

Sensory and nutritional quality evaluation of soy-bajra fortified sattu and ready to eat sattu products

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Life style changes in society have created altogether a new market for value added processed food products. Incorporation of soybean and bajra in popular traditional Indian foods is likely to help in acceptability of soy blended foods. Sattu is an Indian traditional ready to eat snack item. Therefore, the present study was carried out to investigate the nutritional and sensory quality characteristics of traditional sattu and soy-bajra fortified sattu made from puffed flours of barley and Bengal gram and puffed flours of soybean, bajra and Bengal gram, respectively. The results showed that soy and bajra flour could be well supplemented up to the level of 25 per cent with good palatability. Soy-bajra fortified sattu beverage was more acceptable (74.3%) as compared to traditional sattu beverage (72.4%). Overall per cent acceptability of soy-bajra fortified sattu paste was more (74.8%) as compared to traditional sattu paste (67.6%). Overall per cent acceptability of traditional sattu laddoo (81.2%) was more as compared to soy-bajra fortified sattu laddoo (78.0%). No significant difference was observed in all the quality attributes of ready to eat sattu products developed from traditional sattu and soy-bajra fortified sattu. This explains that sensory quality of the products remained unaffected with the use of soy-bajra fortified sattu. The developed sattu based products were also subjected to sensory evaluation using 9-point hedonic ranking scale to find out the consumer acceptability of the ready to eat sattu products sex-wise and residence-wise. Soy-bajra fortified sattu products were almost equally acceptable in rural and urban areas and in both the sex. Increase in protein, fat, energy, calcium and iron was noted in soy-bajra fortified sattu products. The net dietary protein cal% of traditional sattu was 6.89 and soy-bajra fortified sattu was 6.32 which is adequate to maintain health for adults and good to promote growth. The cost of soy-bajra fortified sattu was also affordable by lower economic class and thus this serves the dual purpose of convenience and ensuring nutritional security.

How to cite this article : Jain, Bharti (2012). Sensory and nutritional quality evaluation of soy-bajra fortified sattu and ready to eat sattu products, *Food Sci. Res. J.*, 3(1): 86-90.

Key Words : Traditional sattu, Soy-bajra fortified sattu, Full fat soy flour (FFSF), Sensory evaluation, Ready to eat sattu products

INTRODUCTION

Good health is very essential for a successful life. People are becoming health conscious and thereby demand of specialty foods is increasing. Soybean has tremendous potential to be transformed into a number of such foods suiting to the requirement of people. Daily use of soybean in the diet would provide a balanced nutrition at a low cost and also the health benefits. Awareness on this aspect, among masses, is now spreading. Soy based products are nutritious, economical

and healthful.

Cereals and bengal gram flour can be fortified with full fat soy flour and can be used to prepare traditional food products. In India, sattu is traditionally prepared with the combination of roasted Bengal gram and roasted cereal of the particular region and used as ready to eat (RTE) food in most parts of India originally from north Indian villages (Deshpande *et al.*, 2004a). As soybean contains higher amount of protein and fat than bengal gram, it could be partially substituted to enrich the traditional sattu. Soybeans being referred many times as “golden bean” are a boon to solve the problem of energy protein malnutrition in India and many other developing countries (Gandhi *et al.*, 2008).

The protein digestibility of most soy products is generally

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