Shunned: Discrimination against chronically ill children

19% reported that teacher behavior was either overprotective or too forceful.

14% reported name-calling, isolation, and hitting or poking by other children.

Research shows integration occurs with structured intervention, not happenstance.

Parents perceived discrimination as human-made barriers, and not the child's illness.

65% of the parents surveyed reported no discriminatory behavior.

Insulin and IGF-1 hormone

Diabetic adolescents might reduce their insulin requirements by as much as 40 percent with a new peptide hormone, "insulin-like growth factor," or IGF-1, scientists at the National Institute of Child Health and Human Development (NICHD) reported.

A combination of IGF-1 and insulin was proven to balance diabetics' blood-sugar levels, and is expected to reduce diabetic adolescents' weight-gain tendencies.

Researchers proved that IGF-1 enhances fuel uptake, improves muscle-to-fat ratios, and reduces insulin requirements.

Neural-tube defect cause

Women who give birth to infants with neural-tube defects (NTDs) might have a defect in the enzyme, methionine synthase, researchers at the National Institute of Child Health and Human Development (NICHD) reported.

Since high doses of folic acid, taken shortly after conception, have been proven to help prevent NTDs, and since women who had NTDs also tend to have lower levels of vitamin B12, researchers investigated bodily chemical reactions requiring both components.

The conversion of homocysteine to the amino acid, methionine, by methionine synthase, was the only such reaction. Mothers of NTD infants studied, had higher levels of unconverted homocysteine, proving the enzyme defect.

Women with methionine-synthase defect might require more folic acid than other pregnant women, but additional B12 supplementation might decrease folic acid doses required, researchers concluded.

Breastfeeding ignorance

Physicians are ill-prepared to instruct and counsel breastfeeding mothers, according to a study reported in the Feb. 8 Journal of the American Medical Association.

In a national, random sample of 3,115 residents and 1,920 practicing physicians in pediatrics, family medicine and obstetrics/gynecology, yielding a 68 percent response rate, 90 percent endorsed breastfeeding. Only 50 percent felt confident about counseling. All specialties had poor knowledge of breastfeeding benefits and clinical management. Seventy percent of pediatricians thought they had received "less than adequate" or "no" breastfeeding-support preparation.

Ill-prepared physicians are unlikely to encourage breastfeeding, projecting the attitude that the practice is "too much trouble," researchers speculated. Physicians are unlikely to accurately advise new mothers on breastfeeding problems, contributing to abandoned efforts. Physicians' confidence in their breastfeeding counseling abilities was significantly greater only for those who had breastfed or whose spouse had breastfed.

Prader-Willi syndrome

Prader-Willi syndrome is a rare, incurable birth defect first identified as "floppy baby syndrome," that progresses to a lifelong condition marked by insatiable appetite and behavior problems, according to the Prader-Willi Syndrome Association.

Affecting one in 4,000 to one in 7,000 births, cases often go unrecognized until puberty, by which time victims might die from heart, kidney or pulmonary problems brought on by morbid obesity.

Characteristics at birth include hypotonia, developmental delays and failure to thrive. Between ages 2 and 4, eating compulsions lead to obesity from abnormal calorie utilization, and extreme temper tantrums surface. Other symptoms include coordination and speech problems, stunt growth, incomplete sexual development and low IQ.