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CEREAL BARS / GROUND SOYBEAN HULLS / GROUND  
PINEAPPLE CORE / GROUND WHEAT BRAN

ARUNEE WONGKASEMSOMBAT : FORMULATION OF HIGH-FIBER  
SNACK BARS CONTAINING SOYBEAN HULLS, PINEAPPLE CORE AND  
WHEAT BRAN. THESIS ADVISORS : ANADI NITITHAMYONG, Ph.D.,  
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662-687-6.

Nowadays, most people, especially in large cities, tend to have food consumption habits which can result in inadequate intake of dietary fiber. This can lead to the incidence of many diseases such as obesity, constipation and colon cancer. The study aims to develop 2 types of high-fiber snack bars, bar cookie and cereal bar, with acceptable quality so that they can be a choice for consumers who are health-conscious and like to consume snacks. Dietary fiber (DF) in the forms of ground soybean hulls (SBH), pineapple core (PC) and wheat bran (WB) was used to partially substitute for some ingredients of these products. From sensory evaluation, ground SBH was the DF source which was the most acceptable. The overall acceptability score from a 9-point hedonic scale of SBH bar cookie was  $6.04 \pm 1.58$  (like slightly) and that of SBH cereal bar was  $6.30 \pm 1.43$  (like slightly to like moderately). From chemical analysis, all modified snack bars contained TDF more than 20% Thai RDI or 5 g per reference amount, so can be classified as high-fiber snack bars. For the acceptability test of SBH snack bars in 120 teenagers, the acceptability score of bar cookie from a 5-point hedonic scale was  $4.28 \pm 0.83$  (like slightly to like) and that of cereal bar was  $3.52 \pm 0.77$  (neither like nor dislike to like slightly). In addition, both types of snack bar were adequate for 1 serving size with the amount being 30 g and 40 g for SBH bar cookie and SBH cereal bar, respectively. Regarding cost of ingredients, SBH snack bars were less expensive than the control formula whereas WB snack bars were more expensive than control, SBH and PC formulas.