



A New Frontier for Diabetes

by Dorothy Foltz-Gray

In 1998, Kirk Smith was assigned a six-week medical rotation that changed his life.

A third-year medical student at the University of Texas Medical Branch in Galveston, Smith traveled with a colleague to Cameron Park, Texas (pop. 5,961), a Mexican-American border town identified as the poorest of its size in the nation by the U.S. Census Bureau. Open ditches served for sewage disposal, running water was a luxury, and residents did without garbage pickup or emergency services.

As Smith traveled unlit dirt roads dotted with feral dogs, he realized why his type 2 diabetes patients didn't follow his instructions. "I had been sitting in an air-conditioned office telling people to exercise," says Smith, 52. "But there were no

street lights, the temperature was 100 degrees, and outside, people would be bitten by dogs."

Following his residency, Smith, who holds both a medical degree and a doctorate in medical humanities, returned to Galveston determined to address the ills he had seen. With two other medical students and the help of others active in Cameron Park, Smith

founded Frontera de Salud, a service organization that offers free health care to the working poor in southern Texas. Every six weeks, he drove medical and nursing students five hours to the border town to screen patients for health conditions, including type 2 diabetes, a high-risk disease among Hispanics.

"When you take their genetic disposition for diabetes and expose them to an American lifestyle"—fast food and little exercise—"you have obesity and from that diabetes," lifestyle fast food and little exercise you have obesity and from that diabetes, Smith says.

In fact, Smith found that 12 percent of the Cameron Park population had type 2 diabetes or were prediabetic—twice the number nationwide—and most were not aware of their condition.

The fledging program faced hurdles. Many residents distrusted health care workers. So Smith and his volunteers began to train community women, sending them to classes on diabetes and showing them how to follow up with home visits, determine who wasn't taking medications or checking their blood sugar, and identify who might be suffering from depression, a common companion to diabetes. The women fanned out into the community, dispelling common diabetes myths that drinking your urine cures diabetes and that insulin causes complications such as foot sores.

By 2002, Frontera's efforts shifted to prevention. "The answer was not physician-centered, clinic-based high-cost treatment," Smith says. With assistance from other organizations, Smith pushed for sidewalks, a half-mile lighted walking trail and a law forbidding loose dogs. "That's one of our proudest accomplishments," he says. "It's now safe to walk."

He and his volunteers began teaching patients about diet and healthy portion sizes. Instead of lecturing resistant adult diabetics, they focused on their patients' children, a topic to which parents could warm.

By 2005, Cameron Park had a full-time community nurse, five full-time community health workers, a clinic, three walking trails and a soccer field. The town had a community center that presented exercise, nutrition and cooking classes, which health workers also offered in residents' homes.

"It's a community project," says Lupita Sanchez, 39, one of Frontera's health care workers who grew up in Cameron Park. "We work to identify people with diabetes,

and then we visit them or they come to us. Some may not be willing to change their nutrition, but they are willing to exercise. So we invite them to exercise classes from 8 to 9 each morning. That's how we get them to make changes slowly."

Smith's program is relatively inexpensive, reaching 10,000 patients (the outreach program serves two other neighborhoods) for \$120,000 a year-the cost of two foot amputations, which is a possible outcome for people with untreated diabetes. The economics impressed the Texas Legislature, which awarded \$6 million to Stark Diabetes Center in Galveston, where Smith is outreach director, to implement the Frontera program statewide.

For Smith and his colleagues, the answer to type 2 diabetes lies not in a doctor's office but in the community. "We educate in people's homes. We talk about what they can do," he says. "We have a community garden so that people can learn to start their own. We say 'Here's the activity program, and you can go out with a group tomorrow morning for a walk.' That's our model now."

Protect Yourself

Here are Smith's top three tips for preventing diabetes:

- Find out if diabetes runs in your family. If so, get tested. Ask your local health department about free diabetes screenings.

- Take small steps to fitness. Being physically fit helps your body use blood sugar more efficiently, which also improves your body's insulin use. But you don't have to hop right on a treadmill. Simply begin taking the stairs or walking instead of driving. Build to 30 minutes of exercise daily.

- Eat consciously. Skip chips and sugary sodas. And learn what healthy serving sizes look like: One ounce of cheese looks like four dice; a cup of fruit is about the size of a baseball; a serving of fish or meat is the size of a deck of cards.