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SNACKS/ KRONGKRANG/ TONGPUB/ DOKJOK/
KROBKEM/ KANOM PING/ FIBER-ENRICHED

JIRAPORN JAICHUEN : FORMULATION OF FIBER-ENRICHED THAI
TRADITIONAL SNACKS USING SOYBEAN HULLS. THESIS ADVISORS :
ANADI NITITHAMYONG, Ph.D., PRAPAISRI SIRICHAKWAL, Ph.D.,
VALAITHIP SACHOLVIJARN, M.P.H., 100 p. ISBN 974-662-703-1

Consumption of a low dietary fiber diet has been associated with many diseases such as constipation, colon cancer, coronary heart disease, etc. The study aimed to develop a dietary fiber-enriched product which is acceptable to Thai consumers as a new choice of food for health.

Thai traditional snacks are popularly consumed among the Thais. To add dietary fiber into Thai traditional snacks, this study used soybean hulls as the source of dietary fiber. Soybean hulls are by-products from the soybean milk industry. It consists mainly of dietary fiber and contains lower quantity of antinutritional factor, especially phytate. The Thai traditional snacks namely Krongkrang, Tongpub, Dokjok, Krobkem, and Kanom Ping showed a good potential to be developed into dietary fiber-enriched products. Soybean hulls were used to partially substitute wheat flour, tapioca flour, or rice flour in the formulation of these products. It was found that the maximum level which could be substituted in Krongkrang, Tongpub, Dokjok, Krobkem, and Kanom Ping was 40%, 55%, 35%, 40%, and 20%, respectively. For sensory evaluation, fifty panelists were invited to judge the samples using a nine-point hedonic scale (9 = like extremely, 5 = neither like nor dislike, 1 = dislike extremely). The overall acceptability score of the products (6.04 ± 1.73 to 6.80 ± 1.34) appeared between like slightly (6) and like moderately (7). The results from chemical analysis confirmed that total dietary fiber content in dietary fiber-enriched products were higher than that in control formulas.