Prevalence of obesity has been steadily increasing in Korea and OECD estimated that the rate of increase will be accelerated. Current childhood obesity rate in Korea is 16.5% and consistently increasing. Therefore, government needed to address this issue. The purpose of this study was to develop 12 weeks national childhood obesity program in the after school care setting. The program was consisting of nutrition education, sensory education, physical activity in the form of traditional play, and provision of fresh fruits as a snack. This program was run by Ministry of Health and Welfare, in conjunction with Ministry of Education and Ministry of Agriculture, Food and Rural Affairs. The primary outcome was change in body-mass index (BMI) between baseline and 12 weeks. Other outcomes were amount of physical activity (MET-min/week) and diet behaviours (number of fruits, vegetables, and dairy products consumption per week). A total of 2357 (year 1 and 2) children from 61 primary schools nationwide participated in this study. 1354 children had BMI data at both baseline and 12 weeks for comparison. The result showed that the average BMI of children was decreased from 16.83 kg/m² to 16.72 kg/m² (p=.000) while the average amount of physical activity and fruit consumption were increased by 511 MET-min/week and 0.37 day, respectively (p=.000). Therefore it was concluded that this program was suitable for prevention of childhood obesity in the after school care setting and it will be expended up to 300 primary schools (10,000 children) nation-wide in 2018.

donlee@khealth.or.kr