Development and nutrition composition of functional products prepared using fresh Kulfa (*Portulaca oleracea*) leaves

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**ABSTRACT**

Micronutrient malnutrition poses a serious threat to the health of vulnerable groups of population. Kulfa, as an important medicinal plant, high in nutritional value and rich in micronutrient was selected for the study. Products namely, *Poha, Raita* and *Paratha* were prepared. Organoleptic properties of products were judged by nine point hedonic scale. Proximate composition, mineral and vitamin content of products were analyzed.

Key words: Nutrition, Composition, Kulfa

**INTRODUCTION**

Medicinal plants have been the mainstay of human diets for centuries, providing millions of consumers with important micronutrients, such as vitamins and minerals needed to maintain health and promote immunity against infections. Compared to conventional cultivated species, medicinal plants are hardy, require less care and are a rich source of micronutrients, they could make an important contribution to combating micronutrient malnutrition as well as providing food security (Flyman and Afolayan, 2006).

In nature, there are many plants of promising nutritive value, which can nourish the ever-increasing human population. Many of them are resilient, adaptive and tolerant to adverse climatic conditions. Although, they can be raised comparatively at lower management costs even on poor marginal lands, they have remained underutilized due to lack of awareness and popularization of technologies for utilization. Now-a-days, plant foods are gaining importance as a means to increase the per capita availability of foods (Sheela et al., 2004).

Kulfa (*Portulaca oleracea*) has been used for thousands of years throughout the world for everything from salads to medicines. Kulfa can be found growing wild or cultivated in gardens, in almost any sunny spot. It is a rich source of important nutrients such as minerals and antioxidants and its edible tissues contain high levels of omega-3 fatty acids, which are recommended for a healthy diet. Kulfa is rich in easily absorbed vitamin C and E, which is known to increase immunity to disease. Dried kulfa has about five times more vitamin E than spinach. It is also a good source of coenzyme Q10. Kulfa is rich in pectin, which is known to lower cholesterol. It has been used as a hypolipidemic agent (lowers the fat content of blood) and in the healing of wounds, boils and burn injuries.

It plays an important role in the life of indigenous people around the world. Therefore, the present study was undertaken to explore possibilities of using the leaves of kulfa (*Portulaca oleracea*) to enrich the various traditional food items to cure deficiency diseases (Sankhala et al., 2005).

**MATERIALS AND METHODS**

Fresh sample of kulfa leaves were procured from the local market of Allahabad city. Blanching was avoided due to undesirable colour and increased losses of soluble solids (Baloch et al., 1997). Healthy leaves were shorted after washing and running water for chemical analysis.