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In vitro examination of starch digestibility and changes in antioxidant activities of selected cooked pigmented rice

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Abstract

The impact of morphological characteristics of three different cultivars (red, black, and purple) of cooked pigmented Thai rice on changes in starch hydrolysis and antioxidant potential during simulated *in vitro* digestion was examined. Comparison with the respective homogenized cooked rice slurries, which were regarded as structure-less samples, demonstrated that the intact cooked grain samples tended to show a reduced rate of starch hydrolysis and fewer bioactive compounds during simulated digestion. However, the change of the ferric reducing antioxidant power (FRAP) value for the Kum Luempua (purple waxy) variety cooked by steaming showed a different trend between the intact grain and homogenized slurry, although the changes in 2,2-diphenyl-1-picrylhydrazyl (DPPH)-radical scavenging activity for the intact grain were mostly

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