Effects of a psychomotor education program on Body Mass index (BMI) in a group of school-aged Italian children

Simone Pratesi, Mariangela Fasano and Aldo Carlo Cappellini
Department of Anatomy, Histology and Forensic Medicine, University of Florence, Florence, Italy

Many studies report that a corrected and systematic motor activity may represent a valid and therapeutic approach for preventing and treating overweight and obesity in pre-pubertal children [1]. In this context a psychomotor activity, aimed mainly to improve the functional pre-requisites [2], could play a key role, in particular in helping to perceive properly the own body image often misrepresented among obese children.

The aim of this study was to evaluate the effects of a psychomotor education program (focused on the training of global and segmentary coordination, static and dynamic equilibrium, as well as spatio-temporal cognition) for a period of two years, on body mass index (BMI) an anthropometric parameter easily obtainable from weight and height and commonly utilized as index of obesity [3], in a group of 489 eight-year-old children living in Florence (Italy). Comparing the BMI values recorded in children before and after the psychomotor activity we found a significant decrease of weight excess (approximately 17.6% vs 27.6%). Moreover, we also found that the mean increase of BMI was less than that of the Italian population of the same age (approximately 0.55 vs 1.2), suggesting a beneficial effect of the psychomotor activity.

References

Keywords: Body Mass Index (BMI), psychomotor activity, school-age children.