ABSTRACT

INFLUENCE FIBER CONTENT VERSUS REDUCING SUGAR CONTENT IN WHITE RICE, BROWN RICE, AND ORGANIC RICE

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The changing in lifestyle and food consumption pattern has resulted in increasing some degenerative diseases, such as diabetes mellitus. Rice consumption should be limited in the diet for person with the diabetic type 2, due to the opinion that rice is considered as an hyperglycemic food. However, among rice varieties indicate wide range values of glycemic index (GI). This research focus to influence fiber content versus reducing sugar content. The sample of three variety rice, such as white rice, organic rice, and brown rice being analyzed the amount before and after cook process of reducing sugar content with luff schoorl method, fiber content be based on SNI-01-2891-1992 and water content. The result of reduction sugar content before cooked was white rice = 67,65%, organic rice = 77,06%, brown rice = 71,97% and after cooked was white rice = 24,88%, organic rice = 17,68%, brown rice = 30,16%. The result of fiber content before cooked was white rice = 0,42%, organic rice = 1,03%, brown rice = 17,68%, and after cooked was white rice = 0,22%, organic rice = 0,21%, brown rice = 1,55%. Based on the result of statistic analize with Pearson Correlation was the influence is significant between fiber versus reducing sugar content. Rice varieties with high fiber are suggested to be consumed as a better alternative for the daily diet for person with diabetic type 2.

Keyword: Rice variety, Fiber content, Luff Schoorl, Reducing sugar.