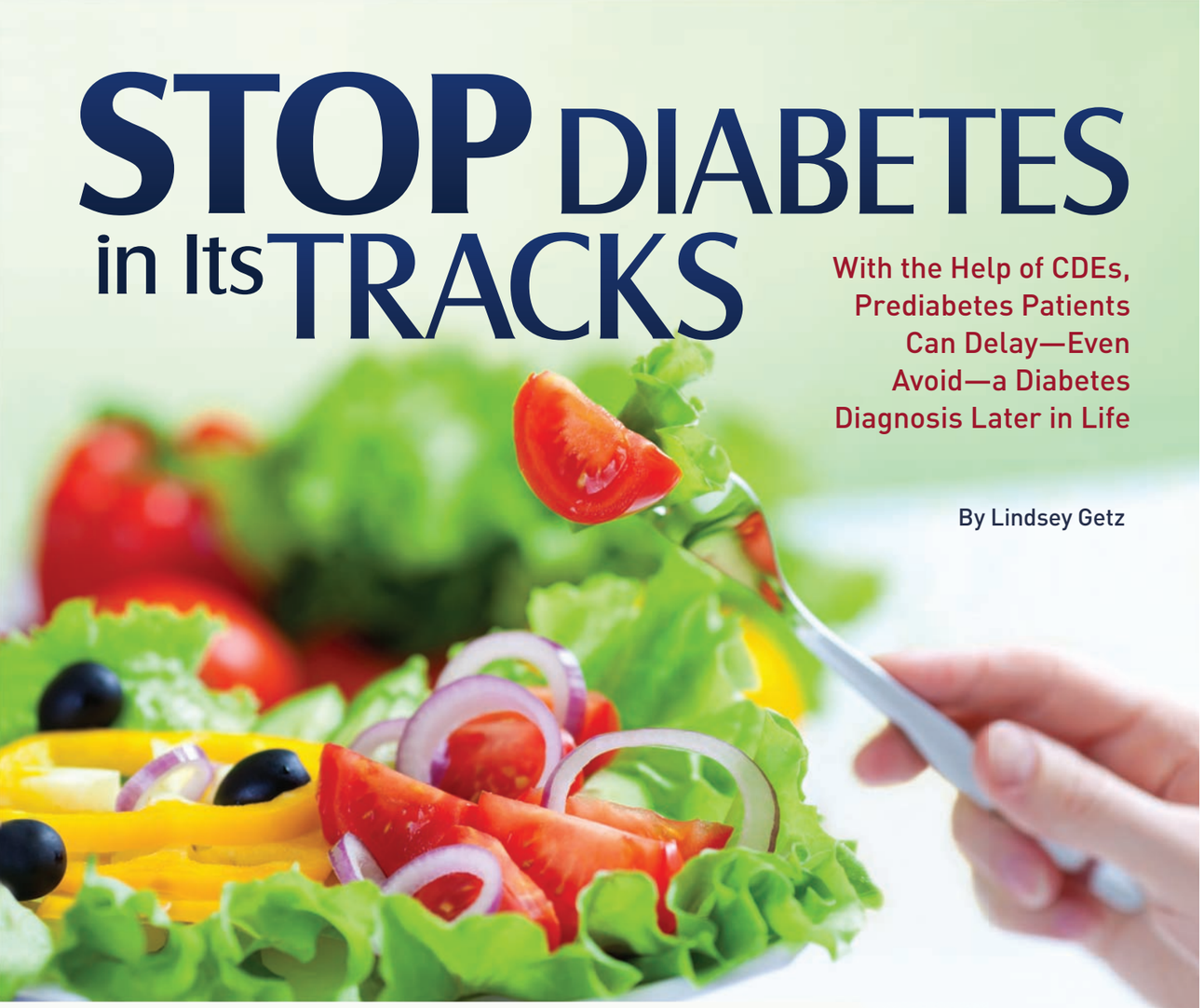
# STOP DIABETES in Its TRACKS

## With the Help of CDEs, Prediabetes Patients Can Delay—Even Avoid—a Diabetes Diagnosis Later in Life

By Lindsey Getz



Following her yearly physical, Diane's primary physician told her that her blood glucose levels were slightly elevated. "You don't have diabetes," he assured, "but you're in that danger zone called prediabetes, which raises your chances of developing the disease down the road if you don't make some immediate dietary and lifestyle changes."

Hearing such words can be sobering to patients. But like diabetes, prediabetes has become a diagnosis that's now considered prevalent. According to the American Association of Diabetes Educators (AADE), there are approximately 79 million people living with prediabetes. That's alarming considering the condition places these individuals at an increased risk of developing diabetes later in life. Over a three- to five-year period, people with prediabetes have a five- to 15-fold higher risk of developing type 2 diabetes than those with normal blood glucose levels—not to mention it puts them at greater risk for coronary artery disease and strokes.

While some patients may experience similar diabetes symptoms during the prediabetes phase, others have no adverse health effects at all. In fact, most people who have prediabetes don't know it. This is cause for deep concern since the prediabetes phase gives the patient time to reverse unhealthful lifestyle habits and delay the onset of the full-blown disease. It also gives certified diabetes educators (CDEs) the opportunity to play a vital role in the lives of these patients.

### Red Flag

Prediabetes occurs when blood glucose levels are higher than normal (fasting between 100 and 125 mg/dL) but not high enough to be classified as diabetes (above 126 mg/dL). Individuals with impaired glucose tolerance (2 hour value of 140 to 199 mg/dL) or a hemoglobin A1c level between 5.7% and 6.4% also are classified as having prediabetes. "The same individuals who are at risk for diabetes also are at risk for prediabetes," says Constance Brown-Riggs, MSEd, RD, CDE, CDN, a national spokesperson for the American Dietetic Association (ADA).

Since the disease hasn't fully progressed, prediabetes is a red flag for patients to make critical lifestyle changes—an area where the diabetes educator can come into play. "One of my patients described a prediabetes diagnosis as a 'second chance at life,'" Brown-Riggs recalls.

The exact timeline of progression from prediabetes to type 2 diabetes is still unclear, says Toby Smithson, RD, LDN, CDE, a spokesperson for the ADA and founder of DiabetesEveryDay.com. But the Diabetes Prevention Program (DPP) has demonstrated that type 2 diabetes can be prevented or delayed through intensive lifestyle changes.

"All of the people in this study had prediabetes and were overweight," Smithson explains. "The group was divided into three interventions: intensive lifestyle changes, standard diet with metformin, and standard diet with placebo. The intensive lifestyle group had better results with lifestyle changes more so than with the addition of diabetes medication, decreasing their risk of type 2 diabetes by 58%. The medication group decreased their risk by 31%."

The results of the Diabetes Prevention Program Outcome Study (DPPOS), part two of the ongoing DPP, also essentially found that with a little bit of weight loss (about 5% to 7% of body weight) and increased physical activity, diabetes can be delayed or in some cases prevented. After 10 years, there was still a 34% reduction of incidence in developing diabetes in the participants from the intensive lifestyle group, delaying the onset of type 2 diabetes by four years.

"The results of the DPPOS aren't surprising," says Hope Warshaw, MMSc, RD, CDE, BC-ADM, owner of Hope Warshaw Associates, LLC, in Alexandria, Va., and author of ***Diabetes Meal Planning Made Easy***. "They don't support a revolutionary new treatment or a blockbuster drug. Pure and simple, they continue to reinforce the familiar refrain: Make small changes in your lifestyle by eating fewer calories and fat grams and burn more calories through exercise—generally walking. It sounds easy, but it's challenging."

In addition, the challenges of delivering high-quality care and education to patients with diabetes is growing. The AADE maintains three positions on the subject: that the diabetes educator is in a unique position to incorporate prevention into self-management skills and education to his or her patients; that each person with prediabetes needs a personalized education plan; and that diabetes educators are critical to diabetes-related preventative efforts and should use evidence-based approaches.

### CDE Counseling

The first position of the AADE challenges RDs/CDEs with the role of patient education. This isn't a simple feat considering the fact that even the term "prediabetes" is relatively new, and there's some controversy surrounding diagnosis. For example, there are many physicians who still don't use the terminology and may simply tell the patient that his or her blood glucose level is a little high.

"How serious the patient takes it often goes back to what the doctor told them and the patient's interpretation of what they were told," says Marlisa Brown, MS, RD, CDE, CDN, president of Total Wellness, Inc., in Bay Shore, N.Y. "There's even been cases where a physician might have told the patient he was prediabetic when he was actually in the diabetic range. As an RD, we might not always know exactly what took place between the physician and the patient but now, under our care, it's our job to help guide the patient in the right direction."

Kathleen Stanley, CDE, RD, LD, MSEd, BC-ADM, diabetes education program coordinator at Central Baptist Hospital in Lexington, Ky., agrees and adds that patient denial is another barrier to overcome—possibly onset at the time of diagnosis.

"There's not a lot of hardcore clinical information about prediabetes, so you can imagine that what gets conveyed from physician to patient is going to drastically vary," she says. "That may equate to the patient not considering prediabetes—if it's even been called that—as a diagnosis. The doctor might have given them some pat medical advice about eating healthier and exercising more, and that's not really concerning to an individual. They've probably heard that before, so they don't take it any differently this time."

This is where the role of the CDE can be life changing, since adhering to a more healthful lifestyle can delay the onset of type 2 diabetes. Warshaw says RDs/CDEs can recommend their patients start with a few simple goals of eating healthfully and exercising more but that taking on too much at once may overwhelm them and make them more likely to give up.

"Start with easy goals," she emphasizes. "Experience success and let that success breed more success. Take one day at a time and stick to it."

### Individualized Plan

The AADE maintains that part of a successful lifestyle change hinges on recognizing that each patient needs his or her own personalized plan, which may incorporate risk reduction and other prevention-related elements of the AADE7 Self-Care Behaviors. These seven behaviors include healthful eating, being active, monitoring, taking medication, problem solving, reducing risks, and healthful coping.

In terms of healthful eating, CDEs can teach self-management education that would include information about how patients can determine their total daily food intake requirements, monitor their food intake, assess the percentage of daily calories from fat, and set an appropriate calorie goal.

"The healthful food choices are similar to those that a diabetes patient would make," Brown says, who sees as many as 35 to 40 diabetes and prediabetes patients each week. "Switching to small frequent meals so they're eating every two to three hours ensures you're not overtaxing the body. So many patients

## FINDING SUPPORT

The American Association of Diabetes Educators (AADE) urges certified diabetes educators (CDEs) to use evidence-based approaches when dealing with prediabetes. While there hasn't been an overwhelming amount of research and resources are still somewhat limited, that's not to say these efforts aren't rapidly growing. Kathleen Stanley, CDE, RD, LD, MSEd, BC-ADM, diabetes education program coordinator at Central Baptist Hospital in Lexington, Ky., believes that the information available will only continue to build and suggests that CDEs seek out existing resources to support them when dealing with patients. The following are three sources you can tap into now:

### National Diabetes Education Program (NDEP)

The NDEP, a partnership of the National Institutes of Health, the Centers for Disease Control and Prevention, and more than 200 public and private organizations, offers a variety of publications on its website (www.ndep.nih.gov). For instance, the brochure ***It's Not Too Late to Prevent Diabetes*** is a tip sheet to help older adults at risk for type 2 diabetes to move more and eat less. Single copies, up to 25, are free. Each additional package of 25 is $5, and there's a limit of 150 copies. A variety of other printable articles are available on the website as well as specifically targeted brochures for special categories such as teens and children as well as individual minority groups.

### American Diabetes Association (ADA)

Diabetes Pro is the professional section of the ADA website (http://professional.diabetes.org). On it, diabetes educators can access relevant webcasts, journal articles, and other professional resources, including a prediabetes brochure called ***What Is it and What Can I Do?*** Materials on the ADA Alert Day, a one-day "wake-up call" event asking the American public to take the Diabetes Risk Test, also can be found on the site.

### AADE

The AADE7 Diabetes Educational Curriculum, derived from systematic literature reviews, is a useful resource found on the AADE website (www.diabeteseducator.org). The AADE7 tools for professionals include goal sheets, a poster, and the AADE7 System (an Internet-based suite of tools for diabetes educators). Also new is a preview of Milner-Fenwick's patient education DVD called ***Pre-Diabetes: It's Time to Make Changes***, 2nd edition).

assume I'm going to take something away, such as no carbs. That's not what it's about. It's about balancing the amount of carbs with protein and fat. We're trying to make your body work more efficiently, not eliminating entire food groups and making your body work in a whole new way."

In addition to dietary changes, CDEs also should encourage an exercise regimen with the target goal of 150 minutes per week—that recommendation coming from the DPP, which is the model most CDEs follow.

"That equates to 30 minutes a day, five days a week—maybe as simple as going for a daily walk," says Bonnie Giller, MS, RD, CDN, CDE, owner of New York-based BRG Dietetics & Nutrition, PC. "Whatever it may be—hiking, biking, walking—the exercise plan should be one that the patient can stick to because that physical activity component is really important. It will help patients achieve that 5% to 7% weight loss and decrease their risk of prediabetes developing into full-blown diabetes."

Though diet and exercise are discussed the most when it comes to prediabetes, other healthful behaviors also are important. "In addition to weight loss, monitoring food intake, and increased physical activity, other general healthful lifestyle changes such as smoking cessation and stress management are lumped in as part of the recommendations that stem from the DDP," Stanley says.

And while education and coaching approaches should target the uniqueness of each individual, according to the AADE, diabetes self-management and prevention programs still can be effective when provided in a group setting, thereby improving cost-effectiveness and reach. Involving peers is another opportunity to create accountability and help ensure patients stick with a regimen.

For instance, the YMCA recently launched the YMCA's Diabetes Prevention Program (YDPP) as part of the Centers for Disease Control and Prevention (CDC)-led National Diabetes Prevention Program. The program features 16 one-hour classroom sessions with a trained lifestyle coach. Following the classroom sessions, participants meet monthly for added support and to monitor progress. Goals include body weight reduction by 7% and participation in 150 minutes of physical activity per week.

"This is clearly an area of interest, and there's a lot of research going on with community health workers and peer support," Warshaw says. "This is a potential opportunity for dietitians to become coaches. I think one of the takeaway messages here is that there are job opportunities for RDs/CDEs who have a particular skill set to offer."

### Taking Action

Though there's a long road ahead when it comes to research and education, the role that RDs/CDEs are already playing certainly has been crucial in advancing the understanding of prediabetes. Brown-Riggs says she views prediabetes as a window of opportunity in which diabetes educators can help their patients prevent or delay the onset of diabetes.

Smithson agrees: "The sooner patients are screened for diabetes and start lifestyle management, the better their chances of delaying complications from diabetes. Patients need to know both prediabetes and diabetes are manageable. It's a complicated disease that involves genetic factors. Some people are able to return their blood glucose levels to normal, but some are not. Patients must realize if they're diagnosed with prediabetes that this is a red flag telling them to start eating a healthful balanced diet and exercising a minimum of five days per week for 30 minutes, as shown in the DPPOS."

In addition, Brown-Riggs sees this as an opportunity for RDs to advocate for their patients. "Often healthcare providers will observe elevated glucose levels and not inform the patient," she says. "While we as RDs can't make medical diagnoses, we certainly can inform our patients. I provide my patients with the facts—what a normal glucose level is, what prediabetes levels are, and what diabetes levels are—and arm them with questions they can pose to their healthcare provider."

While RDs/CDEs never want to step on the toes of a physician, there are some simple ways to intervene without harming the relationship.

"You never want to challenge physicians with a diagnosis and lose their trust because that line of communication between physician and dietitian is important," Stanley says. "But one way a dietitian might be able to clarify a prediabetes diagnosis—even if the physician isn't using that terminology—is to provide the physician with a preprinted referral sheet in which they check a particular box based on the patient's lab work. All the physician has to do is check the box labeled 'prediabetes' if the patient's glucose level qualifies. The dietitian also may want to provide their physicians with a pamphlet or information card they can give the patient with facts about what prediabetes is and referral information to your practice. This helps facilitate communication and in the process educates both the physician and the patient that this is something to take seriously. It helps eliminate patient denial and makes things less of a struggle when they do come through your door."

There's seemingly no better time than now for RDs/CDEs to take the initiative to start closing the gap on the massive number of prediabetes cases that go undiagnosed. This means reaching those patients that haven't been to their healthcare provider or received any testing.

"I'd really encourage my fellow dietitians to take an active role in educating the public as well as fellow healthcare professionals," Stanley urges. "Consider offering a prediabetes class in your local area so you can be part of helping to get this epidemic under control."

**— Lindsey Getz is a freelance writer based in Royersford, Pa.**