

# Pediatric Obesity Clinics Impress, but at a Price

BY DENISE NAPOLI  
Associate Editor

**P**ediatric obesity clinics aiming to get children healthy are springing up across the country. Although some physicians hope the trend continues, the programs are not without problems: a hefty price tag, for one, and a dearth of long-term data.

One program that does have long-term data is the nationwide KidShape, founded in 1986 at Cedars-Sinai Medical Center in Los Angeles by Dr. Naomi Neufeld. The program, which focuses on healthy lifestyles, results in an average 0.6-point decrease in patients' body mass index over the 9-week course, with 80% of the youngsters maintaining or continuing to improve their BMI at 2 years, she said.

"I don't think any of these programs cure obesity," said Dr. George Datto, a pediatrician and director of the adolescent bariatric program at Alfred I. duPont Hospital in Wilmington, Del. "If parents think they will drop their kid off, and at the end of 8 weeks the problem will be gone—that's not the way these things work.

"But they're good for education," he added. "It's a tool to help you change your lifestyle."

One of the newer programs is Boston-based Great Moves! According to Dr. Erinn Rhodes, a pediatric endocrinologist and chief medical officer of Great Moves!, "We intentionally don't focus on weight in the program. What we focus on are healthy lifestyles," she said in an interview.

According to both Dr. Rhodes and Dr. Neufeld, a pediatric endocrinologist in Los Angeles, the most successful programs provide support in four key areas: healthy diet and physical activity, to be sure, but also mental health support and—perhaps most crucially—the importance of parental involvement in weight loss.

"If you're getting the whole family to buy in, that's really the key," said Dr. Neufeld. "You can show parents where they're sabotaging their child's best efforts." Clinics that don't have parental involvement waste 50% of their effort, she said in an interview. At Great Moves!, the parents' BMIs are monitored right alongside those of the children.

Both programs employ on-site dietitians and nutrition experts. At Great Moves!, clinic director and dietician Suzanne Rostler said, "We do a basic Nutrition 101." In the on-site kitchen, children and parents learn how to make

healthy, balanced meals or snacks—"a healthy carbohydrate, plus a lean protein or a healthy fat."

The mental health professionals employed by both clinics are another reason for their success, said Dr. Neufeld. "A lot of kids who are overweight are turning to food for a lot more reasons than just boredom. And it's good to have other people around that they can talk to about it."

Physician involvement also is important to both programs.

At Great Moves!, families meet individually with a physician at least three times throughout the program. "The beginning [visit] is intended to evaluate whether there is any underlying medical reason that may be contributing to [the child's] overweight or obesity, look for complications as a result [of the obesity], and make sure that if there are any secondary medical issues that they have that are unrelated to obesity, we know about them," said Dr. Rhodes. Other visits are for follow-up.

Although KidShape clinics do not schedule mandatory visits with on-site physicians, many of the clinics have MDs serving as director, "spearheading the program," said Christiane Wert Rivard, a program director at KidShape. They also coordinate with referring physicians.

The weekly physical activity sessions, involving nontraditional, "kid-friendly" sports and games, also are key. At Great Moves!, Dr. Rhodes stressed that there are no treadmills or exercise bikes.

KidShape, similarly, involves its participants in weekly karate, kickboxing, and tae kwon do sessions.

This kind of exercise approach is es-



In an on-site kitchen at Great Moves! in Boston, a child learns how to make a healthier pizza.

PHOTOS COURTESY GREAT MOVES!

sential for pediatric weight loss success, said Dr. Donald Bergman, an endocrinologist in private practice in New York who is not affiliated with the clinics. "Children need to be active in small doses; they need to vary the activity so that it is fun." Parents who seek to exercise with their children should vary activities every 15 minutes, he said in an interview.

Pediatric weight loss clinics like these are not all fun and games, however. There is the matter of the bill, which is often not covered by insurance companies.

Indeed, at Great Moves!, the cost is significant: \$300 for an initial assessment followed by six payments ranging between \$300 and \$450, depending on the degree of program participation, said Stanley Goldstein, Great Moves! CEO. A reduced-cost version of the program without physician supervision is in the works, as are negotiations with insurers.

At KidShape, Dr. Neufeld has been somewhat successful at getting private insurers to cover at least some of the cost. To do so, she works to identify some of the comorbidities that obese and overweight children face. ■



No treadmills or exercise bikes here. The focus on physical activity sessions at Great Moves! is on kid-friendly sports and games.

## Obese Dyslipidemic Children Have 'Vascular Age' of Adults

BY CAROLINE HELWICK  
Contributing Writer

**NEW ORLEANS** — The arteries of obese and dyslipidemic children resemble those of middle-aged adults, possibly heralding the early onset of cardiovascular disease, according to a study presented at the annual scientific sessions of the American Heart Association.

"This is a wake-up call," said coauthor Dr. Geetha Raghuvver, a cardiologist at Children's Mercy Hospital, Kansas City, Mo., who presented the findings. She noted that childhood obesity has already been shown to "track" into adulthood and to pose multiple risks to the vasculature.

Dr. Raghuvver and colleagues at the University of Missouri,

Kansas City, and Children's Mercy Hospital measured the carotid artery intima-media thickness (CIMT) by ultrasound in 34 boys and 36 girls whose average age was 13 years. Most were obese, with a mean weight of 64 kg and mean body mass index of 26 kg/m<sup>2</sup>. In all, 40 patients (57%) had a BMI above the 95th percentile.

Most of the 70 also had abnormal lipid levels. Total cholesterol was greater than 170 mg/dL in 59 children and LDL cholesterol was above 110 mg/dL in 51; in 43 children, HDL cholesterol was less than 35 mg/dL and triglycerides were above 100 mg/dL.

To characterize the state of the carotid arteries in these children, the investigators plotted

the CIMT measurements against previously published normative data for 45-year-olds matched by sex and race. The images revealed "advanced vascular age" in 75% of this young obese cohort. Mean CIMT was 0.45 mm, and maximum was 0.75 mm.

"We found that the state of the arteries in these children is more typical of 45-year-olds than of people their age," reported Dr. Raghuvver. She noted that there are no normative standards of CIMT in children against which to compare the findings.

For example, a 12-year-old white male was shown to have a CIMT of 0.54 mm. Plotted against that of a 45-year-old male, this CIMT measurement fell between the 25th and 50th percentiles of the adult (0.50

and 0.57 mm, respectively). The researchers labeled the arteries as having "advanced age" if the CIMT exceeded the 25th percentile for their matched adult counterpart.

"We then wondered what might be favoring this early advancement in CIMT, and we found that those with advanced age had higher triglyceride levels," she reported. More children with advanced vascular age had elevated triglyceride levels than normal triglycerides.

The same was found for the 40 most obese children, or those with BMI above the 95th percentile. Of those, 26 had both a vascular age above the 25th percentile of adults as well as a triglyceride level above 100 mg/dL. Children with lower

triglycerides were evenly divided between those who scored below or above the 25th percentile on the charts for 45-year-olds. When a cutoff of 120 mg/dL was used to define high triglyceride, the result was stable. "More kids in the high vascular age group had higher triglycerides," she added.

"Vascular age was advanced the furthest in the children with obesity and high triglyceride levels, so the combination of obesity and high triglycerides should be a red flag to the physician that a child is at high risk of heart disease," she commented.

Future research should evaluate whether risk factor modification can change the vasculature over time, she said. "We are hoping that it can," she added. ■