

A New Epidemic?

BY SUSAN E. MURRAY

This week I heard Ron Santo, former Cubs third-baseman now color comentater for Chicago Cubs baseball broadcasts, discussing it while in my car listening to WGN. Then I saw a brief newscast declaring it a new epidemic. Then the most recent issue of *MediaWise* (a guide to successful media management for parents) arrived with the headline "Children, the Diabetes Epidemic and the Media Connection." I even read that diabetes is increasing in cats! Now, I'm no expert on health issues, and certainly not an expert on children and diabetes; but I felt compelled to share what I can with you regarding this important issue.

Simply put, diabetes is the term used for when the body does not produce insulin (Type I) or use insulin (Type II). Insulin is a hormone needed to covert sugar, starches, and other foods into energy. Type I diabetes is caused by a defect in the immune system which leads to the destruction of the insulin-producing beta cells in the pancreas. It has always been considered the only type of diabetes in children, except in rare instances, and in the past was called "juvenile diabetes." However, recent findings suggest that somewhere between 8–45% of newly diagnosed children with diabetes have Type II. While the symptoms are sometimes similar, there are differences.

Type II is a complex metabolic disorder, and experts do not agree as to whether diminished insulin secretion or insulin resistance is the primary problem. But whatever the reasons, there are some significant factors we can and need to understand. Type II diabetes most often occurs in children during mid-puberty, although cases as young as four years of age have been reported. Obesity is a significant factor. It has been understood that obese children produce too much insulin, so that when the need for more insulin arises, they are likely to be unable to produce enough. Also, the presence of too much fatty tissue leads to insulin resistance. Children whose body mass index (BMI) is greater than the 95th percentile for their

age and sex, and children whose weight is greater than 120% of ideal for height are found to be susceptible.

While thirst, frequent urination, and recent weight loss are often cited symptoms of diabetes (Type I), overweight is the hallmark of Type II diabetes. Other considerations are a family history of diabetes (45–80% have at least one parent with diabetes, and that parent may not even know of his or her own diabetes). Children are more likely to be of African, Hispanic, Asian, or American Indian origin; but that does not rule out children of Caucasian origin.

As the MediaWise newsletter warned parents, Type II diabetes is primarily caused by lifestyle; so it is mostly preventable. They are concerned with the media connection:

- 1. Lack of physical activity. Physical activity burns off calories. Less activity means unused calories are converted to fat. Obesity rates have gone up 51% in the past decade.
- 2. Television viewing lowers metabolism. The metabolic rate while watching TV is actually lower than a resting metabolism rate.
- 3. Heavy TV watchers have poor dietary habits. Research shows children who watch a lot of TV are lured into eating high-fat snacks and eat fewer fruits and vegetables. In a Stanford University study, children's weight dropped as they spent less time in front of the screen.

The average American child spends 32 hours watching TV and playing video games each week. These activities occupy more time than any other activity except sleeping. Research studies show that at least 26% of children who watch

four or more hours of TV a day have significantly more body fat than those who watch less.

From my understanding, there is only one recently FDA- approved oral medication for use by children diagnosed with Type II diabetes.

Lifestyle changes and weight loss are the two most important management strategies. It seems imperative to me that parents and other important adults in children's lives step up to the challenge of preventing this devastating disease and be active in assisting children who must already meet this lifelong challenge. Providing positive reinforcement for children and making overall family health a higher priority are two important steps.

Space does not allow a deeper discussion, but I encourage you to seek out further resources. The life you save may be your child's!

Sources: www.mediafamily.org; www.childrenwithdiabetes.com; http://jama.ama-assn.org/issues.