

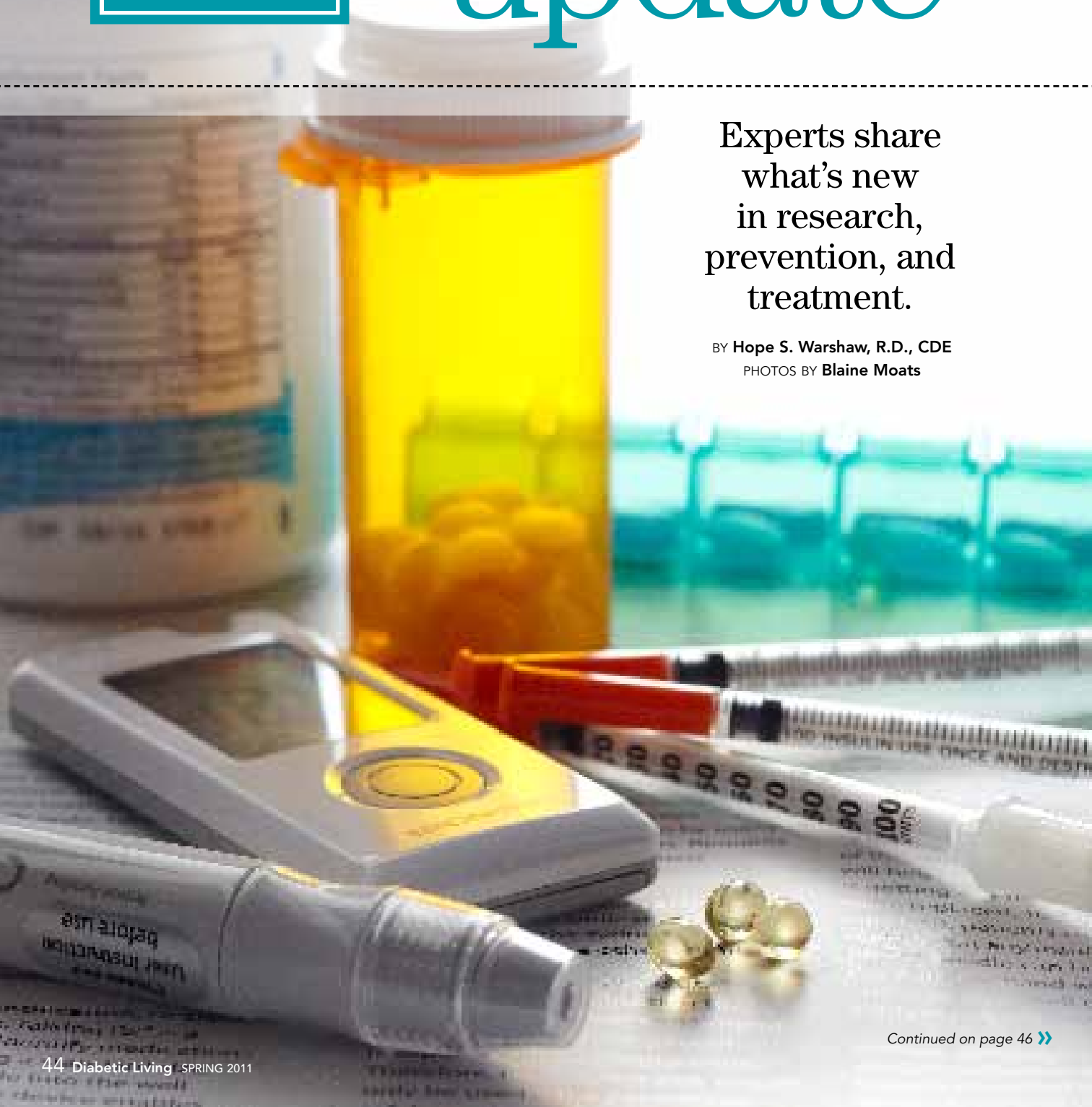
diabetic
LIVING®
SPECIAL
REPORT

diabetes update

Experts share
what's new
in research,
prevention, and
treatment.

BY Hope S. Warshaw, R.D., CDE

PHOTOS BY Blaine Moats



Continued on page 46 >>



TAKE ACTION

Learn your personal blood glucose, blood pressure, and blood lipid targets, and work with your health care provider to achieve them. Visit DiabeticLivingOnline.com/doctor-checkup to download a checklist.



TAKE ACTION

Get involved with and spread the word about ongoing type 1 diabetes research studies. Visit clinicaltrials.gov, diabetestrialnet.org, and trials.jdrf.org for more information.

Type 2: Treat Today, Don't Delay

The evidence is piling up in favor of fast action: "We now have amazing data pointing out that putting in the effort in the early years to get and keep your blood glucose, blood pressure, and blood lipids in healthy ranges pays dividends for decades, even if your control waxes and wanes over the years," says Richard Bergenstal, M.D., executive director of the International Diabetes Center at Park Nicollet in Minneapolis and immediate past president of Medicine and Science for the American Diabetes Association (ADA).

At diagnosis, people with type 2 diabetes (PWDs type 2) have, at

most, half of their insulin-making pancreatic beta cells left. Immediate treatment can preserve some remaining beta cells.

At diagnosis is also the time to treat insulin resistance. While there's debate about which blood glucose-lowering medicine to start (metformin is most common), there's no debate that type 2 calls for an insulin-sensitizing medicine. Bergenstal also emphasizes the value of losing a modest 10 to 20 pounds as soon as possible to make medicines work better, reduce the number of meds needed, and delay the need for higher doses as diabetes progresses.

Type 1: Preserving Insulin-Making Cells

Researchers have been chipping away at type 1 diabetes. They've learned plenty about this autoimmune disease, but a true cure remains elusive. Several drugs designed for use soon after diagnosis are being studied in humans. These medications slow autoimmune destruction of insulin-making beta cells and preserve insulin output, at least temporarily.

Among the drugs in development are Diamyd Medical's GAD vaccine (GAD is the human protein found in beta cells), and MacroGenics' Rituximab and Tolerx's Otelixizumab, which act to fight antibodies that destroy insulin-producing beta cells.

The U.S. government, through the National Institutes of Health's Diabetes TrialNet, assesses type 1 treatments. "TrialNet offers many opportunities for families with type 1 to participate in research of personal benefit while partnering

with researchers to find ways to interdict the disease process and ultimately find a cure," says Jay S. Skyler, M.D., Type 1 Diabetes TrialNet study chair and professor of medicine at the University of Miami and the Diabetes Research Institute in Florida.

TrialNet also studies the natural history of type 1. Skyler says close relatives of people with type 1 diabetes should be screened to assess their risk of developing the disease. Those at high risk (testing positive for type 1 antibodies) are offered additional testing and are closely followed.

"When I talk to parents of newly diagnosed kids, I'm more hopeful than ever now," says Elna Narula, R.N., CDE, a research nurse with Diamyd Medical from Gaithersburg, Maryland, whose teenage daughter has type 1 diabetes. "An informed parent is a child's best ally."

Health Care Reform

Provisions in the Affordable Care Act 2010 will go into effect through 2014. "This massive legislation will make a difference for PWDs," says Shereen Arent, J.D., executive vice president of Government Affairs and Advocacy for the ADA.

Having diabetes will no longer be a lawful reason to deny health care coverage. Before the reform efforts, it was legal for insurance companies to charge PWDs high premiums or refuse to cover them, Arent says. By 2014, PWDs can no longer be denied insurance or forced to pay more for coverage simply because they have diabetes. Nor can insurers drop PWDs from coverage due to diabetes or its complications.

Janel Wright, J.D., chair of the ADA National Advocacy

Committee, says PWDs will have more options for insurance through state high-risk health insurance pools or exchanges until 2014, when the pools will no longer be necessary. An essential-benefits package will include important diabetes-care provisions.

For Medicare beneficiaries, a new free (no copay or deductible) wellness visit to identify health risks and work on a personal action plan to prevent diabetes complications has been added. And beginning this year, the Medicare drug-coverage gap, or "doughnut hole," will begin to close. Other parts of the legislation aim to slow the type 2 epidemic and put more emphasis on training and helping primary care providers treat PWDs cost-efficiently.

Virtual Connections

Online communities are a convenient way to find support from other PWDs. "Millions of people worldwide are living with similar challenges. They're sharing tricks of the trade, treatments that work, recipes that satisfy, and ways to work through the emotional side of diabetes," says David Edelman, who cofounded Diabetes Daily (diabetesdaily.com) with his wife, Elizabeth, PWD type 1.

It's easy to get started. "Check out a few of the well-respected and popular sites. Get a feel for which ones speak to you by reading blogs, subscribing to their e-newsletters, and tracking the back-and-forth dialog," says Manny Hernandez, PWD LADA, founder of TuDiabetes (tudiabetes.org) and president of the Diabetes Hands Foundation. Many people

prefer to quietly read and familiarize themselves with a community before taking the plunge and sharing their own thoughts, which is just fine.

Richard Swain, PWD type 2, from Salem, New Hampshire, has found his online home at Diabetic Living's Facebook page (facebook.com/DiabeticLiving). "Diabetes can leave you feeling alone and without anyone who really knows how you feel," he says. Connecting online allows Swain to share insights and knowledge in a congenial environment. "I feel virtually embraced—like I'm standing around the water cooler at work," he says.

TAKE ACTION

To influence who gets elected to represent you and what they do once in office, let your voice be heard. Tell them the many ways diabetes impacts your life. Visit diabetes.org/takeaction to get involved.

TAKE ACTION

Visit a few of the many diabetes online communities: diabetesdaily.com, diabetesmine.com, diabetessisters.org, diabeticconnect.com, juvenation.org, tudiabetes.org





TAKE ACTION

Have a medication checkup at least twice a year.

Your daily blood glucose checks along with your A1C results will let you and your provider know when you need to add, up, and/or change blood glucose-lowering medicines.



TAKE ACTION

Record and analyze your daily blood glucose results.

Review with your provider how often and when you should check your blood glucose level, and ask about the best response to any off-target results.

New Blood Glucose-Lowering Meds

The arsenal of blood glucose-lowering medications is expanding. “Drug discovery is at an all-time high,” says Laura Shane-McWhorter, Ph.D., CDE, professor of pharmacotherapy at the University of Utah College of Pharmacy in Salt Lake City.

“A shift has occurred from treating the resulting high blood glucose to targeting one or more of the six organs involved in type 2 diabetes: the pancreas, liver, gastrointestinal tract, muscle, adipose tissue (fat), and brain,” says Susan Cornell, Pharm.D, CDE, an assistant

professor at Northwestern University's Chicago College of Pharmacy in Downers Grove, Illinois.

As type 2 diabetes progresses, the body's insulin supply dwindles, requiring an ever-evolving combination of medicines to achieve glucose control, Shane-McWhorter says. The good news: Just as diabetes progresses, so do the development and approval of new medicines.



Better Monitoring Devices

Today's glucose meters are sleeker, speedier, and smaller. But can the latest, greatest technology improve your control? It depends on the knowledge level, desire, and fortitude of you and your health care provider.

Consider continuous glucose monitoring (CGM), which provides more than 250 glucose readings a day and software that can chart the peaks and valleys. It's still primarily a tool for PWDs type 1, Bergenstal says, but intermittent use can be beneficial for PWDs type 2. He suggests borrowing a continuous glucose monitor from your provider for 72 hours to detect and problem

areas. The reports will show patterns after eating and at other times of day, which can steer your and your provider toward more effective therapies.

Meter companies have realized that PWDs need better tools to interpret blood glucose data for both taking immediate actions and plugging away at long-term control. The Jazz meter from AgaMatrix (pending FDA approval) will upload data to Apple devices such as the iPhone, for example. Integrated algorithms offer rhyme and reason to your numbers with personalized messages to help you improve control. 