

**DEVELOPMENT OF MYANMAR CARBOHYDRATE  
COUNTING BOOKLET**



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M.Sc. (NUTRITION AND DIETETICS)

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Diabetes mellitus is one of the major challenging problems in Myanmar and in spite of its high occurrence, the prevalence of good glycemic control is relatively low; yet most of the foods that Myanmar people consume daily are carbohydrate-based. Therefore, a nutrition education tool that could raise the awareness of amount of carbohydrate in foods and provide scientific but comprehensible dietary information about carbohydrate counting is necessary to combat diabetes through prevention, health promotion and management. The aim of this study was to develop and assess a carbohydrate counting booklet in two experimental phases: in the first phase, the booklet named "Basic Carb Counting for People Living with DM" was developed, it was 14.5 × 20.5 × 1 cm. in size and with 103 pages. It contained illustrated facts and information about diabetes, basic carb counting and carb choices of different food items along with respective food photographs. In the second phase, 36 participants with diabetes participated in the study. Their mean age was 48.4 ± 10.7 years, 47.2% were male and 52.8% were female. The results showed that the knowledge score of diabetes, carbohydrate and total scores increased significantly ( $p < 0.05$ ) between pre-test score and post-test score. The correctly response rate to the carbohydrate counting exercises was quite high (mostly > 80%). The participants' satisfaction level with the newly developed booklet was between "very satisfied" to "extremely satisfied" giving the mean and median responses of between 5 and 6 on a 6-point Likert scale. In conclusion, the developed carbohydrate counting booklet was accepted by people with diabetes in Myanmar and the contents in the booklet were understandable to witness the improvement in the knowledge of the disease and the basic carbohydrate counting concept as well.

**KEY WORDS:** DIABETES / CARBOHYDRATE COUNTING /  
NUTRITION EDUCATION TOOL

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