Characteristics of a successful program to decrease BMI and LNED intake in school children

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Healthy eating habits are essential to reduce children's risk of health problems. The prevalence of obesity continues to increase and is growing concern in Portugal and Europe (Wijnhoven et al., 2014). This study aims to describe the characteristics of a successful program to decrease BMI and LNED intake among school children. 464 children (239 female. 6 to 12 years) from seven schools participated in this randomized trial. In Portugal children from elementary schools have only one teacher who teaches a range of subjects. The intervention program was based on health promotion model (Pender, 1996) and the social cognitive theory (Bandura, 1986) and aimed to promote healthier active lifestyles by encouraging children to be more active and make better food selection. The training sessions were approved by the Minister of Education with 72 hours of duration. The program was implemented over two terms: teachers' training delivered by researchers and intervention delivered to children by trained teachers. Intervened teachers had 12 sessions of 3 hours each with the researchers, according to the topics of nutrition and healthy eating for children and family (sessions 1-4); importance of water (session5); strategies to increase fruit and vegetable intake (session 6-8); strategies to improve physical activity and reduce screen time (sessions 9-10) and healthy cooking activities. After each session, teachers were encouraged to develop activities in the class according to the learned topics. This intervention program decreased the consumption of Low-nutrition, energy dense (LNED) foods and the Body Mass Index (BMI) z-score among the intervened children and offers promise to yield best practices in the prevention of overweight and obesity.

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Wijnhoven T; van Raaij J; , Sjöberg A; et al.: (2014). WHO European Childhood Obesity Surveillance Initiative: School nutrition environment and body mass index in primary schools. Int J Environ Res Public Health. 30;11(11):11261–11285.