Adherence to the Mediterranean diet in relation to obesity status in children: The CYKIDS study

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There is evidence regarding the association of adherence to Mediterranean diet (MD) to obesity, among adults; however there is no relevant data for any children’s population. We aimed to investigate the association between adherence to MD and obesity status in children. A national cross-sectional study among 1140 children (mean age=10.7±0.98) using stratified multistage sampling design, in Cyprus was performed. Body Mass Index (BMI) was calculated according to IOTF criteria, from parental reference. Adherence to the MD was assessed by the KIDMED diet score. To test the research hypothesis logistic regression analysis was applied with dependent variable two categories of obesity status, normal weight (NW) vs. overweight/obese (OW/OB), and independent the three categories of the KIDMED score, after controlling for several potential confounders. Compared with low Mediterranean diet adherers, children with high KIDMED score were 80% less likely to be OW/OB (95%CI (0.041-0.976)), adjusted for age, gender, parental obesity status, parental educational level, as well as, dietary beliefs and behaviours. When physical activity was taken into account however, the aforementioned relationship was not significant [OR=0.20 95%CI (0.021-1.86)]. Furthermore, male gender, maternal obesity, and dietary beliefs and behaviours emerged as more significant in predicting obesity in children, compared to their KIDMED score. Adherence to the Mediterranean diet is inversely associated with obesity in children; however other behaviours, and in particular physical activity, seem to be more influential.

Dietary Behaviors and their relationship with overweight/obesity in adolescents of Ho Chi Minh City, Vietnam

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Objective: To examine the relationships between dietary behaviors and overweight/obesity among adolescents in urban areas of Ho Chi Minh City, Vietnam.

Methods: A prospective cohort study starting in 2004 with follow-up assessments at 12 and 24 months after baseline was conducted. Anthropometry, parental and child factors, as having breakfast and reducing the consumption of snacks and soft drinks appear to be promising themes in future obesity prevention programs in HCMC.

Protein intake and obesity in schoolchildren

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Background: The influence of protein on the regulation of food intake and weight control remains incompletely understood. The objective of our study was to assess the association between protein intake and obesity risk in schoolchildren.

Participants and methods: The study was performed in a convenience sample of 1962 Portuguese school children (49.8% girls), 5-10-year-old (age was 7.5 ± 2.3 years). Height and weight were measured according to international standards, and body mass index (BMI) was calculated. The definition of obesity was based on average centiles according to the International Obesity Task Force cut-offs. Children’s parents completed a self-administered questionnaire, which provided information on general family background characteristics, children’s dietary intake (using a semi-quantitative food frequency questionnaire), and children’s physical activity. Unconditional logistic regression models were fitted to estimate the magnitude of the association between protein consumption (adjusted for energy intake) and obesity in children, adjusting for confounders (age, breastfeeding, parental education, dietary fibre, total fat and energy intake).

Results: The prevalence of obesity was 14% in boys and 11% in girls. In boys, the probability of being obese increased significantly for those who were in the highest quartile of protein consumption adjusted for energy intake (OR = 1.70, 95%CI 1.01-2.85, p = 0.046), even after adjustment for confounders (OR = 1.99, 95% CI 1.13-3.50, p = 0.017); in girls, no association was found between protein intake and obesity.

Conclusion: High protein intake was positively associated with obesity in boys.