

Development of Spirulina Based “Biscuits”: A Potential Method of Value Addition

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ABSTRACT The present study was undertaken to assess the nutritional composition of Spirulina powder, development of Spirulina based value added products and their nutritional composition and shelf life. Value added biscuits were prepared by using refined wheat flour, sugar powder, ghee, milk, ammonia, baking powder, custard powder, milk powder, vanilla and pineapple essence and 10 per cent level of Spirulina powder. Mean score for overall acceptability of value added biscuit was 7.5 against the control sample, 7.9 on nine point hedonic ranking scale. The developed value added biscuit contained 2.95 per cent moisture, 19.6g protein, 26.71g fat, 2.08g crude fiber, 1.83g ash, 46.83 g carbohydrate and 506.11 kcal energy per 100g on dry weight basis. Spirulina supplemented biscuits had β -carotene, vitamin C, iron and potassium contents in the range of 349.75 μ g/100g, 2.75 mg/100g, 17.62 mg/100g and 292 mg/100g, respectively. Fat acidity revealed satisfactory quality of the value added biscuit at the end of three months of storage period. Thus, Spirulina based value added products may be beneficial for vulnerable population due to its high nutritive value. These would also be advantageous for those who are suffering from degenerative diseases because of its therapeutic properties.