

Accepted : May, 2010

Organoleptic evaluation of recipes based on maize flour

KANU PRIYA AND SUBHASHINI VERMA

ABSTRACT

Eight recipes were prepared namely, *gruel*, *methi roti*, *palak poori*, pancake, mixed vegetable *pakoda*, *namkeen para* and tacos using maize flour as a main ingredient and supplemented with other ingredients *viz.*, Bengal gram flour, milk and milk products, green leafy and other vegetables. These products were organoleptically evaluated using nine point hedonic scale. Sensory evaluation revealed highest score for overall acceptability of pancake (8.6 ± 0.4) and lowest for *methi roti* (7.3 ± 0.64). Supplementation of cereal with pulse, green leafy vegetables and little bit of milk and milk products improved the protein quality of the products e.g. *methi roti* with curd had highest NDpCal% of 9.5.

Key words : Maize flour, Supplementation, Organoleptic evaluation, Maize flour

INTRODUCTION

Maize (*Zea mays*) is universal crop grown in the developed and developing countries. It is the third most important cereal crop of the world next to wheat and paddy. It is one of the staple foods for the people of Punjab, U.P. and Rajasthan in India. Roasted and steamed maize grains, maize *chapati* with *sarson ka saag* are popular and commonly consumed among Punjabi families. The nutritional inadequacies of the maize are also well known, supplementation with protein rich sources and preparation of acceptable products would not only improve nutritional value of maize but would also provide a variety. Hence, the present study was undertaken to develop nutritious recipes based on maize flour by supplementing Bengal gram flour, milk and milk products and vegetables.

MATERIALS AND METHODS

Selection of products:

Eight products namely, plain *roti*, *gruel*, *methi roti*, *palak poori*, pancake, mixed vegetable *pakoda*, *Namkeen para* and tacos were selected for the purpose (Table 1).

Procurement:

Maize flour and other ingredients used for

supplementation like wheat flour, Bengal gram flour, green leafy vegetables like spinach and fenugreek and other vegetables, milk and its products were also bought from the local market.

Development of products:

Seven products using maize flour as basic ingredient and supplemented with legumes, vegetables and milk and milk products were developed (Table 1).

Preparation of plain *roti*:

Dough was made using 200 g of maize flour with 165 ml of luke warm water. The dough was divided into five equal sized balls and shaped into *rotis* on rolling board and roasted on hot griddle till both the sides were done. Each *roti* weighed 55g.

Preparation of *gruel*:

One small maize *roti* (35g) was crushed and mixed with 75 ml of hot milk and seven g of sugar.

Preparation of *Methi Roti*:

150 g of maize flour, 50 g of Bengal gram flour, 100 g of fenugreek leaves and 75 ml of water were used for the preparation of dough. The dough was divided into five