

Can Ketogenic Diet Reduce Infantile Spasms?

Infantile spasms, also known as West syndrome, typically don't respond to antiseizure drugs. In this study done at John Hopkins, 104 children (mean age: 1.2 y) were put on ketogenic diet, consisting of high-fat foods and fewer carbohydrates and proteins. Most of them had previously been treated with a mean of 3.6 anticonvulsants, including cortico-steroids or vigabatrin. About two-thirds of the children had half as many seizures after six months on the diet. That figure increased to 77% after one and two years. About 31% had 90% fewer seizures after three months, and 39% achieved that response after six months. After nine months on the diet, 46% children had 90% fewer seizures, and that number remained fairly constant at one and two years. Improvement in neurological development and the EEG was also found. This diet was also used as first-line therapy in 18 newly diagnosed infants. Ten of them became seizure-free within two weeks of starting the diet. Considering the low adverse effects, benefits for development, and reduction in anticonvulsants, ketogenic diet can be considered as a valuable second- or third-line therapy for infantile spasms (*Epilepsia* 2010; doi: 10.1111/j.1528-1167.2010.02586.x.).

Association Between Dietary Patterns and Fat and Bone Mass in Young Children?

It is an established fact that obesity and osteoporosis have origins in childhood, and both are affected by dietary intake and physical activity. However, there is little information on what constitutes a diet that simultaneously promotes low fat mass and high bone mass accrual early in life. This study was done at Cincinnati, USA to identify dietary patterns related to fat and bone mass measured by dual-energy X-ray absorptiometry in 325 children (age 3.8–7.8 y). After controlling for covariables that included race, sex, height, weight, energy intake, calcium intake, physical activity measured by accelerometry, time spent viewing television, and playing outdoors; a dietary pattern characterized by a high intake of dark-

green and deep-yellow vegetables was related to low fat mass and high bone mass; high processed-meat intake was related to high bone mass; and high fried-food intake was related to high fat mass. Based on the results, we must insist, right from the preschool age, diets rich in dark-green and deep-yellow vegetables and low in fried foods, which may lead to healthy fat and bone mass accrual in young children (*Am J Clin Nutr*; doi:10.3945/ajcn.2009.28925).

Birth Weight – Is it Related to Visceral or Subcutaneous Fat?

Several studies have reported inverse associations between birth weight and central adiposity in adults. However, few studies investigated the contributions of different abdominal fat compartments. This population-based study was done in 1092 adults aged 30-55 y to examine associations between birth weight and adult visceral and subcutaneous abdominal fat. After adjustment for adult BMI, there was an inverse association between birth weight and total abdominal fat and visceral fat but not between birth weight and subcutaneous abdominal fat. Tests for interaction showed that adult BMI modified the association between birth weight and visceral fat. The inverse association between birth weight and adult abdominal fat thus appeared to be specific to visceral fat. However, associations with birth weight were apparent only after adjustment for adult BMI. Therefore, rapid postnatal weight gain, rather than birth weight alone, leads to increased visceral fat (*Am J Clin Nutr*; doi:10.3945/ajcn.2010.29247).

Is There a Role for Routine Neonatal Screening By Pulse Oximetry?

This review of literature suggests that the routine use of Pulse Oximetry does help to diagnose critical congenital heart defects (CHD) in neonates who might otherwise be discharged undiagnosed from the newborn nursery. The benefits probably exceed the cost, and evidence is provided to confirm this (*Neonatology* 2011; 99:1-9).

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