

Research Paper :

## Utilization of paneer whey for the preparation of whey corn flour soup

ANISHA VERMA, NEHA SINGH AND R. CHANDRA

Accepted : April, 2010

See end of the article for authors' affiliations

Correspondence to:

**ANISHA VERMA**

Department of Food and Nutrition, Halina School of Home Science, Higginbottom Institute of Agriculture Science and Technology (D.U.), ALLAHABAD (U.P.) INDIA

### ABSTRACT

Whey is a major source of energy giving lactose, vitamin, minerals and good source of heat promoting whey protein. The present work was conducted with the objectives to prepare whey corn flour soup and studying its organoleptic and chemical properties. The experiment was replicated six times and the data obtained during the investigation were statistically analyzed by using analysis of variance (ANOVA) and critical difference (CD) techniques. Whey corn flour soup prepared by admixture of water and whey in ratio of 1:1, 1:2, 1:3 served as T<sub>1</sub>, T<sub>2</sub> and T<sub>3</sub>, respectively. The quality of whey corn soup was compared to that of the control T<sub>0</sub>, corn flour soup prepared from water. Sensory evaluation of prepared whey corn flour soup was carried out using the nine points Hedonic scale. Fat, protein, carbohydrate and total solid were found to be highest in treatment T<sub>3</sub> (1:3) 1.283, 0.63, 7.0 and 10.612, respectively. T<sub>2</sub> (1:2) recorded highest scores in flavour and taste, consistency, colour and appearance and overall acceptability. Whey based ready to serve beverage offers the advantages of convenience for busy consumers.

**Key words :** Whey, Paneer, Chhana, Corn flour soup, Beverages, By-products

Whey is an excellent beverage base and genuine thirst quencher, nutritious and possesses medicinal properties but treated as waste dairy by-product. On one side, it controls the pollution and on the other hand adds value to the products. Paneer whey contains water 93.6 per cent, fat 0.5 per cent, protein 0.4 per cent, lactose 5.1 per cent and ash 0.4 per cent (Day, 1977). Paneer whey soup increases the appetite and it is also helpful in case of diarrhea and liver problems. On the other hand paneer whey soup contains good amount of carbohydrate, fat, protein and minerals. So, that keeping the above mentioned reasons in the mind, we have utilized the whey for the preparation of whey corn soup. The present study was conducted with the objectives to find out the feasibility of utilizing whey for soup making and to find out the chemical and organoleptic quality of whey corn flour soup.

### METHODOLOGY

The research work was carried out in the research laboratory of Department of Dairy Technology, Allahabad Agricultural Institute-Deemed University, Allahabad.

#### Collection of ingredients:

Skimmed milk and whey were collected from Students Training Dairy Allahabad Agricultural Institute, Deemed University. Other ingredients were collected from local market of Allahabad.

### Development of whey corn flour soup:

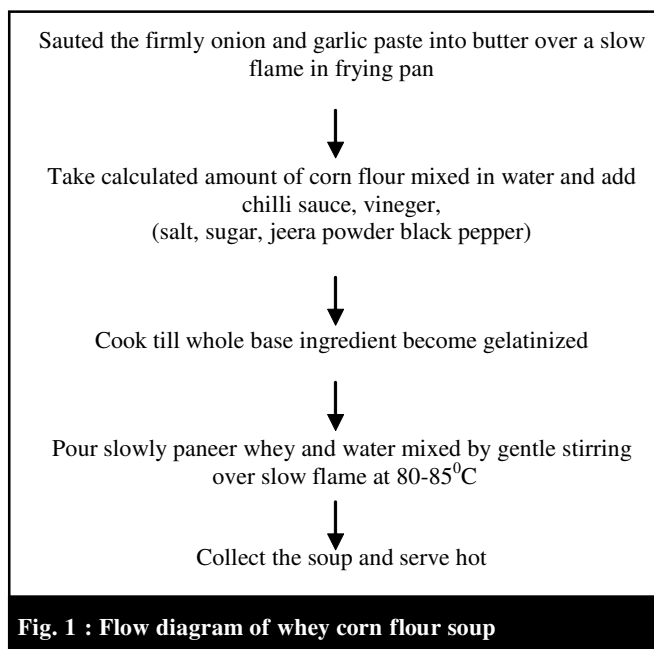


Fig. 1 : Flow diagram of whey corn flour soup

#### Detail of treatments and replications:

T<sub>0</sub> control= Corn flour soup prepared without addition of whey, T<sub>1</sub> = Corn flour soup prepared with addition of whey in the ratio of 1:1, T<sub>2</sub> = Corn flour soup prepared with addition of whey in the ratio of 1:2, T<sub>3</sub> = Corn flour soup prepared with addition of whey in the ratio of 1:3