

Fat replacers and their application in food products

Gopika C Muttangi and Shilpa Yatnatti
University of Agricultural Sciences, India

Fat plays a key role in a majority of food products. It is an important constituent of food and serves as a rich source of energy and contributes to various sensory and rheological characteristics. It provides a creamy texture and a flowing mouth feel to foods. These attributes contribute to richness of the food resulting in better market value. The consumption of diet high in fat is associated with incidence of obesity, coronary heart diseases, hypertension, insulin resistance, and cancer and gall bladder diseases. Hence there is demand for low-fat and low energy foods. Consumers are looking for foods and beverages naturally low in fat or free from fat. The removal of fat from foods alters many of the physico-chemical and functional properties. However the emergence of fat replacers have paved the way in making low fat products having characteristics similar to that of full-fat counterparts. Fat replacers are ingredients used to replace fat in the food system and they are categorized as carbohydrate based, protein based and fat or lipid based fat replacers. Food products with partial replacement of fat maintain sensory and functional properties similar to that of full fat products. No single fat replacer can provide all attributes of fat. So solution to this is combination of fat replacers and reduced fat products instead of no-fat products. There is a need to develop fat replacer of versatile type, which can be used in a number of food products.

Biography

Gopika C. Muttangi has completed her P.G at the age of 24 years from University of Agricultural Sciences, GKVK, Bengaluru. She has conducted research study on "Evaluation of Sunflower seed kernels for the development of added value food products". She is currently doing her Ph.D in the same University in the Department of Food Science and Nutrition.

gopika.cm@gmail.com

Effect of formulation of whole ragi flour (*Eleusine coracana* L.) on the nutritional and sensorial quality characteristics of cake

Gokul Shinde P, Watharkar Ritesh B, Burbade Rajesh, Sable Sunil and Ugale Shardul
Department of Food Science and Technology, K.K.Wagh College of Food Technology, India

Cake is one of the oldest popular bakery products. Generally it is prepared from refined Wheat flour and is a rich source of protein, fat and carbohydrates, vitamins but limiting in minerals and dietary fibres. Whole Ragi flour is rich in minerals like iron, calcium, phosphorus, fibre and vitamin contents. In the present study, the mineral and fibre contents of Cake samples were improved by the use of various blends of Wheat flour and Whole Ragi flour (100:0; 90:10; 80:20 and 70:30) with other ingredients. The results showed that cake samples enriched with Whole Ragi flour were rich in mineral contents like calcium, iron, phosphorus and crude fibre as compared to the control sample. Sensory scores of cake sample prepared with 90% Wheat flour and 10% Whole Ragi flour was same as the control. The cake prepared with 30% Whole Ragi flour had highest mineral and fibre content, but the sensory score was low due to the loss in sponginess and increased intensity of brown colour. These cakes may be beneficial for growing children, teenagers and pregnant and lactating women due to its high nutritive value but Cake prepared from the 20% Whole Ragi flour had less mineral and fibre content, but high sensorial score.

Biography

Shinde Gokul P. is pursuing for B.Tech. (Food Technology) degree from K.K. Wagh College of Food Technology Nashik, M.P.K.V Rahuri. I have attended workshop on "Business opportunities in food Processing" which was held by JMCC. I am working on this project under Prof. R.B.Watharkar, Department of Food Science and Technology, K.K.Wagh College of Food Technology.

gokulshinde23@gmail.com