

Nutrient composition of cauliflower (*Brassica oleracea* var. Botrytis) leaf powder and its acceptability in fast food snacks

R. MOGRA, J. BANGA AND PREETI RATHI

Cauliflower leaf powder was developed by drying cauliflower leaves. The process of drying of leaves in mechanical dryer was standardized after taking trials for different temperature and time period. On the basis of organoleptic characteristics of powder, the leaves dried at 40°C temperature for 22hrs were finalized. CLP was then analyzed for their nutritional and anti-nutritional composition. On dry weight basis CLP contained 12.55g moisture, 17.67g protein, 1.76g fat, 8.20g fiber, 15.32g ash per 100g. Energy was found to be 256 Kcal. Calcium, phosphorus, iron was 3600mg, 368mg and 36mg, respectively. Regarding anti nutrients it had tannins 40µg, oxalates 0.201g and phytates 11.3g. The results revealed that CLP developed from cauliflower leaves serve as a source of micronutrients. Thus, CLP need to be popularized which will be helpful in overcoming micronutrient deficiency diseases. In addition, optimum utilization of this uncommon leaves will help in widening food basket.

Key Words : Nutrient composition, Cauliflower leaf powder, Blanching

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INTRODUCTION

India is the second largest producer of vegetables in the world and accounts for about 15 per cent of the world's production of vegetables. The current production level is over 71 million tones and covers about 3 per cent of the total area under cultivation in the country. Among vegetables India occupies first position in the production of cauliflower. Cauliflower is usually known by local name as phoolgobhi and a popular vegetable of *Cruciferae* family. It is a major cole crop grown throughout the country for its white tender curd which is commonly used as vegetable.

Cauliflower is originated over 2000 years ago in the gardens of Asia Minor and the Mediterranean. The word cauliflower comes from latin word caulis means stalk and floris means flower. The botanical name of cauliflower is *Brassica oleracea* var. Botrytis. Cauliflower is nutritious, the versatility

of this plant is reflected by the fact that not only the curd but also leaves are used as a vegetable.

Cauliflower leaves are by-product of cauliflower cultivation. Cauliflower leaves which are normally wasted can be cooked like any other green leafy vegetable and can be used as a valuable source of micronutrients as they are rich in calcium, iron and phosphorus and also source of natural antioxidants the use of which may help in preventing degenerative diseases.

Adolescence is the age where the food behaviour is such that they skip meals and eat more junk foods and fast foods and suffer more from micronutrients deficiencies. The adolescence is considered especially vulnerable nutritionally because there is an increased demand for nutrient related to the dramatic increase in physical growth and development.

Fast food snacks have attained considerable popularity among adolescents in recent times. In fact these fast foods have become a part and parcel of their daily meal. Adolescence is a critical period of human development demanding increased intake of almost all the nutrients. Therefore, an attempt has been made to formulate commonly consumed fast food snacks by incorporating them with micronutrient rich available greens of cauliflower. so that their use as vegetable and in other food preparations can be promoted to overcome the micronutrient deficiency among population.

MEMBERS OF RESEARCH FORUM

Author for correspondence :

R. MOGRA, Department of Food and Nutrition, College of Home Science, Maharana Pratap University of Agriculture and Technology, UDAIPUR (RAJASTHAN) INDIA
Email : mograrenu@yahoo.com

Associate Authors' :

J. BANGA AND PREETI RATHI, Department of Foods and Nutrition, College of Home Science, Maharana Pratap University of Agriculture and Technology, UDAIPUR (RAJASTHAN) INDIA