

# Nutrition

*How one school district is helping fight childhood obesity*

## Eat, Drink, and Be Healthy

When it comes to helping our 28,000 students achieve a healthy lifestyle, Houston's Spring Independent School District (ISD) doesn't always go for the lowest bid. That's not what our taxpayers want from us. Their bottom line—and ours—is not what costs the least but what's right for the kids.

Childhood obesity is at epidemic proportions. Approximately 30 percent of U.S. children and adolescents age 6 to 19 are overweight, and 15 percent are obese. Spring ISD, like most school districts, feels a heightened responsibility to do what it can to help reverse the trend. While we can't pin down obesity's direct financial impact on the district, we know it has a cost, both in terms of necessary health-care services and in numbers of days lost to illness. More important, we can't lose sight of obesity's impact on the whole child, academically, physically, and psychologically. Helping reverse the trend requires educators, parents, and the community to work together as partners.

Now in the third year of our fourth five-year plan, Spring ISD's school board is addressing the obesity issue in the same way it addresses all issues that affect student success. It's the board's role to set vision, give direction, and enact policy as it relates to the plan. Within this process, the district's Child Nutrition Department will set goals to enhance our students' nutritional needs. These objectives will be measured and evaluated in

order to achieve success, specifically as the objectives pertain to the issue of obesity.

### **From food service to nutrition**

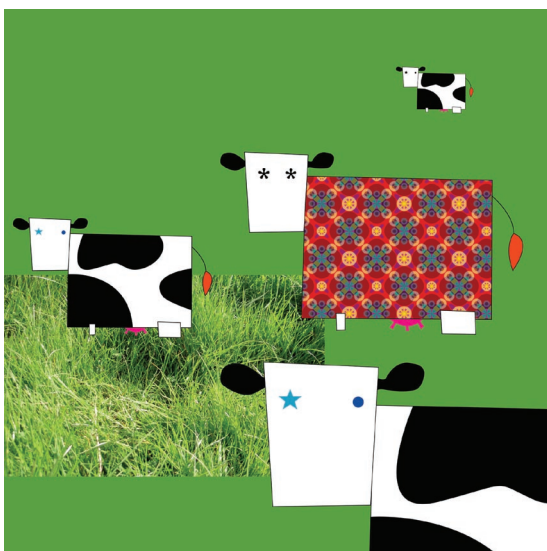
Three years ago, we changed the name of our food service department to more accurately reflect the district's vision. The new name—the Child Nutrition Department—indicates that the staff wasn't hired simply to manage food and people but for professional expertise in the child nutrition field.

Empowered by the board, the department has implemented many new programs to enhance student nutrition and fight obesity. The primary strategy is to provide nutritious foods while catering to children's preferences. After all, student acceptance of a food product is crucial. If children don't buy the meals, they don't get the sound nutrition the staff has prepared for them. That affects program costs: When children prefer a particular food, they consume it. And the more the volume goes up, the greater the department's productivity.

Students eat at school every day of the school year, and while they obviously aren't getting all their meals at school, many are eating both breakfast and lunch there. That's a significant portion of a child's daily intake. Children learn by example, and they will learn to make better food choices when they see nutrition staff and educators as role models in healthy eating.

The key is establishing a preference for healthy foods and beverages, without letting children know these foods are good for them. So the nutrition staff is constantly on the lookout for innovative

By Sherry Mudder  
and Melanie Konarik



concepts and products that kids like and that are good for them, too, such as fat-free gravy and salad dressings, lower-fat pizza, baked and grilled entrees, and wrap sandwiches. These food products might cost more money initially, but many of them have greater value, so they are worth more—and they end up putting more money back into the program.

### The move to milk

That has been our district's experience with milk. It started one afternoon in fall 2002, when the school's athletes were taking a practice break in the high school cafeteria. Given all their physical activity, it was clear that these students needed better nutritional choices than what was being offered in the vending machines at the time. So we added a milk vending machine with 16-ounce bottles of flavored single-serve milk in attractive plastic packaging. (We later added fat-free milk, fortified with nonfat dry milk for a thicker texture.)

The next thing we knew, at meal time, instead of taking the carton of milk offered with meals or buying an additional carton for 30 cents, other students were spending \$1 to purchase milk out of the vending machines.

This development was right in line with the findings of a nationwide pilot test (see sidebar). And it looked like a promising way to achieve two of the department's key goals in our five-year plan: to provide nutritious high-quality meals and products so children can do their best in the classroom, and to operate a department that is financially self-sufficient.

Increasing the amount of milk students drank at school also would help alleviate the growing calcium deficiency among school-age children, especially at the upper grade levels. The average per-capita consumption of milk by children age 13 to 17 fell by more than 20 percent between 1996 and 2001, according to the U.S. Department of Agriculture.

In August 2003, we set up our own pilot test in two high schools and four middle schools. The results were impressive. In just nine months, the sales of milk

increased 49 percent; total ounces sold increased 112 percent. The average number of students buying lunch every day increased 10 percent, and the average daily participation at breakfast increased 15 percent. So, in addition to getting children to drink more milk, the program attracted more children to eat breakfast and lunch, thereby improving student nutrition in all food groups and generating more income to pay for the additional product cost.

The nutrition staff then decided to try a test at several elementary schools as well. In those schools, the test involved simply replacing an 8-ounce carton of milk with an 8-ounce plastic package, so little change was expected. But, with the additional flavors and new packaging and merchandising, we generated a 26 percent increase in unit sales.

Given the success of this pilot program, the school board had no trouble deciding to approve a higher bid for milk in plastic packaging. The board considered the pilot a valuable example of out-of-the-box thinking. We are convinced this type of approach will help our children engage in a healthy eating lifestyle and allow us to do our part in combating

obesity and health issues.

The decision has paid off. Statistics for the 2003-04 school year show an all-grade increase of 8.5 percent for lunch participation and 17.1 percent for breakfast. And parents have been very positive about the program, which they perceive as offering their children a better meal.

### The big picture

It seems to be working in Spring ISD, but could providing an enhanced milk program in schools nationwide really affect nutrition and health and help solve the obesity problem? Promar International, an independent strategic marketing firm specializing in agricultural and food industries, has estimated the effects of national implementation:

- 430,000 additional students would participate in the school meal program annually.

- 2.1 million additional students who currently participate in the school meal program would add milk to their meals.

- By improving their overall diets over time through school meal and milk consumption, nearly 2.6 million children

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## The school milk pilot test

Can school food service programs get kids to improve their nutrition and drink more milk? That was the question the American School Food Service Association (now the School Nutrition Association™) and the National Dairy Council® set out to answer through a year-long study involving more than 100,000 students in 146 schools.

In the test, milk was served ice cold, in a variety of flavors and age-appropriate sizes, in plastic packaging designed to appeal to kids. It was sold in attractive displays and served on the meal line, as an à la carte offering, and in vending machines.

The test results showed that the pilot milk program generated an average 18 percent increase in milk sales, a 37 percent increase in milk consumption,

an almost 5 percent increase in lunch participation at the secondary level, and—where participation is already very high—a 1.5 percent increase at the elementary level.

These numbers are significant from a national public health perspective, the survey reported, given that only 12 percent of teenage girls and 30 percent of teen boys consume the recommended daily servings of dairy foods.

For more information:

[www.asfsa.org/newsroom/sfsnews/schlmilkpilot.asp](http://www.asfsa.org/newsroom/sfsnews/schlmilkpilot.asp)

[www.nationaldairycouncil.org/nutrition/child/pilotTest.asp?page=8](http://www.nationaldairycouncil.org/nutrition/child/pilotTest.asp?page=8)

[www.NutritionExplorations.org/sfs/promar/asp](http://www.NutritionExplorations.org/sfs/promar/asp)

[www.nationaldairycouncil.org/press/alert/newsAlert\\_128124.asp](http://www.nationaldairycouncil.org/press/alert/newsAlert_128124.asp)

would be expected to reduce their lifetime risk of six major health conditions, by 20 to 50 percent, including: coronary artery disease, type II diabetes, colorectal cancer, osteoporosis, stroke, and hypertension.

■ Through dietary improvements and disease-risk reduction over time, these students would lower direct and indirect health-care costs by an estimated \$800 million to \$1.1 billion annually.

But milk is just one part of Spring ISD's efforts to promote good nutrition. We've also begun a pilot program to serve breakfast in the classroom, baking foods instead of frying, and using many low-fat products and enriched grains. The nutrition staff also is looking into the Coordinated Approach to Child Health (CATCH), a program begun by the University of Texas-Houston's Health Science Center School of Public Health. CATCH is a cardiovascular curriculum for elementary school students that provides a coordinated approach for hands-on learning, including physical education, classroom education, and the cafeteria as a learning environment.

And we are taking the next step in healthy vending this fall. In addition to the milk vending machines, we will have machines that offer healthy snacks like cereal and refrigerated vending machines with items like ham-and-cheese sandwiches and yogurt.

We believe we are making a significant contribution to the children we serve. There's no question in our minds that the additional nutrients we are providing are having a positive impact on our children's learning and their overall health. We think this philosophy, coupled with a well-thought-out plan, will help us fight obesity in our district. It's what's best for the kids, and it's our opportunity to make a difference in their lives.

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Sherry Mudder is a school board member in the Spring Independent School District, Houston.

Melanie Konarik (melaniek@springisd.org) is the district's director of child nutrition.