Effectiveness of a Multi-Component Intervention for Overweight and Obese Children (Nereu Program): A Randomized Controlled Trial

Childhood obesity has been identified as one of the most important problems in public health. As a consequence, the treatment and prevention of overweight and obesity in children is of fundamental importance because of the negative physical and psychological impact of these health conditions. Consequently, the primary aim of the present study was “to evaluate the effectiveness in the primary health care setting of an intensive, family-based, multi-component, behavioural intervention (Nereu Program) compared to the usual counselling intervention, in terms of anthropometric parameters, physical activity and sedentary behaviours and dietary intake.”

The Nereu Program is “an intensive, 8-month, family-based multi-component, behavioural intervention in primary care settings, consisting of four components:

a) Supervised physical activity sessions for children
b) Family theoretical and practical sessions for parents
c) Behaviour strategy sessions for both children and parents
d) Weekend activities

This study was developed as a randomised, controlled, multicentre clinical trial designed for children diagnosed with overweight or obesity, randomly allocated to two study arms before recruitment. After the 8-month intervention, the “Nereu Program group had improved activity habits, especially in their increase in their moderate and vigorous physical activities to more than 2.5 hours daily.” Furthermore, the Nereu program participants also reported improved dietary habits with increased consumption of fruits and decreased consumption of sugar-sweetened juices and soft drinks. The results were therefore encouraging in the short-term where the “Nereu Program intervention proved to be useful in changing physical activity and sedentary behaviours and improving eating habits, but showed no significant differences in anthropometric parameters were observed between the study arms.”

Reference: Serra-Paya N, Ensenyat A, Castro-Vifualles I, et al. Effectiveness of a Multi-Component Intervention for Overweight and Obese Children (Nereu Program): A Randomized Controlled Trial. PLoS One. 2015;10(12):e0144502. doi:10.1371/journal.pone.0144502