

## Biscuits Production by Mixing Banana and Cashew in Wheat Flour

Kapil Gaur\*

Department of Biotechnology, DCRUST Murthal, Sonapat, India

\*Corresponding author: Kapil Gaur, Department of Biotechnology, DCRUST Murthal, Sonapat, India, Tel: 8376837633; E-mail: [djgaur007@gmail.com](mailto:djgaur007@gmail.com)

Received date: February 24, 2015; Accepted date: February 26, 2015; Published date: March 06, 2015

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### Abstract

Biscuits were baked from a mixture of banana and cashew using wheat flour as base ingredient. Biscuit produced can show variability in flavor in all the attributes studies when compared to the control produced from wheat flour only. The value for crust color and moistures were 6.6 and 6.4 respectively. Studying on biscuit production showed that they contain higher moisture (13.4%) protein (12.6%) and fat (3.6%) contents when compared to the control produced from wheat flour alone. The banana and cashew flour can be used to replace part of wheat flour as well as fat and sugar in the production of biscuits without affecting the overall quality of biscuit produced in a drastic way.

**Keywords:** Biscuit; Sensory; Flour; Perishable; Banana

### Introduction

Biscuits have enjoyed a relative constant place in our diet for a long time and their continued quality has inspired the development of newer and additional enticing product that square measure offered in the market these days once the [1] functions of their ingredients are perceive biscuits is one amongst the foremost bother – free marketable items in any work. The foremost ingredients within the production of biscuit are flour, fat sugar egg and feat agent and the standard of biscuits is summarized within the general terms first is size each width and height and the second is the biscuit bite. Banana is the most popular fruit in the world. They are flashy and can be cultivated in all part of the tropics [2].

Banana fruit is a staple food in several Africa countries and they have beneficial nutritional properties. In as much as banana is widely consumed, its short shelf life is of great concern to both producers and consumers [3]. Bad storage systems used by formers and time lag from form to consumers due to the modes transportation enhanced the deterioration of this crop which may make them unacceptable to the consumer. Hence, wastage is inevitable the perishable nature of banana therefore makes processing important. Cashew is most popular nut and a very important crop whose seeds are rich in the sources of edible oil (43.55%) and protein (25.28%). Banana and cashew with other ingredient are used to produce biscuit. The flavor of banana and cashew when mixed with each other in correct proportions results in the outcome of a new product.

In the whole about two-thirds of the world's cashew production is crushed for oil and the remaining one-third is consumed as food [4]. In many parts of the world like Nigeria, cashew is a source of income for many as it is widely eaten as a snack after roasting. A combination of cashew and banana is commonly eaten as a snack in Nigeria and it is indeed very tasty. The most commonly used ingredients used in the production of biscuits are cashew, banana, wheat flour, margarine, egg, baking powder, sugar and milk.

With the help of these mixtures biscuits can be made either by using only wheat flour, baking powder, egg, sugar and milk or by mixing the banana and cashew in the wheat flour and keeping the rest of the

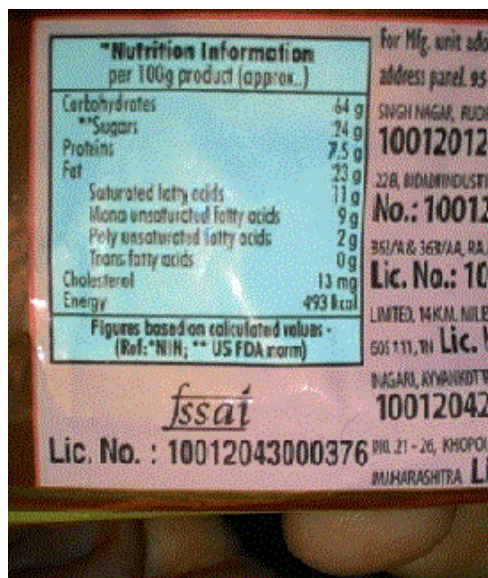
things as same, but a difference in the protein content between the two types of biscuits can be tested and a very slight difference in the taste between them can also be felt (Figure 1). It was clear that the protein content of the biscuit having banana and cashew having as its ingredients contain more protein level than the biscuit which was made by using wheat flour only (Figure 2).



**Figure 1:** Protein content of biscuit made by using only wheat flour is low.

### Discussions

No significant difference can be felt in the moisture, ash, fiber, protein, fat and carbohydrate content between the two types of the biscuit. The substitution of cashew and banana for wheat did not affect the quality of the biscuits.



Nutrition Information per 100g product (approx.)	
Carbohydrates	64 g
**Sugars	24 g
Proteins	7.5 g
Fat	23 g
Saturated fatty acids	11 g
Mono unsaturated fatty acids	9 g
Poly unsaturated fatty acids	2 g
Trans fatty acids	0 g
Cholesterol	13 mg
Energy	493 kcal

Figures based on calculated values - (Ref: \*NIH; \*\* US FDA norm)

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Figure 2: Protein content of biscuit made by using banana and cashew with wheat flour is high.

It is possible to incorporate banana and cashew flour into the major biscuit ingredients (wheat flour, fat, sugar, egg and leavening agent) to obtain a very flavor-able and nutritious product. The production of these flavor-able and nutritious biscuit has led to the development of a new means of utilizing banana and cashew, thus reducing the banana wastage.

## Conclusions

It is possible to produce nutritious and acceptable biscuits through a substitution of banana and cashew. The high protein content of biscuits made from the addition of banana and groundnut as well as the acceptability of the baked product could lead to an increase in the utilization of indigenous food crops.

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