

Glycemic index of selected Nigerian foods for obese people

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Abstract

This research work was carried out to determine the glycemic index of beans product. Four beans product (Beans served with stew, Akara, Moinmoin and Ofuloju) from the same cowpea specie (*Vigna unguiculata*) with different processing methods (boiling, steaming, frying) were evaluated .50g Oral glucose – D was used as standard food. Mineral analysis and glycemic index were determined using AOAC 2002.

A total of ten (10) healthy volunteers were used in the study. The volunteers consist of three (3) males and seven (7) females. Socio – demographic, Body Mass Index (BMI) of the subjects were assessed using a structured questionnaire and weighing scale respectively. A total of four beans products namely; Beans served with stew, Akara, Moinmoin and Ofuloju were given to the subjects after which blood sample was collected using a glucometer (on-call-plus).

The result of the socio economic characteristic shows that the age of the subjects ranged from 30-23 years, Height ranged from 1.57-1.48m, weight ranged from 45-69kg while their BMI were between 19.57 – 31.36 kg/m². The result of the mineral analysis showed that Moinmoin had the highest iron content (5.7) while Akara had the lowest content (0.02), Akara had the highest Magnesium content (3.5) while beans served with stew had the lowest Magnesium content (2.9). Beans served with stew had the highest zinc (0.05) while Akara had the lowest zinc content (0.02). The Glycemic Index (GI) of beans served with stew was 56, akara was 44, moinmoin was 41 while ofuloju was 54. The GI results revealed that bean product can be recommended for obese patients.

Biography

Olabisi Akinlua completed her Master of Science (MSc) studies in Food Technology at the University of Ibadan, Nigeria and a post graduate Diploma in Maternal & Child Nutrition from International Agricultural Centre, Netherlands. Former Dean, School of Pure and Applied Sciences of Moshood Abiola Polytechnic, Abeokuta, Nigeria. A Chief Lecturer of Food Technology Department, she is about completing her Ph.D at Federal University of Agriculture, Abeokuta. She is a fellow of the Nigerian Institute of Food Science & Technology and a member of the Nutrition Society of Nigeria. She has to her credit over ten academic published papers in reputed journals.