

# Eliminate the Negatives About Glucose Monitoring

BY JOYCE FRIEDEN  
Publication Editor

WASHINGTON — “It’s almost as if [health care providers] have a secret strategy for discouraging people” from monitoring their blood glucose levels, according to William Polonsky, Ph.D.

To help his colleagues avoid these negative behaviors, Dr. Polonsky, a certified diabetes educator and founder of San Diego’s Behavioral Diabetes Institute, listed six surefire ways to dissuade diabetes patients from regularly testing their blood sugar:

► **Be vague about your testing recommendations.** Just tell patients to “check every day or so.”

► **Ignore blood glucose logs.** If patients bring in the results of their blood glucose tests, don’t look at the results or comment on them.

► **Don’t explain anything.** Don’t let patients know how to understand and use their test results.

► **Hide your own discomfort.** If you don’t know what the glucose test results mean, just say the results are “very complex.”

► **Be controlling.** Explain how patients can use their results to limit and control their lives. Be punitive if you can.

► **Use the “red circle” approach.** If you do look at their test results, look at them quickly and draw a red circle around the highest number you can find; then say, “What happened here?”

“If you practice this with your next 10 patients, I guarantee you that none of them will check their blood sugars any more,” Dr. Polonsky said at the annual



meeting of the American Association of Diabetes Educators.

For those who want to encourage patients to test their glucose regularly, Dr. Polonsky suggested the following strategies:

► **Make it meaningful.** Make sure the blood glucose data answer their questions, such as how exercise affects their blood sugar or why they feel tired at certain times, he said. (See box.)

► **Use the “Noah’s Ark” principle.** The idea is to perform blood glucose tests in “before and after” pairs so that patients can

see how their actions affect their glucose readings. This is probably the most important concept, he said.

► **Look at the patient’s testing results.** “I know we’re all so busy, but I’m pretty sure this

might help,” he said. “I hear so much about my colleagues saying, ‘Just fax me your results,’ and then no one ever gets back to [the patient] or the fax gets misplaced.”

► **Congratulate people on the effort, not the numbers.** “I’m not going to critique [the patient] on what that number is,” said Dr. Polonsky. Instead, “I’m going to say, ‘Hey, you checked your blood sugar. This is great. Thanks.’”

► **Find better ways to help patients understand the information.** “Help people to see patterns, because for many of our patients, it’s not so clear.”

► **Watch for patients who base their self-esteem on their results.** “We need to challenge them. We need to say over and over again, in a really kind way, ‘Wait; there are no good or bad numbers. This is just information, and all of it is valuable.’” Dr. Polonsky’s institute gives patients tiny

stickers that go right under the window of any blood glucose meter that say, “Hey, remember, it’s just a number.”

That doesn’t mean that patients don’t still need to be counseled generally on what to do about too-high or too-low glucose readings, he noted during his session, which was sponsored by Roche Diagnostics, maker of blood glucose monitors. “Instead of using the word ‘bad,’ I use the words ‘safe’ and ‘unsafe,’ as in, ‘This number tells me you’re not in a safe place.’”

Although many providers think that diabetes patients don’t understand how serious their disease is, that’s not actually a problem, said Dr. Polonsky. “Most of our patients understand it’s a serious disease; the problem is many of our patients don’t

believe this is an urgent disease. [They think], ‘I can deal with this later.’ Using the words safe and unsafe is my way of trying to say, ‘You’re not safe right now, so this is urgent.’”

It’s also a way of not sounding condescending, “as opposed to, ‘You’ve been bad again, I see,’” he added.

► **Find better ways to promote action from patients.** “What we should be always practicing saying and asking our patients to think out loud, is, ‘What, if anything, can I do about this?’” Dr. Polonsky said. “We want to help our patients get into that kind of thinking so that the immediate thought is not, ‘I can’t believe I messed up again,’ but [instead], ‘It’s just a piece of information; what can I do about this?’” ■

## Using Data to Answer Patient Questions

Dr. Polonsky discussed several patients for whom he designed “home experiments” using blood glucose monitoring to answer their diabetes questions.

One patient who previously hadn’t been motivated to exercise wanted to know whether exercise affected his blood sugar, so Dr. Polonsky asked him to walk for 30 minutes each day for 1 week, and measure his blood sugar before and after the walk.

The patient’s blood glucose level fell by an average of 34 mg/dL after walking. “But the kicker was, [the patient] showed up in my office with [the log] and said, ‘I’ve discovered something that will shock you,’” Dr. Polonsky explained. “I said, ‘What is it?’ and he said, ‘Look, exercise lowers blood sugar.’”

“I said, ‘We’ve been talking about this for a year! You sat through that diabetes education program twice, re-

member?’ He said, ‘Yeah, but I’m not kidding. I mean, it really works.’”

Because the patient “figured out that exercise was of value, he got excited about it. ... And he wasn’t just interested in exercise, he got interested in blood glucose monitoring because he realized it [helped him] learn something useful,” Dr. Polonsky said.

Another patient was curious about how breakfast affected her blood sugar. Dr. Polonsky asked her to perform a similar 1-week experiment in which she wrote down her blood sugar results right before and 2 hours after breakfast. Her average increase was 34 mg/dL. “I said, ‘Whatever you’re doing, generally speaking, looks like it’s working. Congratulations!’ And for [her], that was very exciting. Patients desperately need a sense of positive treatment efficacy. ... It helps them become activated, engaged, and interested in doing more.”

## Evidence Grows for Link Between Periodontitis and Diabetes

BY ROBERT FINN  
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SAN FRANCISCO — Evidence continues to accumulate that periodontal disease is associated with insulin resistance and poor glycemic control, and there are tantalizing suggestions that treating periodontitis may lead to improvements in glycemic control.

That was the message delivered by the speakers at the first joint symposium of the two ADAs—the American Dental Association and the American Diabetes Association—at the annual scientific sessions of the American Diabetes Association.

The speakers agreed that systemic inflammation appears to form the critical link between periodontitis and diabetes, although the chicken-and-egg question has not yet been answered. Diabetes appears to induce periodontal disease or cause it to worsen in some patients, but periodontal disease seems to worsen glycemic control. Periodontal disease also seems to increase the risk of cardiovascular disease and stroke and, when present in pregnant women, to increase the risk of low-birth-weight babies.

Whatever the direction of causation, the clear message was that dentists must ask their patients about diabetes, and physicians must inquire about the oral health of their diabetes patients.

Some of the evidence comes from analyses of the third National Health and Nutrition Examination Survey (NHANES III—data compiled between 1988 and 1994) by George W. Taylor, D.M.D., of the University of Michigan, Ann Arbor. In one analysis that included individuals between the ages of 17 and 90, Dr. Taylor and his colleagues looked at the presence or absence of periodontitis and metabolic syndrome and their relationship to insulin resistance. Among patients with neither disorder, 10% demonstrated insulin resistance. The rate of insulin resistance increased significantly to 36% among patients who had only periodontitis, to 53% among patients who had only metabolic syndrome, and to 48% among patients who had both.

After adjustment for education, age, race/ethnicity, exercise, smoking history, white blood cell count, fibrinogen levels, and levels of C-reactive protein, those with periodontitis alone were 3.7 times as likely to have insulin resistance as were those with neither disorder. The risk increased 7.3-fold among patients with metabolic syndrome alone, and 6.8-fold among patients with both disorders.

The question remained, however, whether treating periodontitis would improve glycemic control. In a systematic review, Dr. Taylor found that 5 of 8 randomized controlled trials and 8 of 12 other studies returned positive answers to that question.

Periodontist Lewis F. Rose of the University of Penn-

sylvania, Philadelphia, was one of 18 physicians, dentists, and other independent experts who convened in Scottsdale, Ariz., in April 2007 to review the strength of the evidence for the associations among periodontitis, diabetes, and cardiovascular disease. The participants in the Scottsdale Project conducted a systematic review of 118 published articles in an attempt to answer eight focused questions.

Despite some uncertainty in the evidence, the panel agreed that it would be appropriate to develop guidelines to assist dental providers in identifying patients who are at risk for diabetes or cardiovascular disease and, conversely, to develop guidelines to assist medical providers in identifying patients who are at risk for periodontal disease.

Dr. Rose noted that one physician on the panel said, “I can’t believe we’re going to be asked to identify another problem in a 15-minute period in our patients.”

Dr. Rose acknowledged the difficulty of squeezing yet another item into limited appointment times. Even so, he said that it would not take much time simply to ask patients with diabetes whether they had seen a dentist within the last year.

Dr. Rose said that he had no conflicts of interest related to his presentation. Dr. Taylor acknowledged serving as a consultant to, and advisory board member for, Colgate-Palmolive, and the company sponsored the joint symposium with an unrestricted educational grant. ■