

## **Nutritional Composition of Crackers Produced from Blend of Sprouted Pigeon Pea (*Cajanus cajan*), Unripe Plantain (*Musa parasidiaca*), and Brewers' Spent Grain Flour and Blood Glucose Level of Diabetic Rats Fed the Biscuit**

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**Abstract :** The nutritional composition and hypoglycaemic effect of crackers produced from a blend of sprouted pigeon pea, unripe plantain, and brewers' spent grain and fed to Alloxan induced diabetic rat was investigated. Crackers were produced from different blends of sprouted pigeon pea, unripe plantain and brewers' spent grain. The crackers were evaluated for proximate composition, amino acid profile and antinutritional factors. Blood glucose levels of normal and diabetic rats fed with the control sample and different formulations of cracker were measured. The protein content of the samples were significantly different ( $p < 0.05$ ) from each other with sample A having the lowest value and sample B with the highest value. The values obtained showed that the samples contained most of the amino acids that are found in plant proteins. The levels of antinutritional factor determined were generally low. Administration of the formulated cracker meals led to a significant reduction in the fasting blood glucose level in the diabetic rats. The present study concluded that consumption of crackers produced from this composite flour can be recommended for the diabetics and those who are sceptical about the disease.

**Keywords :** crackers, diabetics rat, sprouted pigeon pea, unripe plantain and brewers' spent grain

**Conference Title :** ICFAE 2016 : International Conference on Food and Agricultural Engineering

**Conference Location :** Istanbul, Türkiye

**Conference Dates :** January 25-26, 2016