

## A study on the consumer acceptance of soy blended bakery products

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### ABSTRACT

The study was taken up to create awareness on the various health benefits of using soy products in diet. Bakery items such as biscuits (sweet, salt and sugar free), bread and cakes were prepared by incorporating defatted soy flour at the prescribed proportion. Consumer evaluation of the items was carried out for soy blended bakery products. The results revealed that more than eighty per cent of the rural and urban mass rated the soy incorporated sweet biscuits and cakes to be very good whereas soy incorporated bread was rated very good by about fifty per cent of both the communities. The data indicate that the bakery products prepared by incorporating defatted soy flour were acceptable by both rural and urban people.

**Key words:** Defatted soy flour, Soy blended bakery products, Consumer acceptance

### INTRODUCTION

Soybean is an excellent health food at the most economical price. It contains about 40 per cent good quality protein, 23 per cent carbohydrates, 20 per cent cholesterol free oil and reasonable amounts of minerals and vitamins. Soybean is generally processed for its oil, protein and lecithin. Normally whole beans are used for making full fat soyflour, dairy analogs (soymilk, soypaneer, soy-yogurt, soy-ice cream) fermented food (Tempeh, Natto, Sauce) and snack foods (roasted/sprouted beans). Soy flour can also be made from partially/fully defatted beans (cake/meal) and used in making baked products (chapattis, bread, biscuit, bun, rusk and cake), Texturised Soy-Proteins (TSP), protein isolates and concentrates (Ali, 1993).

The effect of incorporation of soybean flour and its products have been investigated and studies have shown that 5-25 per cent soy flour can be used in bread, cakes and cookies, snack foods and infant foods without any loss of physical characteristics but substantial improvement in the nutritional value of the products. Soybean proteins are often added to food at low levels to utilize their functional properties. At these levels, their contribution to nutrition is minor. At higher levels (5-25 per cent), these proteins are an important source of protein; they also contribute the desired functional effect.

Acceptance of soy foods in India has been rather slow. One of the reasons is lack of awareness among the people about the high nutritional value of soybean and its products. A major but as yet not fully tapped outlet for soy products is the bakery industry. The bakery products are considered easy, convenient and rather inexpensive means of taking food in hygienically prepared ready to eat form. Hence the present study was carried out to

create awareness on the benefits of using soy products in the diet of the people by introducing the various soy incorporated bakery products and to evaluate their acceptance by large scale consumer evaluation in and around Coimbatore district.

### MATERIALS AND METHODS

#### 2.1 Raw materials:

Soy based bakery products were prepared by incorporating defatted soy flour in bakery products like biscuits, bread and cakes according to the standards developed at Soybean Processing Unit, CIAE, Bhopal, India. The desirability of the products was found out by consumer evaluation of the products among the urban and rural mass in and around Coimbatore district.

#### (i) Soy blended biscuits:

Soy blended biscuits were prepared by incorporating 25 per cent of defatted soy flour. The process of soy based biscuit consists of creaming of sugar and shortening along with baking powder and baking soda, mixing of other ingredients, sheeting, molding and baking at 200EC for 15 min. (Fig.1) Variants of biscuits like sugar, salt and sugar free biscuits were also prepared.

#### (ii) Soy blended bread:

Soy blended bread was prepared by incorporating 10 per cent of defatted soy flour in the dough mix. The mixed dough was divided, molded and placed directly in a greased pan to ferment and baked at 220EC for 20 min.

#### (iii) Soy blended cakes:

Soy blended cake was prepared by creaming the

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