[Review Article]

Current Review of Intervention Studies on Obesity and Role of Exercise in Weight Control

Yoshio Nakata 1)

Abstract

Previous studies have examined the short- and long-term effects of different weight-loss programs on obesity. Although both diet and exercise interventions are important for more effective weight loss, diet intervention is given priority over exercise intervention because of its larger effect size on short-term weight loss. In most clinical and public health settings, various components of weight-loss program affect the outcome. Studies have already been performed on the effects of motivational lectures; educational materials; and individual, group-based, and internet-based support in this regard. The next step after losing weight is maintaining the reduced weight after the intervention. In this phase, the relative importance of exercise interventions seems to increase. The results of many studies suggest that high levels of daily physical activity contribute to weight maintenance, and the American College of Sports Medicine published a Position Stand that recommends physical activity for preventing weight regain. Further high-quality studies need to be performed on each phase of obesity prevention, intervention for weight loss, and prevention of weight regain after weight loss. To develop guidelines for the Japanese population, high-quality trials involving the Japanese population are required.

Key words: weight loss, diet intervention, exercise intervention, randomized controlled trial, evidence

¹⁾ Graduate School of Comprehensive Human Sciences, University of Tsukuba, Ibaraki, Japan