

Relationship between amylose content and glycemic index of commonly consumed white rice

Abstract

This study was conducted to analyze the amylose content of two types of white rice commonly consumed by Malaysians and determine its relationship with the glycemic index (GI) value. The two samples of rice namely White Rice 5% Broken (WR5%) and Fragrant White Rice (FWR). Nutrient compositions of the rice were analyzed. Amylose content of the rice was determined using colorimetric assay. The GI values of the rice were determined using a standardized protocol. Both types of rice had comparable nutrient composition. The amylose content of the WR5% ($12.5 \pm 0.4\%$) was comparable to FWR ($11.6 \pm 0.5\%$), as the difference was not significant. GI value of FWR (124 ± 16.4) appeared to be comparable to the WR5% (87 ± 14.4), as the difference was not significant. This study may show that white rice categorized as low amylose may have high GI value.

Keyword: Amylose content; Glycemic index; White rice