

Research Title	Sinlek brown rice brownie: Determination of nutritional composition and characterization of high iron flour
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Sinlek brown rice is the developed rice strain, which has low glycemic index and high iron content. It can be processed for applied in food products. The objective of this research was to study the nutritional values and characterization of Sinlek rice flour and to develop Sinlek rice brownie. Furthermore, the iron concentrations in Sinlek brown rice and products were determined. The result showed that Sinlek brown rice had contained high content of iron and protein with an average value of 17.10% and 15.17%, respectively. Sinlek rice flour was obtained using the dry milling method, giving a low amylose content of 7.49%. The viscosity profile of Sinlek rice flour indicated that this flour was moderate-swelling flour and the pasting temperature was 91.05°C. For functional properties, the water soluble index of Sinlek rice flour was higher, but the water absorption index was similar to those of commercial rice flour in general. The substitution of Sinlek brown rice flour for wheat flour at 75-100% in brownie affected all texture characteristics, especially hardness of brownie as compared to the control one (100% wheat flour). The substitution with Sinlek rice flour at 75% had the highest scores in color, tenderness, juiciness, odor and overall acceptance and acceptable product for the consumers was 90%. The nutrition values of Sinlek brown rice brownie were higher in protein, fat, ash and iron contents than those of wheat brownie. Therefore, Sinlek rice brownie is a proper health product for people who need high nutritional values and high-iron food.