wo years ago, when my son entered first grade at P.S. 166, on Manhattan's Upper West Side, he and I suddenly became engaged in a dismal drama over food. I would send him off to school with a lunch packed with the kinds of wholesome foods he'd been eating since he was weaned. To my chagrin, he would return at three o'clock with it half uneaten. "One of the kids gave me a Hostess Twinkie," he'd confess.

Some days he'd even berate me with,

those things will have been changed because *you* helped to change them."

But how to begin to change things? Answer: form a committee, however small. Our Nutrition Committee at first consisted of one other concerned parent and myself. We joined forces when we learned that applications were open for minigrants (\$500 to \$3,000) for nutrition education, through the State Education Department, under Title IV-C. If we could devise a miniprogram and draft a pro-

C ornbread mix was not the worst of it by any means. Cooking activities throughout the school tended to feature such items as chocolate pudding, chocolate, chip cookies, and layer cakes, often from packaged mixes.

How was nutrition being explicitly taught, if at all? "Mostly through pictures"—to quote Jeanne Silverstein, another third-grade teacher. More often than not, the pictures were related to the standard Basic Four Food Group posters and other materials dis-

Making Diets Healthy at P.S. 166

By Michelle Marder Kamhi



Students at P.S. 166 drawing some whole wheat muffins from oven.

"How come you never give me bologna sandwiches on white bread like the other kids have?"

"Because they're not very healthy," I'd explain, for the forty-fifth time.

"If they're not healthy," he swiftly parried one day, "how come the other mothers let their kids have them?"

"They may not know."

"Well, if you know, shouldn't you tell them?" he asked, with the wonderful lucidity peculiar to children.

And that's how it all began. The only other impetus that was needed came from the invitation Principal Gloria Johnson had extended to our incoming group of parents: "I'm sure that in visiting our school you've seen some things you didn't like. I can only hope that by the time your child graduates,

posal in time for the deadline, three weeks away, we might get some money to underwrite a program for the following school year.

We immediately began to talk to teachers and observe their classes. There was little formal nutrition education. Yet most of the teachers were doing a lot of cooking with their classes. These cooking activities were related to social studies, however, and scarcely a word was being said about nutrition!

Says teacher Gloria Friedman of her third-grade class: "When we did a unit on grains of the world, I'd go to the store and buy a cornbread mix. I'd never dream of reading the labels to see what was in it. Now when I read the labels, I almost die to think of the stuff we were eating!"

tributed by the National Dairy Council and the U.S. Department of Agriculture.

In truth, most of the teachers we talked to gave short shrift to nutrition. The official Board of Education curriculum does include a "nutrition strand" under Health Education. Recently "revised," in name only, the New York City nutrition curriculum is thin, outmoded, and uninspiring. A typical learning objective is the following, for fifth graders: "Digestion takes place in the food tube, or alimentary canal." Was it any wonder that teachers were doing so little?

T hough the Dietary Goals for the United States had been published in February 1977, the teachers we saw

While the children were engaged in these new food adventures parents were being initiated into the whys and hows of wholesome eating . . .

on our tour of P.S. 166 that Fall weren't even talking about the ill effects of foods high in salt, sugar, and fat, much less banning such foods from the classroom. Many teachers served up sugary cookies and drinks like Hi-C for daily snacks and treats, while birthdays and holidays were generally celebrated with gooey cakes, assorted candies, potato chips, and soda.

As for the school's food service program in those days, it typified the average American diet: overcooked, overprocessed foods, high in fat, salt, and sugar, low in fiber and wholesome, natural ingredients. Nor were the contents of the children's lunch boxes much better. (About a third of the children brought lunch from home.) With few exceptions, the nutritional shortcomings cut across the diverse social, economic, racial, and ethnic groups in the school. Many of the middle-class children were eating as badly as the poverty-level kids. And many of the teachers were eating as badly as the children.

It was clear that before we could hope to educate the kids about food, we'd have to provide a crash course for teachers and parents. By the time we had finished touring the school, our minigrant proposal virtually wrote itself. The core of our proposal was teacher training and parent education.

Funded in June of 1978, our program began that Fall with the hiring of a part-time nutrition education consultant, a graduate of Joan Gussow's Program in Nutrition at Columbia University Teachers College. Gussow maintains that the real role of nutrition education is "to alter people's access to food. . . not just to teach that oranges have Vitamin C," and this was exactly the broad perspective we wanted for our program.

Meeting regularly with a sample group of teachers (one from each grade level, K-5), the consultant began by introducing them to Mary Goodwin's Creative Food Experiences for Children, the unofficial textbook for our new curriculum. The teachers were immediately enthusiastic about Goodwin's hands-on approach to nutrition education, which readily tied in with other basic areas of the curriculum, like social studies.

It was not long before third-grade classes studying "desert peoples" were making and eating such exotic dishes as tabouli, humus, and falafel on wholewheat pita-a far cry from packaged cornbread mixes! And while they intrepidly sampled these new foods, the children began to learn about aspects of nutrition wholly new to them. Teachers not only talked about how these traditional Middle Eastern dishes combine complementary plant foods to provide essential protein but discussed why such a plant-based diet may be healthier than our costly animal-based diet, high in saturated fat and low in fiber.

H ispanic children in Monica Trinidad's bilingual fourth-fifth grade class were likewise learning that their familiar staple of rice and beans could be more healthful than steak, especially if they used converted or brown rice in place of "enriched" white rice.

Downstairs, on the second floor, Alice Greenberg's kindergarteners charted a race between various bean sprouts "to see which kind grew fastest." They also tasted the sprouts and learned, too, that seed foods like beans are very nutritious because they store up the food supply for the baby plant.

Later in the year, class K-3 ground wheat berries into flour, using a stone hand mill donated by the P.T.A. They then baked the flour into wholewheat scones and ate them with gusto, while they learned why wholewheat is healthier than white flour. When another group made a hearty wholewheat sourdough bread, served warm from the oven, the children clamored for seconds and even thirds.

While children were engaged in these new food adventures, parents were being initiated into the whys and hows of wholesome eating, through a series of workshops. Many parents, however, were unable to attend workshops; thus a series of English-Spanish fliers, summarizing the information covered in the workshops, was subsequently distributed to all parents.

By now the ranks of our nutrition committee had grown as word of our work had spread. The first parent workshop focused on the Dietary Goals. Even more important than the discussion of the Goals were the refreshments for the workshop, which were carefully planned by the Nutrition Committee. In keeping with the dietary guidelines presented in the Goals, the typical high-fat, high-sugar, high-salt refreshments such as doughnuts, commercial coffee cakes, and salted snack foods were banned. In their place we served homemade wholegrain fruit-nut breads, made with minimal sugar; a huge bowl of fresh fruit salad; unsalted nuts; and wholegrain crackers. Fruit juices and mild herb teas were provided as alternatives to coffee. Workshop participants quickly discovered that "what's left to eat" offers delights not to be found in oversweetened, oversalted, and overrefined foods. After sampling some of the luscious fruit salad, one burly father, who looked every inch a confirmed meat, potatoes, and apple pie man, announced unabashed: "This is really delicious. I'm going to start making this at home!"

A t the first workshop, parents were also shown a new device for planning balanced meals—the "Perfect Plate." Conceived during a fruitful after-hours brainstorming session I had with consultant Elaine Kuperstein, the Perfect Plate is based on the "basic three" nutritional schemes used in many countries which do not rely heavily on animal sources of protein.

Consistent with the Dietary Goals,

Workshop participants quickly discovered that "what's left to eat" offers delights not to be found in oversweetened, oversalted, and overrefined foods.

the Perfect Plate clearly shows the importance of complex carbohydrate foods-particularly whole grains and tubers, as well as fruits and vegetables-in a well-balanced diet, while it deemphasizes the role of protein foods, especially those from animal sources. (Many nutritionists estimate that the average American now consumes twice as much protein as is needed.) As a graphic device, the Perfect Plate is much simpler and easier to remember than the 3-2-4-4 scheme of counting servings from the Basic Four. It's especially helpful for teaching young children about meal-planning.

Adults, too, can easily see, by reference to the Perfect Plate, that a typical steak-house platter of, say, an 8-ounce slab of beef, a miniscule cup of cole slaw, and an anemic white roll is nutritionally lopsided. For Principal Gloria Johnson the Perfect Plate recalls her West-Indian background: "When my sister and I used to ask mother 'What's for dinner?' she'd always start with the same answer: 'rice.' That's probably why she lived to a ripe old age of ninety-one!"

As a logical follow-up to the *Dietary Goals* and the Perfect Plate, our second parent workshop focused on mealplanning around vegetable sources of protein. We introduced the topic tentatively at first, for fear of putting people off by seeming too "radical." But we soon found that many parents and teachers alike were eager to learn about vegetarianism, for economic reasons if for no other.

By this time, word of the classroom nutrition activities had spread throughout the school. Parents whose children were not in the classes involved were starting to ask why.

We had begun the program with a small group of teachers who would voluntarily meet with the consultant during their lunch hour. After-school sessions would enable the consultant to work with more teachers, but where would we find the money to pay for them? Providence was with us. In February we learned that the Board of Ed's Office of School Food Services had funds for Nutrition Education and Training minigrants. "Proposals to support or expand existing programs" would be considered. Better yet, the monies would be awarded for the balance of the school year.

e had only one day to put together a proposal, but our experience had shown us exactly what we needed: Funds to pay teachers, lunchroom aides, and food-service staff to attend after-school workshops; copies of Creative Food Experiences, Diet for a Small Planet, and selected publications from the Center for Science in the Public Interest for every classroom; additional consultant's time to setup and conduct the workshops and to work intensively with the teachers; and money for groceries for school-wide cooking activities and tasting parties.

makes heart conditions worse. Things you should avoid (do not eat these): (1) salt, (2) salty meats, and (3) salty seeds."

Simple, wholesome refreshments played an essential part in the staff workshops, as in the parent sessions. (As Margaret Mead once said: "People don't eat nutrition; they eat food!") Foods like unadulterated wholegrain crackers and breads, natural nut butters (unsalted, unsweetened, and unhydrogenated), unsalted nuts and sunflower seeds, and plain baked sweet potatoes gained immediate converts.



Students mix a Halloween Party with a nutrition education lesson.

When the NET grant came through, early in March, our program took off at full gallop. After-school workshops swiftly oriented participants to the *Dietary Goals*. About 85% of the teaching staff attended. The well-documented links between our dietary excesses and the major killer diseases in the U.S. were stressed. Teachers were encouraged to carry this information back to their classes and to discuss it in very explicit terms with their students.

Soon the children were putting the *Dietary Goals* into their own words. "Salt is not good for your health," wrote Lucy Pagano, a fourth-grader in Monica Trinidad's bilingual class. "It gives you high blood pressure. So when you buy something you better watch out. Read the label when you buy it. Once my father ate so much salt that he got high blood pressure. It

When workshop participants began announcing that they were not only changing their own eating and buying patterns but were even successfully introducing these foods at home to family and friends, we knew that our miniproject was having a considerable ripple effect.

T eachers and parents soon testified to the positive reinforcement of school-wide participation in the program. The subject of nutrition was now on everyone's lips. For the first time since the start of our miniproject, we began to have hope that improvements in the breakfast and lunch programs would be possible.

The terms of the NET grant required that the school Nutrition Committee, expanded to include students and food service staff, meet monthly with the

Photo

school dietician, Anna Hudson. Out of those meetings last spring, in the context of the children's and staff's new knowledge about the *Dietary Goals*, came suggestions for the improvements which we are now seeking in this year's menus. (This is as swift a change as one might hope for in a system where menus and food orders are made up three months ahead.)

To foster the children's acceptance of wholesome foods, we held a variety of tasting parties in classes throughout the school. Students enjoyed sampling wholegrain breads and crackers; skimmed and lowfat milk; assorted raw vegetables; and unsweetened lowfat yogurt while they were learning

students are learning to read labels warily. (The simplest guideline is that the most wholesome packaged foods tend to be the ones with the *shortest* list of ingredients.) And the most important information on the label, we stress, is often between the lines. Unspecified "vegetable oil," for example, is probably highly saturated coconut or palm oil—or cottonseed oil.

The day my son came home with a vocabulary list of "glucose, maltose, dextrose, fructose, honey, corn syrup," etc. I could see that my efforts had begun to reap benefits close to home. His second-grade class's assignment was to see how many packaged foods containing hidden sugar he could find at home.

mother of a fifth grader recently, "I had to buy white bread just for David. He was the only one in the house who wouldn't eat wholewheat bread. Then one day last year he came home from school and announced 'No more white bread for me, Mom!' What's more, he has stuck to it."

Says bilingual teacher Monica Trinidad: "There is no doubt that the children are becoming more aware. And they are trying foods they never ate before. I wasn't really teaching nutrition before the project. I would even bring lollipops to class as treats. At parties we'd have potato chips, soda, and all kinds of candies. Now we have fresh fruits and juice instead."



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about the nutritional benefits of such foods. Especially popular were the "Yogurt Sundae" parties, where children assembled their own combinations of fruits, nuts, lowfat yogurt, and natural flavorings.

In the lunchroom this year, raw carrot and celery sticks are displacing mushy canned vegetables. Fruits canned in syrup have been banished in favor of fresh fruits on most days; occasionally, unsweetened canned pineapple or applesauce is substituted. No more white bread; only wholewheat, is served. And meats containing nitrates/nitrites have been banned, thanks to a school-wide poll of parents.

Consumer education is a vital part of our program. Teachers, parents, and This was a perfect example of how teachers were using the information disseminated at the workshops to create meaningful grade-appropriate activities integrating nutrition with the main curriculum subjects.

Perhaps the most difficult part of any program, especially for the people closest to it, is evaluation. Says Gloria Johnson: "If successful education results in positive changes in the learner, we can consider that our nutrition education program has been the most successful indeed—simply by observing the healthy changes in the children's eating habits."

"Before the project," confided the

How do the children feel about the new treats? Do they enjoy them as much as the candy and junk foods? "Oh, yes, of course they do," Ms. Trinidad replies emphatically, as though surprised that anyone would even question it.

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