

## Effect of drying methods and pretreatments on dehydration and rehydration characteristics of osmo-dried papaya slices

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■ **ABSTRACT** : Papaya slices were treated with different pre-treatments namely control,  $T_1$  = Control,  $T_2$  = Potassium metabisulphate,  $T_3$  = Sodium bisulphate and  $T_4$  = Blanching at 95°C for 4 minute. The treated sample were osmosed in syrup solution of 55 °Brix and 65 °Brix for period of 180 minutes, than wiped and dried in tray dryer and hot air oven dryer at 60°C. It was revealed from the results that, drying of papaya slices in a hot air oven dryer takes only 600 minutes for drying from an initial weight of sample to final weight of sample. The rehydration ratio was recorded of 65 °Brix that 4.95, 2.61, 3.05 and 2.89 for  $T_1$ ,  $T_2$ ,  $T_3$  and  $T_4$  samples after 90 days. Drying of papaya slices in a Tray dryer takes only 660 minutes. The dehydration ratio was recorded of 65 °Brix that 8.40, 3.52, 4.13 and 3.10 for  $T_1$ ,  $T_2$ ,  $T_3$  and  $T_4$  samples.

■ **KEY WORDS** : Dehydration ratio, Rehydration ratio, Co-efficient, Osmo-dried papaya slice

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