## [Practice Article]

## SMART Diet, a Group-based Weight-loss Program, for Overweight and Obese Adults: JAEE Research Project "Evidence from Intervention Studies"

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## **Abstract**

The Japanese Association of Exercise Epidemiology has approved a research project "to promote the creation, communication, and utilization of evidence from intervention studies in Japan". In response, we aimed to provide evidence of an effective group-based weight-loss program called the SMART Diet for overweight and obese adults. We conducted a randomized controlled trial to demonstrate the effectiveness of the SMART Diet, which was developed based on one-arm and non-randomized controlled trials. In terms of generalizability through the RE-AIM (Reach, Effectiveness, Adoption, Implementation, and Maintenance) framework, the participants in the previous studies were relatively small and biased ("reach"). The SMART Diet is composed of a motivational single lecture, educational materials, and group-based support. The "effectiveness" of each component was verified in a randomized controlled trial. Although "adoption" and "implementation" have not been verified, training seminars for instructors of the SMART Diet have been held to promote the adoption and implementation of the program. "Maintenance" of the program was examined, and the result was acceptable. However, further intervention for weight-loss maintenance is needed. Although challenges remain to be addressed, the SMART Diet was verified as an effective weight-loss program over a relatively short period and is expected to be utilized for health promotion practice.

Key words: obesity, weight loss, diet, exercise

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