Nutrition and cognitive development

Even mild malnutrition during childhood can cause permanent cognitive impairment, according to a Tufts University study.

The statement on the Link Between Nutrition and Cognitive Development in Children, published by the University's Center on Hunger, Poverty and Nutrition Policy, estimated that approximately 12 million U.S. children younger than 18 years do not get enough to eat, placing them at risk for brain underdevelopment, poor growth and poor performance on standardized tests.

Twenty-five percent of poor U.S. children have iron-deficiency anemia, which affects concentration, attention span and memory, the study stated. Malnourished children generally are fatigued, more prone to illness and socially apathetic.

Improved nutrition can modify cognitive impairment, the study stated, but many low-income families do not take advantage of available federal food programs such as the Special Supplemental Food Program for Women, Infants and Children (WIC), Head Start and the School Breakfast Program. Only three-fifths of WIC-eligible women and children use the program.

For free copies of the study, contact: Center on Hunger, Poverty and Nutrition Policy, Tufts University, (617) 627-3956; or fax (617) 627-3020.

Hypotonic infant seizures

Infants who are given bottled water for rehydration, or as a feeding supplement, are at risk for hypotonic seizures from water intoxication, according to a study in the Sept. 9 Morbidity and Mortality Weekly Report (MMWR).

Hypotonia risk is increased for infants, younger than 6 months, who are vomiting or have diarrhea, but are given tap or bottled water instead of oral rehydration solution, researchers reported. Immature renal function and infants' strong hunger drive also increases the risk of seizures if total body water increases 7 percent to 8 percent or more above normal, without sufficient sodium.

Poor infants might be at greater risk for seizures, the study stated, since bottled water is an inexpensive alternative to infant formula or oral rehydration solutions.

Bottled-water labels often incorrectly approve infant use. The U.S. Food and Drug Administration has recommended that bottled-water manufacturers amend labels to state that bottled water should be given to infants only when mixed with formula or juices and not as an alternative to formula.

Anorexia nervosa, menstruation and fertility

Adolescents recovering from anorexia nervosa can expect to resume menstruation and normal fertility potential when they reach 92 percent of their body weight for height, according to a study in the summer 1994 Adolescent and PEDIATRIC Gynecology.

Weight gain did not guarantee return of menses among 83 anorexic adolescents, but at follow-up, 83 percent of those who had regained 92 percent or more of normal body weight were menstruating, researchers reported. All patients, who wished to become pregnant, conceived within a year after returning to their normal weight.

Poverty and child health

U.S. children from low-income families have more health problems, and are more severely affected by poor health than wealthier children, according to a study reported in the August Journal of School Health.

Researchers gathered health-examination and household-interview data from three National Center for Health Statistics studies, dividing families into four family income categories, ranging from less than $10,000 to more than $35,000 per year.

Families with incomes below $10,000 were more than twice as likely to report that illnesses limited their children's daily activities, and six times more likely to report that children were in poor or fair health, compared to families making $35,000 or more a year, researchers reported.

Poor children had better visual acuity than higher-income children, but were less likely to have glasses if needed. Lower-income children had more ear drum abnormalities, more tooth decay and more nonaccident skin problems. Poorer children had significantly higher blood-lead levels.

Anti-social behavior was 70 percent higher in lower-income children. Poorer children experienced 38 percent more behavioral problems.

Life expectancy with cerebral palsy

Children born with mild to moderate cerebral palsy have life-expectancy rates roughly equal to normal children for their first 20 years, according to a study in the August British Medical Journal.

Researchers reported that among 1,251 infants born with cerebral palsy, survival rates were most affected by disability level, specifically mobility and mental ability. Severely disabled children had a 50 percent chance of surviving 20 years or more. Girls had a 5 percent better survival rate than boys.

Munchausen syndrome by proxy

Physicians must watch carefully to discern a subtle form of child abuse that masquerades as a mysterious set of treatment-resistant symptoms, a recent article in the July/August American Journal of Maternal/Child Nursing stated.

Munchausen syndrome by proxy (MSP), occurs when a child's caretaker, usually the mother, fabricates signs and