ABSTRACT

IMAS SEPTIYANI. Glycemic Index of Various Tiwul Food Products Based on Cassava (Manihot esculenta Crantz) in Normal People. Under Direction of RIMBAWAN and YEKTI HARTATI EFFENDI

Tiwul is an Indonesian traditional food made from Cassava. Cassava is pounded or mashed and then steamed. Currently, commercial instant tiwul is relative easily found in the community. Commercial based tiwul industries state that the product is good for people with diabetes mellitus. However, until now there has been no study on the glycemic index value of tiwul. The purpose of this study is to observe the glycemic index of various tiwul food products based on cassava in normal people. Three types of tiwul used in this study were 1) conventional tiwul with fresh flavor, 2) commercial instant tiwul with sugar and, 3) tiwul high in protein with the addition of soy protein isolate. Subjects in this study were 10 normal individuals (healthy), consisting of 5 men and 5 women who are free from diabetes, liver and kidney diseases based on results of laboratory data including fasting blood glucose, 2 hours post prandial blood glucose, levels of bilirubin (direct and total), SGOT, SGPT, and creatinine blood levels. The measurement results show that the glycemic index of different types tiwul have different glycemic responses eventhough they remained the same in one category. The values of glycemic indexes of conventional tiwul (94,74), commercial instant tiwul (96,91), and high protein instant tiwul (71,92) are in the category of food with high glycemic index value (GI>70). Results of analysis of variance showed that differences in the type of tiwul have no effect on the glycemic index values (p>0,05).

Keywords: glycemic index, normal people, tiwul, cassava