ferritin (SF), hemoglobin (Hb) and hemoglobin content in reticulocytes (CHR). We measured C-reactive protein (CRP) to identify infections. Parents filled in a questionnaire to identify risk factors for ID.

**Results** Until now we included 350 healthy infants. Forty infants were excluded (CRP >5 mg/l). ID (SF < 12 µg/l) and IDA (SF < 12 µg/l and Hb < 6.8 mmol/l) were detected in 60 (19.4%) and 27 (8.7%) of the 310 remaining infants respectively. CHR was measured in 249 infants. 32 of 249 (12.9%) infants showed iron deficient erythropoiesis (CHR < 26 pg). Iron intake and use of iron fortified formula were associated with less ID (p = 0.02 and p = 0.01). Intake of >500 ml cow’s milk/day was negatively associated with iron status (p = 0.01).

**Conclusion** ID is present in 19.4% of healthy young infants aged 0.5 to 3 years in the Netherlands. Iron status was positively associated with iron intake and the use of iron fortified formula and negatively associated with excessive intake of cow’s milk.

**SCHOOL-BASED OBESITY AND RELATED CARDIOVASCULAR DISEASE PREVENTION INTERVENTIONS IMPROVE WEIGHT AND ACADEMIC PERFORMANCE OVER A THREE-YEAR STUDY**

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**Background** Childhood obesity and related health consequences continue to be major clinical and public health issues in the US and abroad. Healthier Options for Public Schoolchildren (HOPS) was a school-based obesity prevention intervention with nutrition and physical activity components implemented in the elementary school setting targeting 6–12 year olds.

**Methods** HOPS was implemented in August, 2004 through December 2009, and included approximately 3,200 children (48% Hispanic) attending four elementary schools in Florida. Demographic, anthropometric (height, weight, body mass index [BMI]) and academic (Florida Comprehensive Assessment Test [FCAT]) were collected during the school year. Interventions included modified dietary offerings, nutrition and lifestyle educational curricula, school gardens, and other school-based wellness projects.

**Results** Repeated measures analysis showed over a three year study period the intervention Z weight scores decreased significantly among boys (0.81 to 0.71, P<0.001) with a trend among girls (0.56 to 0.51, P<0.07). Within ethnicity, a significant decrease in Z weight score for Hispanics (0.66 to 0.59, P<0.01) and whites (0.62 to 0.54, P<0.02) was found. Over the same time period, FCAT math scores improved significantly among girls (508 to 319, P<0.001) and reading scores improved significantly among boys (299 to 307, P<0.01). Within ethnicity, Hispanics significantly improved both FCAT math (298 to 309, P<0.001) and reading (286 to 301, P<0.0001) scores.

**Conclusions** School-based obesity prevention interventions including nutrition and physical activity components show promise in improving health and academic performance in elementary-aged children longitudinally, especially among Hispanics.

**MATERNAL PERCEPTION OF CHILD BODY MASS INDEX (BMI) AND CONCERNS RAISED BY HEALTH PROFESSIONALS**

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**Background and Aims** To describe maternal perceptions of their child’s BMI and maternal report of concerns about body weight raised by a health professional.

**Methods** Data collection took place in 2010 when children were between 6 and 8 years of age and questionnaires were mailed to 706 mothers who were part of a longitudinal cohort that had been followed since pregnancy. Mothers reported the child’s anthropometric measures, and BMI was categorized as underweight, healthy, overweight, or obese based on the child’s age and sex according to the World Health Organization Growth Charts adapted for Canada.

**Results** 450 participants completed the questionnaire (response rate 64%). 74% of children had a healthy BMI, 10% were underweight, 9% were overweight, and 7% were obese. 80% of parents whose child was underweight believed their child was about the right weight and only 13% recalled a health professional recently raising concerns about their child being underweight. 59% of parents whose child was overweight believed their child was about the right weight and only 6% recalled a health professional recently raising concerns about their child being overweight. 62% of parents whose child was obese believed their child was about the right weight and only 18% recalled a health professional recently raising concerns about their child being overweight.

**Conclusions** The majority of parents whose children were not a healthy BMI misclassified their child’s weight status, suggesting that there are opportunities for health professionals to educate parents about healthy BMI for their child’s age and sex.