

HEALTH ZONE**EDUCATION**

Schools get kids involved in better nutrition

By Rebecca Hennes

For decades, kids have tried every trick in the book to avoid eating vegetables.

For parents who struggle to figure out how to turn that around, researchers at the Baylor College of Medicine have determined that educational intervention — such as involving children in cooking or gardening — is the answer.

Dr. Cassandra Diep, post-doctoral research fellow at the Baylor College of Medicine, and her team analyzed 29 studies of 33 interventions over the course of about 25 years. She said that behavioral theory, such as parents serving as good role models by eating healthy themselves, was not a determining factor in convincing children to eat better.

Instead, what worked best was school-based programs or interventions.

"Knowledge itself isn't the key to changing behavior," Diep said. "But if we incorporate education with other components such as increasing fruit and vegetable availability that will more likely have an effect on a child's consumption of those foods."

Recipe for Success is a local nonprofit health-education learning program aimed at combating childhood obesity and instilling better eating habits in children. Founded by Gracie and Bob Cavnar in 2005, Recipe for Success has reached more than 25,000 students across the nation. The program teaches children what real food is, where it comes from and why they should eat it.



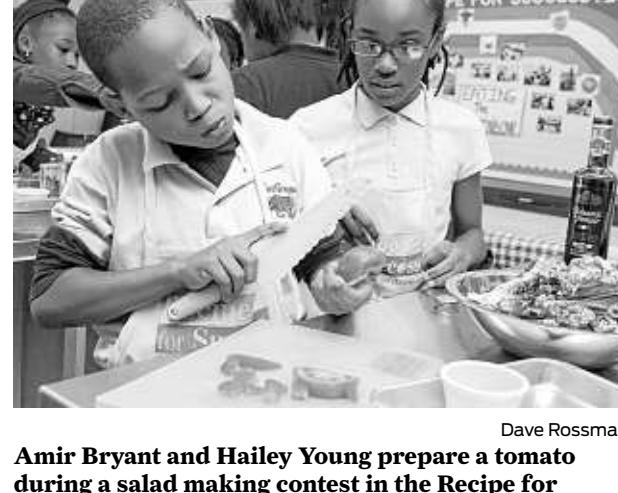
Houston Chronicle file

Students work year round in their class' vegetable garden. Recipe for Success is aimed at combating childhood obesity by changing the way children understand, appreciate and eat their food.

"Using the garden is a nonconfrontational format to lure a child into the magic of the way food grows," Cavnar said. "They are intrigued by that and their resistance goes down because it's a cool thing to watch something spring from a seed. They are so much more likely to want to try it because they are excited about the very concept and the magic of it."

Diep said younger children shy away from vegetables because those foods taste bitter to them. Cavnar agreed and added that children — and people in general — are hard-wired to not trust new foods.

"That's why it takes so many opportunities to get a child to even try a new food, because they



Amir Bryant and Hailey Young prepare a tomato during a salad making contest in the Recipe for Success program at McGregor Elementary School.

are hard wired to not like it and not because they don't like it but because that's just literally in their brain stem," Cavnar said.

"Parents tend to get discouraged too soon."

HealthCorps is another education-based intervention program to

change eating habits, but this one is aimed at high school students. HealthCorps was founded by Dr. Mehmet Oz in 2003 and has led to the creation of 60 programs in 13 states and the District of Columbia. After a successful go at Sharpstown High School, it will move into Westside High School.

"HealthCorps has had this great presence on campus to kind of remind kids that wellness is a part of their education," president Michelle Bouchard said. "Students have actually talked about how it has changed their life, and they're eating more fruits and vegetables, they are exercising more and trying to get their families to do the same."

"When (teenagers)

learn something, they tend to be activists and they tell their groups of friends, they're on social media a lot, so they have a big sphere of influence," Bouchard said. "They also are huge family influencers."

HealthCorps offers "living labs" that cover three sections of the curriculum — mental resilience, nutrition and fitness. The labs include cooking programs, gardening and exercise clubs that bring yoga or Zumba to the schools.

Both Cavnar and Bouchard agree that organizations like theirs are important solutions to the childhood obesity problem.

"It's costing all of us billions of dollars," Cavnar said. "Think of chronic disease management — if a child has type 2 diabetes at age 5, they can start losing limbs by 20. We are starting to see hospitals flood with chronic disease patients. It can actually impact our economy."

At home, Bouchard urged parents to try simple things with their children.

"I'm not suggesting or asking for radical things," Bouchard said. "For example, here in Houston, you've got an amazing new park at Memorial with a bike route. If you can, try to incorporate those sorts of things to do in your life. Also, try to squeeze in at least one meal a day where you can sit down and just sit there for 30 minutes with your kids at dinner, find one meal where you can sit down and talk with them."

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INNOVATION

Technology key to global health efforts

By Lora Hines

Dr. Sharmila Anandasabapathy, the new director of Baylor Global Initiatives, a Baylor College of Medicine center focused on worldwide programs, last month held the center's first global health symposium since its establishment in 2011. The event highlighted international research Baylor faculty conducts to tackle diseases primarily affecting poor people and the future of world health. A gastrointestinal endoscopist, Anandasabapathy, 43, wants the center to develop technologies to treat cancer and chronic diseases in poor areas. She recently discussed her goals for Baylor Global Initiatives, formerly known as Baylor's Center for Globalization.

Q: What interests you about global health innovation?

A: I started working with engineers to develop tools for early cancer detection. Most cancer mortality occurs outside the United States in globally underserved settings. Stage by stage in Africa, breast cancer is a death sentence. In the United States, survival is largely the norm. It's the result of early detection.

A lot of the technologies and approaches that we were using in this country for medical care were not necessarily appropriate for other parts of the world and were not sustainable. They were either too complex or too difficult. You can't have endoscopists with nine years of training working in Africa, India and China. The answers to these medical problems lay in innovations around technologies and using those technologies in the context of innovative systems. If there's



Baylor College of Medicine

Dr. Sharmila Anandasabapathy is the new director of Baylor Global Initiatives.

no power in an area, you have to look for battery-powered options or solar. If you don't have trained physicians to interpret your devices because of the complexity of the imaging, then we needed to think about using mobile applications or using software to do the interpretation. Technology may be the answer to some of our global health issues.

Q: What is your vision for Baylor Global Initiative?

A: When I came here in July and was thinking about how to develop Baylor's program, we decided it should be innovation — technology, but also systems innovation that is environmentally creative, culturally appropriate and using tools that are available in a setting. Everyone in Africa has a cellphone. Shouldn't we be using our cellphones for education for primary and secondary prevention? Shouldn't we be integrating that into medical care? You won't have specialists. You may not have physicians. In a lot of areas there's a nursing shortage. Should we be thinking about using

these tools to train community-based health care workers or family members to detect and manage diseases in culturally appropriate ways? That's our angle for approaching this program.

Q: How do you start?

A: We have to get rid of our preconceptions about who we're educating. It may not be high-level physicians. We need to think about using nurses to fulfill a lot of these roles. We need to think about empowering and educating family members. We need to think about training community-based health workers. We need to think about using developing technologies that are environmentally appropriate — cellphones, mobile applications — that can help assist and fulfill these roles. We're not going to be able to solve everything, but we're going to be able to solve some problems.

Q: Why is improving global health important?

A: Some of the systems and approaches we use are not sustainable.

They're definitely not feasible abroad. Over time, they're not going to be sustainable in the U.S. We have as much to learn in this country from innovations that are occurring in other parts of the world. I went to visit a series of Indian hospitals that we

collaborate with closely. They have to work in very low-resource, rural settings. All of their hospitals are built on single, tablet-based platforms with 3G capabilities. They don't have doctors on site. They transmit their images. If there's microbiology, parasitology, pathology, it gets sent to a central site. That prevents you

from having staff on site, the cost of having staff on site. They have created tablet-based medical assist programs that know, for example, the antibiotic sensitivities in that region of India. A physician has an immediate tool that says, "I'm dealing with a pneumonia in this area and these are the sensitivities to antibiotics in this region." The computer is basically helping them manage that patient. Why aren't we doing this in the United States?

Q: Why aren't we?

A: We're retrofitting on broken systems. They're starting from nothing. They have the ability to be much more creative, and they leapfrog. There are a lot of things on our end that needed to be simplified and modified for low-resource areas. But there were a lot of things being developed in low-

resource areas that would have immense value in our country, particularly in low-resource areas of the United States. When you have nothing, you are forced to be creative.

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ALZHEIMER'S DISEASE

Researcher, art exhibit find common ground focusing on brain health

By Leila Merrill

Jason Eriksen had never connected with an artist or a work of art like this before.

But now his laboratory at the University of Houston and one of his students are featured in "Echo of the Unknown," an exhibition by Janet Biggs that combines video, sound and objects. It is on display at the school's Blaffer Art Museum.

The exhibition is inspired by the artist's family experiences with Alzheimer's disease, public figures coping with the disease and research on it. That's where Eriksen comes in.

As an associate professor in UH's department of Pharmacology and Pharmaceutical Sciences, he teaches and does research, much of which focuses on Alzheimer's and similar diseases that affect people's brains.

Alzheimer's is an irreversible and progressive form of dementia that, according to the National Institutes of Health, affects an estimated 5 million Americans.

"By 2050, this number is expected to triple to as many as 16 million," Eriksen said. "Alzheimer's disease is also the most expensive condition in the nation, costing our nation \$214 billion in 2014. The long-term goal of my research is to understand the underlying changes that occur in dementia and to develop better ways of diagnosing and treating Alzheimer's disease."

While Biggs' art is on display, the museum is hosting the Blaffer Art Museum Innovation Series, which includes talks and other events. Eriksen participated in one recently and offered brain health advice.

As little as 22 minutes a day of moderate exercise can significantly lower a

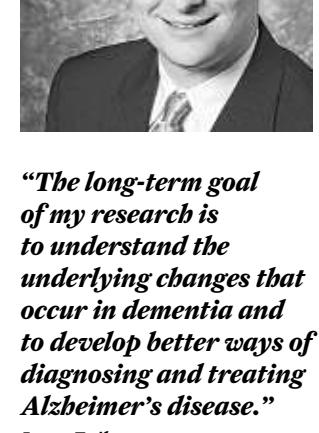
person's risk of Alzheimer's. "A huge number of studies have reported that just over 20 minutes of walking or other physical exercise provides large benefits for physical and mental health, especially in older adults. Physical activities increase oxygen consumption and keep the blood flowing, and are protective for the brain," he said. "As little as 150 minutes of moderate physical exercise per week appears to be sufficient to reduce the risk for Alzheimer's disease in adults by up to 40 percent."

What else can we do to help our brains?

"In addition to staying physically active, there is emerging evidence that making some simple lifestyle choices, like adopting a brain-healthy diet and remaining socially active, can greatly contribute to improved brain health," Eriksen said. "Several studies have shown that adults who adhere to the Mediterranean diet lower their risk for mental decline and Alzheimer's disease substantially."

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