Effect or Adult Body Weight Control In local community

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ABSTRACT

The prevalence of obesity is increasing in recent 20 years. It has been important public health problem in many countries. Obesity is associated with risk factors of many diseases. The energy intake and expenditure unbalancedly is the main cause of obesity. The most important of body weight control is to restrict calorie intake, modify dietary manner and keep doing exercise. The purpose of this study evaluated effect of 8-week body-weight-reduction program in 60 subjects with 20% over ideal body weight, which preceded this approach by comparison of biochemical assessment, blood pressure, anthropometry, body weight and percentage of body fat, between pre and post weight reduction. For the biochemical assessment, there was significantly decreased (P＜0.05) in plasma glucose, systolic and diastolic blood pressure. Uric acid, plasma total cholesterol and triglyceride were decreased, but no statistical difference. Anthropometric measurements including body weight, percentage of body fat, waist circumference, hip circumference were significant difference (P＜0.05). Body weight reduced 4.8±2.5kg, percentage of body fat reduced 3.3±3.6% waist and hip circumference reduced 9.6±5.5cm and 5.4±3.8cm, respectively. In the following two years, some of subjects continued to keep their weight control education but some did not (nonparticipative group). After 2-year follow up, there were no significant difference in biochemical assessment of two groups but the data were still reasonable. Waist circumference, hip circumference, the ratio of waist-to-hip circumference and systolic blood pressure were significant difference (P＜0.05) in participative group but the diastolic pressure did not. The percentage of body fat and the body mass index for participative group were lower than nonparticipative group. Only body weight of the participative group significantly reduced (P＜0.05) two years later. The ratio of weight gain back in participative group was 45% which was lower than the nonparticipative group (78%). Therefore, the program did help the participat to prevent weight gain back.

Keywords : weight reduction ; obesity ; anthropometry ; percentage of body fa ; weight gain back

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