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EDUCATION MODEL ON WEIGHT CONTROL IN OBESE SCHOOL CHILDREN.
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To assess the effect of a simple nutrition education model on weight control, the study was conducted on 139 obese primary school children (grade 4-6, aged 9-12 years old). Subjects were classified into three groups: group 1 (n=52) served as a control, whereas in group 2 (n=46) each targeted obese pupil received a weight control booklet (WCB) and in group 3 (n=41) both the pupils and their parents received WCBs and one-time food demonstration plus two-time nutrition advice were provided to the parents. Using modified quasi-experimental design, questionnaires were given to subjects and their parents to determine knowledge, family and environmental factors. Nutrient intakes of subjects were determined by using 24-hour food recalls, and 10-hour fasting blood samples were also obtained from subjects to determine changes in serum lipid. In addition, anthropometric measurements were performed by using weight, height and skinfold thickness.

Results indicated that the simple nutrition education model could significantly improve nutrition knowledge of the obese pupils but not of their parents in the intervention groups. Snack and high caloric food consumption was found to remain unchanged in the obese pupils. Also, pupils' physical activities did not increase as expected. Although there was a greater trend of decreasing in carbohydrate, protein, fat, cholesterol and sugar intakes in group 3 (pupil and parent intervention), their mean percentage changes of all nutrient intakes were not significantly different from those of group 1 (control) and group 2 (pupil intervention only). Moreover, the intervention could not affect significant changes in serum lipid and anthropometric indicators.

Thus, the provision of this simple nutrition education model for three months was not able to promote appropriate consumption behavior as expected. In the future, it is suggested that a better-designed and behavior-oriented nutrition education model should be explored to create not only knowledge but also behavior change in obese pupils. To be effective, the model must also gain support from parents and teachers. Implementation should take at least one year and it should be planned based on formative research so that it is not only educational but also motivational for all involved to take proper action.