

Jureemart Deeammart 2007: Cracker from Horm-nin Rice Flour added Calcium from Fish Bone. Master of Home Economics, Major Field: Home Economics, Department of Home Economics. Thesis Advisor: Assistant Professor Kanidta Poonpolkul, M.S. 193 pages.

The objective of this study are to develop the nutritious cracker as well as to value added to raw material by horm-nin rice flour add fish bone powder in order to increase content of iron and calcium. The experiment used horm-nin rice flour added to a prototype product at level of 20% by weight of wheat flour and fish bone powder added to a prototype product at 2% by total weight. Focus on the total calcium for one serving of not more than 20% of RDI (Recommended Dietary Intakes). The nutritive value of cracker product from horm-nin rice flour added calcium fish bone in one serving size (30 g.) was 3.89 g. protein, 17.51 g. carbohydrate, 6.45 g. fat, 0.35 crude fiber, 0.89 g. ash, 143.64 kilocalories energy, 37.20 mg. calcium and 0.53 mg. iron, respectively. The calcium and iron contents war 1.68 and 1.7 times higher than control. This represents 4.65 and 3.53 percent of RDI for calcium and iron. Physical properties of the product were hardness of 24.24 N., water activity 0.340 and color in L* a* b* system of 45.85 4.79 and 13.63, respectively.

Consumer acceptances and preference of cracker from horm-nin rice flour added calcium fish bone was tested on 200 consumers, and 83% from these consumers accepted at level of a little like. According to consumers opinion, it was due to it's healthy product not harmful, low price, and to be as an alternative product for consumption. An appropriate shelf-life of product kept in polypropylene was 5 weeks packaging at room temperature (28-32 °C). The cost of product was 2.13 baht per serving unit (30 g.).

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Thesis Advisor's signature

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