation and can be used as an alternative to chemical preservatives. These compounds of importance were extracted from powdered dried peels in ethanol using a water bath shaker to obtain pomegranate peel extract (PPE) with concentration of 125mg/ml. The preservative effect of PPE was studied on home-made butter for 15 days at 4°C using various concentrations like 1.25 mg/g, 2.5mg/g and 3.75 mg/g. The result showed the extended shelf life of PPE incorporated samples as compared to the control sample (R) which was found unacceptable on the ninth day and onwards. The rejection of control sample (R) was on the basis of sensory evaluation and increased number of microbial count, i.e., log 2.74 cfu/ml. The sample C (3.75 mg/g) showed better storage life of 15 days without any effect on its sensory attributes. PPE can be used as preservative in home-made butter as result indicates that the concentration of PPE inversely effects the microbial growth and hence there is a sharp decline in microbial count at high concentrations.