

Physico-Chemical Properties Of Rice And Its Glycemic Index

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Abstract

In the present study, several different rice were evaluated for their physicochemical properties and glycemic index. They were IR 36, Batang Piaman, Mekongga, X rice (unidentified varieties), Taj Mahal, parboiled rice of Batang Piaman and X rice. IR 36 Batang Piaman and X rice showed comparable milling quality. Parboiling process increased milling quality of rice. Batang Piaman and Taj Mahal were classified as high amylase, while Mekongga and X rice were classified as medium amylase. Parboiling process changed the pasting properties of rice from the initial type B (for IR 36 and Mekongga) and type C (for Batang Piaman, and X rice) to type D. IR 36 and Taj Mahal showed low and medium glycemic index (GI), respectively. Varied responses were observed with glycemic index (GI) of rice due to parboiling process. Parboiling decreased the GI of Batang Piaman from 86 to 59. however, similar response was not observed on the other rice. The result, emphasized that it is possible to find out the naturally domestic rice with low GI.

Key Words: rice, glycemic index, diabetes mellitus