

Ubonrat Phromfung 2006: Pineapple Dietary Fiber Added Khaotaen Product and Consumers

Acceptance: Case Study in Lampang Province. Master of Home Economics, Major Field:

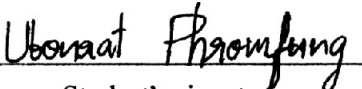
Home Economics. Department of Home Economics. Thesis Advisor: Miss Chanida Pachotikarn,

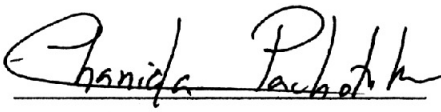
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The objective of this study was to develop pineapple dietary fiber Khaotaen. The optimum level of pineapple dietary fiber added in Khaotaen formula was studied. Sensory evaluation, physical and chemical properties, and cost production were determined. The correlations between characteristics of consumer and consumer acceptance of the developed Khaotaen were investigated. Pineapple waste from juice factory was used to produce the dietary fiber by extraction, drying and grinding process through 18 mesh screen with 1.47 % yield. The pineapple dietary fiber contained 3.04 % protein, 0.85% fat, 80.60% fiber, 2.21% ash and 7.41% moisture. The study revealed that the maximum pineapple dietary fiber added in Khaotaen formula was 7% by weight of raw sticky rice which was the highest accepted by 30 trained panelists. The formula of developed Khaotaen was 1 kg of sticky rice, 70 g of pineapple dietary fiber, 225 g of pineapple juice, 130 g of palm sugar, 10 g of salt and 38 g of black sesame seed. The color of Khaotaen was yellowish-brown which. L^* , a^* and b^* values were 35.11, -2.60 and 14.16, respectively. The expansion value increased 2.06 times from prototype, and water activity and compression force were 0.18 and 2.34 N, respectively. The comparison nutritive value between the developed Khaotaen and the prototype per 100 g samples were (g) 5.12 and 9.28 protein, 28.46 and 23.57 fat, 62.84 and 63.87 carbohydrate, 2.39 and 0.97 dietary fiber, 0.24 and 1.32 moisture, 0.95 and 0.99 ash, 0.34 and 0.36 calcium (mg) and 527.96 and 504.72 energy (kcal), respectively. The developed product had two times higher dietary fiber than the prototype. The production cost of the developed Khaotaen was 2.06 baht/ 9 each (40 g).

The consumer acceptance of pineapple dietary fiber Khaotaen was tested on 400 consumers in Lampang Province by using multistage sampling technique. The developed Khaotaen product was accepted by the 82.00% of the consumer at the level of like to slightly like. Eighty percent of respondents decided to buy the developed products. The study found that consumer occupation was positively correlated with consumer acceptance ($p < 0.05$), whereas, sex, age, education and monthly income were not significantly correlated.


Student's signature

 25, May, 2006
Thesis Advisor's signature