

# Osmotic Dehydration of Bell Pepper- Process Optimization and Standardisation

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**Abstract**—The **bell pepper** (also known as **sweet pepper**, **pepper** or **capsicum** is a cultivar group of the species *Capsicum annuum*. In the "very good" conventional nutrient category, bell peppers provide us with a good number of B vitamins (including vitamin B2, vitamin B3, folate, and pantothenic acid), as well as vitamin E, potassium, molybdenum, and fiber. Bell peppers also contain vitamin K, vitamin B1, manganese, phosphorus, and magnesium in good amounts. Overall, we get a remarkable wealth of conventional nutrients from this popular fruit generally used as vegetables, but the main problem here is that only few ways are present through which we can incorporate this valuable fruit into our diet so the present study aims to standardize and optimize the process parameter for preparation of bell pepper using a combination of syrup & citric acid, honey & lemon juice by using **osmoticdehydration** (partial removal of water from plant tissues by immersion in a hypertonic(osmotic)solution which results in the increased shelf life of the product).

Three different colors of bell pepper i.e (Red, Yellow, Green) were taken and the product was prepared and it was found that on drying the color of the red and yellow candies was more appealing as compared to the green color one. Various combination were tried and the sensory evaluation were done by a team of panel members and the result were evaluated. It was observed that the product obtained using different process parameter showed marked variation in the sensory scores. The study shows that bell pepper are an ideal raw material that may be used for osmotic dehydration as the product obtained was highly acceptable, further studies may be carryout to study different variable and to perform proximate analysis of the obtained sample.