Some Studies on Drying Characteristics of Tomato Slices

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ABSTRACT

The drying characteristics of tomato slices were studied by using polyhouse dryer, solar cabinet dryer and open sun drying. Dried tomato powder characteristics were studied. The ripened tomato of local variety were taken and cut into slices of 8 mm thick. The pretreatment was given by dipping the tomato slices into 10% salt solution and 5% KMS. The pretreated samples were placed in polyhouse dryer, solar cabisnet dryer and open sun drying for drying of tomato slices. The dried slices ere fed manually to Willey mill for making powder. Tomato powder was analyzed to lycopene content, reducing sugars, ascorbic acid, TSS, pH and total carbohydrates. The time taken for polyhouse drying is 65 h whereas solar cabinet and open sun drying was 90 h and 110 h respectively. Comparing different methods of drying, solar cabinet dried sample contain high amount of vitamin C, TSS, reducing sugars and carbohydrates as compared to other methods. The tomato powder in solar cabinet dryer may be considered as a better quality product for human consumption.

Key words : Open sun drying, Polyhouse, Solar cabinet Dryer, Tomato slices,Tomato powder.