

HOW DO YOU GET A FOURTH GRADER TO EAT MORE VEGGIES?

Two nutrition professors are empowering kids for a lifetime of healthy choices.

By Tricia Brick

PAULA QUATROMONI DOESN'T WANT TO TALK TO KIDS ABOUT CHILDHOOD OBESITY. A BU Sargent College associate professor of nutrition, Quatromoni (SPH'01) is well aware of the alarming statistics: More than a third of American kids and adolescents are overweight or obese, according to the Centers for Disease Control and Prevention. About 18 percent are obese, a number that has tripled in the last three decades. Low-income kids are at even higher risk: one in three low-income preschool-age kids is overweight or obese. And obesity puts children at risk for a range of health disorders, from high blood pressure to diabetes.

Sargent faculty, including Quatromoni and Clinical Professor Linda Bandini, have been involved in childhood obesity research and interventions for decades. And with the rise of ventures like First Lady Michelle Obama's Let's Move! initiative, the promotion of healthy habits to slow weight gain has enjoyed renewed attention nationwide.

But while she is active in the fight to raise a healthier generation, Quatromoni says, "We shouldn't even be saying 'childhood obesity' to fourth graders. There's so much that can be damaging, in terms of promoting chronic dieting, body image dissatisfaction, bullying, or stigma of overweight kids," she says. "I would much rather be promoting fitness and healthy eating than what the scale says. I want the messages to be positive and empowering. This is what a healthy breakfast looks like. This is what healthy snacking means."

Quatromoni has built this positive messaging into an innovative new nutrition education curriculum by joining forces with an educational online series called *Kickin'Kitchen.TV*. A cooking show for preteens, the series combines sitcom-like plot lines and a hip-hop soundtrack with lessons on making healthy choices in and out of the kitchen.

Quatromoni, who is an advisor for the series, developed nutrition lessons coordi-

nated with episodes of *Kickin'Kitchen.TV*, and in fall 2011, ten of her graduate students visited fourth- and fifth-grade classrooms in Cambridge (Massachusetts) Public Schools to pilot-test the curriculum.

In three of the ten classrooms, the Sargent students taught a more traditional curriculum, though still interactive, featuring lectures, worksheets, and discussions. In the other seven classrooms, the lessons used episodes of *Kickin'Kitchen.TV* as a jumping-off point for conversations and activities around topics like the nutritional benefits of fresh foods or the consequences of skipping breakfast.

The kids seemed to gravitate naturally to the series. "There was a significant increase in nutrition knowledge in both groups; the students learned with both the traditional lesson plans and in the digital classrooms," Quatromoni says. "But the *Kickin'Kitchen.TV* episodes in particular just captivated the kids. They loved the characters; they loved the comedy; and they loved the cooking and the healthy eating tips."

And they wanted more: even though the program's website was still in development at the time, half of the kids checked out the site on their own at home. In the upcoming second phase of the project, Quatromoni hopes to mobilize kids' interest in social media to encourage them to use the website for finding and sharing recipes, recording food logs, and participating in physical activity challenges.

One key to the curriculum's success, Quatromoni says, is that the series meets kids where they are: online, with stories about young people who look and act like them.

"Our whole goal here is to be empowering, to motivate kids to say, 'Hey, I can go home and do this,'" she says. "And getting these nutrition messages from a fourteen-year-old cooking a vegetable frittata in her kitchen for her friends is different from me standing up there lecturing. 'You have to eat more vegetables.'" →



Photo by Vernon Doucette

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Photo courtesy of Kickin'Kitchen.TV

Associate Professor Paula Quatromoni (top) is an advisor to *Kickin'Kitchen.TV* (above), an online series that teaches kids about healthy eating.

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Photo by Vernon Doucette

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—LINDA BANDINI

HELPING TEENS WITH DISABILITIES

CLINICAL PROFESSOR LINDA BANDINI is also working to educate kids and families about nutrition and health by tailoring her messages to the needs and abilities of those she's reaching out to—in her case, young people with disabilities.

Kids and teens with developmental disabilities like autism and Down syndrome have higher rates of obesity than their typically developing peers. Yet in terms of nutrition and activity, this group has historically been understudied and is often excluded from weight loss and educational initiatives, Bandini says. Working with research teams including Sargent graduate students, she seeks to identify the risk factors particular to these groups and, in turn, to develop effective interventions to help young people with disabilities stay healthy. "The work we're doing is under the umbrella of health promotion," she says.

"We're looking to see whether kids with developmental disabilities differ from typically developing kids in terms of eating habits, diet, and the levels of physical activity they engage in, because all of these things can have implications for overall health."

Through the Children's Activity and Meal Patterns Study, Bandini has been looking at eating and physical activity in young people with autism spectrum disorders. In a recent *Journal of*

Pediatrics article, she reported that kids with autism ate a less varied diet than their peers, including fewer vegetables and fruits and other foods necessary for adequate nutrition.

A second study, *Teens' Recreation and Activity Choices*, is seeking to shed light on what factors might influence adolescents' decision-making around physical activity. Working with three groups of young people—some with intellectual disabilities, some with autism spectrum disorders, and some typically developing kids—Bandini and her colleagues have supplemented quantitative measurements with a series of interviews, asking such questions as: What do you do in your leisure time? Do you like to play team sports? Do you like to watch TV? How do you feel when you participate in these different activities?

"We're hoping, first, to get a sense for whether the adolescents with disabilities are as active as typically developing kids," she says. "And if they're not getting enough physical activity, we hope the data may help us to understand why and, in time, to develop intervention programs."

Bandini has experience developing these types of interventions. Over the past year, she has been working with Sargent graduate students to develop a comprehensive nutrition education curriculum for adolescents with intellectual disabilities. The Sargent students developed modules and pilot tested them in Boston-area schools to ensure the lessons fit the abilities and needs of these young people.

"Reading comprehension can be a challenge for youth with intellectual disabilities, so all our lessons are hands-on, visual, with lots of interactive games," Bandini says. "They are adolescents, with adolescent likes and dislikes, so we worked hard to develop a curriculum that is specifically tailored for that age range." By customizing messages about nutrition and fitness for the populations they're reaching out to, Bandini, Quatromoni, and their colleagues are empowering kids to make smart choices for overall health rather than focusing on the numbers on a scale. **IS**

JOINING WITH THE CITY



Mayor Thomas Menino

In his 2012 State of the City address, Boston Mayor Thomas Menino (Hon.'01) announced a new citywide antiobesity initiative, and in collaboration with the

Boston Public Health Commission, Boston University will be providing space and resources for students and faculty to establish new nutrition and exercise programs for local youth. Find out more at www.bu.edu/today/2012/combating.

Photo by Dan4th Nicholas

From the DL to Dublin

AN UNDERGRADUATE'S JOURNEY TO BECOMING A PHYSICAL THERAPIST BEGAN WITH A HOCKEY INJURY AND FOUND ITS DIRECTION IN IRELAND.

BY RACHEL JOHNSON

When Matt Whitney (13) sees his patients, he sees himself. As a freshman, he was at another university, with different goals and a career path heading toward finance. One hockey injury, and a trip to the disabled list (DL), changed everything.

Most people don't speak fondly when describing therapy after a life-altering injury, but Whitney has a glass-half-full outlook. "I just kind of fell in love with it right there," he says, describing his yearlong rehab experience and decision to switch to BU Sargent College. "The therapists were really cool guys and they gave me an insider's point of view."

He says this insight gave him greater empathy for his patients at the Irish Wheelchair Association (IWA), where he worked while studying abroad through BU's Dublin Internship Program in the fall of 2011. The IWA is a Dublin-based organization that works to improve the physical and emotional capabilities of people with limited mobility; for Whitney, it was a chance at supervised hands-on therapy. "They kind of throw you into the fire," he says. "My boss would say, 'I booked a patient with rheumatoid arthritis for you tomorrow,' and I would have to research it and put a plan of treatment together."

An athlete himself, Whitney had pictured a professional future of rehabbing other athletes with sports-related injuries, but the Dublin program showed him how much he enjoyed getting involved



Undergraduate Matt Whitney (left) works with a patient at the Irish Wheelchair Association in Dublin, Ireland.

Photo by Cydney Scott

"I CAN SAY TO MY PATIENTS, 'I'VE BEEN THERE, I KNOW WHERE YOU'RE AT.'"

—MATT WHITNEY

in all types of therapy. "I saw a lot of people who'd had strokes," he says. "I had a cerebral palsy patient; I had a couple patients with multiple sclerosis. I had always come at therapy from the sports injury angle, and I really didn't think I had any interest in working with people with disabilities, but I loved it."

Although he had never experienced cerebral palsy or MS himself, Whitney used the challenge of his own injury to understand his patients' situations, physically and emotionally. His therapy has been useful in the classroom, too: "A lot of the work involved the testing that I had gone through myself," he says. "I was able to say, 'Oh yeah, I remember doing that, and this is why I did it.' It helped me really understand my own therapy for the first time."

He enjoyed working with patients in Dublin so much, he plans to go on to graduate school and become a licensed physical therapist.

But Whitney knows empathizing with his patients is only half the battle. He also needs to get them to see themselves in him. Having gone through the rehab process himself, he says, he tries to be an example. "I can say to my patients, 'I've been there, I know where you're at.' And because I've been there before, they believe me." **IS**



Watch a video of Matt Whitney's experience in Ireland at www.bu.edu/today/2012/bu-abroad.