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Physical activity in preterm pigs



Preterm infants show delayed development of motor function after birth. Using a pig model, Cao and coinvestigators tested the hypothesis that early initiation of enteral feeding stimulates both gut growth and neonatal physical activity. Groups of preterm pigs were fed different combinations of parenteral nutrition, bovine colostrum (BC), formula, and human milk (HM). The researchers found that BC and HM supplementation had the greatest effect in increasing physical activity and intestinal weight. [See page 137](#)

Cerebral visual impairment



Cerebral visual impairment (CVI) is an acknowledged form of vision loss, but there is no generally accepted definition of it. Geldof and co-workers tested 105 preterm children and 67 controls. CVI was defined after comprehensive oculomotor, visual sensory, and perceptive assessment, and was validated against vision problems in daily life in terms of intellectual, behavioral, emotional, and social functioning. [See page 190](#)

Allergic diseases in neonatal jaundice



Few studies have systemically analyzed the association between neonatal jaundice and childhood-onset allergic diseases. Using data from the National Health Insurance Research Database for 2000 to 2007, Wei and colleagues identified 27,693 newborns with neonatal jaundice and 55,367 matched nonneonatal jaundice cohorts and calculated the hazard ratios (HRs) for five allergic diseases. The authors found that the incidence density and HRs for the five allergic diseases were higher in the neonatal jaundice cohort than in the nonneonatal jaundice cohort, and that the HRs declined modestly with age. [See page 223](#)

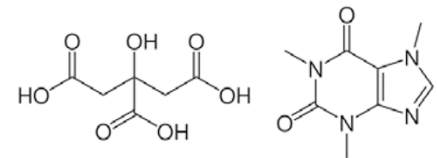
Antidepressant exposure in utero



Hanley *et al.* investigated whether *in utero* exposure to serotonin reuptake inhibitors (SRIs) influenced behaviors in children. They compared the internalizing behavior scores of children exposed to SRIs with those of children who were not exposed. Higher levels of internalizing and anxious behaviors were reported in SRI-exposed children at both 3 and 6 years of age compared with unexposed children, even

when the investigators controlled for maternal depression. [See page 174](#)

High-dose caffeine in preterm infants



Standard-dose caffeine improves white matter microstructural development. McPherson and colleagues hypothesized that early high-dose caffeine would result in further improvement. Seventy-four preterm infants were randomly assigned to either a high or standard loading dose of caffeine citrate in the first 24 hours of life. Infants randomized to early high-dose caffeine had a higher incidence of cerebellar injury at 2 years of age and subsequent alterations in early motor performance. The results of this pilot trial discourage a larger randomized controlled trial. [See page 198](#)

Puberty and oxidation



Paltoglou and colleagues investigated the relationship between growth hormone and oxidation with respect to obesity and puberty before and after an acute bout of exercise. A total of 76 healthy normal-weight and obese prepubertal and pubertal boys underwent blood sampling before and immediately after aerobic exercise. Markers of pro- and antioxidation and hormones were measured. The findings showed that boys' antioxidant capacity improves with the onset of puberty. [See page 158](#)