Effects of a School-Based, Early Childhood Intervention: 19-Year Follow-up

Early childhood interventions have been shown to have a wide variety of positive effects. Reynolds and colleagues report on the outcomes of 1539 individuals aged 24 years who were enrolled in the Child-Parent Center program in Chicago beginning in preschool. Compared with a nonrandomized control group, participants had higher rates of school completion and college attendance. They also had lower rates of felony arrests, convictions, and incarceration. Participation in both the preschool and school programs was associated with higher rates of full-time employment. The study supports the need for quality preschool education for all children, especially those at highest risk.

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Prepregnancy Obesity as a Risk Factor for Structural Birth Defects

Given the dramatic increase in the rates of overweight and obesity and reports of an association of maternal obesity with some birth defects, Waller and colleagues used data from the National Birth Defects Prevention Study to assess the relationship between prepregnancy obesity and risk of birth defects. Mothers of infants with spina bifida, limb reduction defects, diaphragmatic hernia, and omphalocele had 1.3 to 2.1 increased odds of being obese compared with mothers of infants without birth defects. Gestational diabetes was associated with a 34% increased risk of birth defects, as well. With the current epidemic of obesity, these findings may be a harbinger for an increased prevalence of birth defects in the future.

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Abnormal Brain Structure in Children With Isolated Clefts of the Lip or Palate

The cleft is part of a well-defined syndrome of additional anomalies in approximately 30% of children who have one. Many of these children have substantial cognitive defects. While cognitive defects in children with isolated clefts are less common and generally less severe, they nevertheless can be significant functional disabilities. This study used magnetic resonance imaging to examine the brains of 74 children and adolescents with isolated clefts who were aged 7 to 17 years. These children had abnormally smaller brains, with both the cerebrum and the cerebellum involved. Tissue distribution of gray and white matter in the cerebral cortex was abnormal in males with isolated clefts. This pattern of brain abnormalities in children with isolated clefts is different than that seen in adults with the same disorder, indicating altered brain growth and development. Longitudinal assessment of brain growth in children with isolated clefts is important to better understand the pattern of development.

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Effects of Fast Food Branding on Young Children’s Taste Preferences

Food and beverage industries spend more than $10 billion each year to market their products to children in the United States. In this study, researchers presented identical food, either in McDonald’s or nondescript packaging, to 63 children aged 3 to 5 years. Children preferred the taste of food and drinks if they thought the food was from McDonald’s. Children with more television sets in their homes and those who ate at McDonald’s more often were more likely to prefer the food or drink’s taste if they thought they were from McDonald’s. These results add evidence to support recommendations to further regulate marketing to very young children and for the fast food industry to change their product offerings.

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Figure 1. Number of television sets in the household as a moderator of taste preferences. Total preference scores may range from −1 (preferred the unbranded food in all comparisons) to +1 (preferred the McDonald’s branded food in all comparisons).

Figure 2. Frequency of eating at McDonald’s as a moderator of taste preferences. Total preference scores may range from −1 (preferred the unbranded food in all comparisons) to +1 (preferred the McDonald’s branded food in all comparisons).