Can a Mediterranean diet help overweight kids? (Nutr Metab Cardiovas Dis. Jul 2013)

A Mediterranean-like dietary pattern has been shown to be inversely associated with many diseases, but its role in early obesity prevention is not clear. The study aimed to determine if this pattern is common among European children and whether it is associated with overweight and obesity. The study recruited 16,220 children aged 2-9 years from study centers in eight European countries. Weight, height, waist circumference, and skinfolds were measured at baseline and in 9114 children of the original cohort after two years. Diet was evaluated by a parental questionnaire reporting children’s usual consumption of 43 food items. Adherence to a Mediterranean-like diet was calculated by a food frequency-based Mediterranean Diet Score (fMDS). The highest fMDS levels were observed in Sweden, the lowest in Cyprus. High scores were inversely associated with overweight including obesity and percent fat mass independently of age, sex, socioeconomic status, study center and physical activity. High fMDS at baseline protected against increases in BMI, waist circumference and waist-to-height ratio with a similar trend observed for percent fat mass (P = 0.06). Although a Mediterranean dietary pattern is inversely associated with childhood obesity, it is not common in children living in the Mediterranean region and should therefore be advocated as part of EU obesity prevention strategies.

Can prenatal folic acid increase the risk of childhood asthma? (Am J Clin Nutr. Sep 2013)

The authors conducted a systematic review and meta-analysis of the association of folate and folic acid intake during pregnancy and risk of asthma and other allergic outcomes in children. The findings do not support an association between periconceptional folic acid supplementation and increased risk of asthma in children.


Although sublingual immunotherapy (SLIT) has been demonstrated to be a safe and efficient treatment in children with seasonal allergic rhinitis (AR), there is little evidence on the efficacy of SLIT with house-dust-mite (HDM) extract in children with isolated perennial allergic rhinitis. The authors tried to assess the clinical efficacy and safety of HDM-SLIT in children with isolated allergic rhinitis-conjunctivitis monosensitized to HDM without asthma symptoms. Twenty-two children (aged 5-10 years) with perennial AR and conjunctivitis symptoms mono-sensitized to Dermatophagoides pteronyssinus and Dermatophagoides farinae were enrolled. A total of eighteen subjects were randomized to receive either active SLIT or placebo for 12 months, in a blinded manner. Daily symptom and medication scores, baseline lung functions, bronchial hyperreactivity, nasal provocation and skin prick tests were recorded and re-evaluated at the end of treatment. After one year of treatment, no significant differences were detected in between groups and within group comparisons based on total rhinitis symptom/medication scores. Skin reactivity to Dermatophagoides pteronyssinus was significantly reduced in HDM-SLIT compared to placebo group. A significant reduction in nasal sensitivity was observed in SLIT group after one year treatment when compared to baseline. Total conjunctivitis symptoms were reduced significantly in both active and placebo group at the end of treatment compared to baseline. The proportion of patients with non-specific bronchial hyperreactivity increased to almost 3-fold in placebo group compared to baseline. HDM-SLIT was not superior to placebo in reducing isolated rhinoconjunctivitis symptoms within 12 months of treatment. However, HDM-SLIT has a modulating effect on allergen-specific nasal and skin reactivity in isolated perennial AR children.


Studies have suggested that calcium supplementation of women receiving low-calcium diets significantly reduces risk of pregnancy induced hypertension and infant growth parameters. The authors tested the effects of calcium carbonate supplementation (1500 mg per day) on blood pressure in pregnant, rural Gambian women. The study was a randomized, double-blind, parallel, placebo-controlled supplementation trial from 20 wk of gestation (P20) until delivery (calcium: n = 330; placebo: n = 332). Mean compliance was 97%, and urinary calcium measures confirmed the group allocation. The intention-to-treat analysis that was adjusted for confounders showed no significant effect of calcium supplementation on the change between 20 and 36 weeks systolic or diastolic blood pressure. There was no significant effect of supplementation on blood pressure, pregnancy weight gain, weight postpartum, or infant weight, length, and other measures of growth. This result may have been because the Gambian women were adapted to a low dietary calcium intake, and/or obesity, high gestational weight gain, high underlying BP, tobacco use, alcohol consumption, and sedentary lifestyles were rare.

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