

Effect of Drying Modes on Quality Characteristics of Dehydrated Leafy Vegetables

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Abstract

The present investigation was carried out for justifying the suitability of various dehydration techniques for desired products. The commonly consumed green leafy vegetables viz. fenugreek leaves (*Trigonella foenumgraecum*) and *oleracea* L.) were assessed for their commercial processing potential through dehydration technology. The selected vegetables were washed and subjected to steam blanching. The pretreated vegetables were then dehydrated under conditions i.e. sun, shade and tray drying to safe moisture level. The dried samples were evaluated for their dehydrated features, nutritional and sensory characteristics. The data on the dehydration technology revealed that tray dried green leafy vegetables found comparatively more wholesome, palatable and reported maximum retention of nutrients like vitamin C (96%), with minimum drying time (2.30–3.30 hrs) and equilibrium moisture content (6%) as compared to other methods. The rate constant for drying of fenugreek and spinach leaves were found to be 0.0105 min⁻¹ and 0.0088 min⁻¹ in tray drier. The tray drying method was found comparatively superior in retention of sensory quality parameters (overall acceptability) over sun and at par with shade drying.

Keywords

Spinach, fenugreek, blanching, drying, sensory quality.

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