ADA Guidance No Longer Bars Low-Carb Diets

BY MIRIAM E. TUCKER
Senior Writer

New guidance from the American Diabetes Association gives a green light to the use of low-carbohydrate diets as a weight-control measure for patients with diabetes.

The updated guidelines for 2008 also revise recommendations on prediabetes testing, metformin use, and hypoglycemia prevention, among other topics.

The organization still does not endorse low-carbohydrate diets for weight loss or diabetes management, but it has updated the section of its guidelines that covers nutrition recommendations and interventions for diabetes to remove a specific recommendation against diets that restrict carbohydrates to less than 130 g/day. Now, for weight loss, the ADA says that either low-carbohydrate or low-fat calorie-restricted diets might be effective in the short term (up to 1 year). Previous language that recommended against low-carb diets was also removed from the 2008 update.

For patients who are on low-carbohydrate diets, the ADA now advises monitoring of lipid profiles, renal function, and protein intake (in patients with nephropathy), as well as adjustment of glucose-lowering therapy as needed (Diabetes Care 2008;30[suppl. 1]:S61-78).

'This is not an endorsement of lifelong marked carbohydrate restriction.'

DR. STONE

"The evidence is clear that both low-carbohydrate and low-fat calorie-restricted diets result in similar weight loss at 1 year. We're not endorsing either of these weight-loss plans over any other method of losing weight. It's important for patients to choose a plan that works for them, and that the health care team support their patients' weight loss efforts and provide appropriate monitoring of patients' health," guideline panel member and registered dietician Ann Albright, Ph.D., ADA President of Health Care and Education, said in a statement.

New data cited in the 2008 document are from the A to Z Weight Loss Study, a randomized trial that compared the Atkins, Zone, Ornish, and LEARN (Lifestyle, Exercise, Attitude, Relationships, and Nutrition) diets in a total of 311 overweight premenopausal women. At 1 year, those who followed the Atkins diet showed significantly more weight loss (–4.7 kg) than did the other three diet groups (–1.6 kg with Zone, –2.6 kg with LEARN, and –2.2 kg with Ornish). Secondary outcomes, including lipid profile, percentage of body fat, waist-hip ratio, fasting insulin and glucose levels, and blood pressure, were comparable or better with Atkins versus the other diet groups (JAMA 2007;297:969-77).

However, the ADA reiterated a point it had made in 2007: The recommended daily allowance for digestible carbohydrate is 130 g/day, based on providing adequate glucose as the required fuel for the central nervous system without reliance on glucose production from ingested protein or fat.

"Although brain fuel needs can be met on lower-carbohydrate diets, long-term metabolic effects of very low-carbohydrate diets are unclear, and such diets eliminate foods that are important sources of energy, fiber, vitamins, and minerals that are important in dietary palatability," according to the 11-member writing panel, which was cochaired by Dr. John P. Bantle of the University of Minnesota, Minneapolis, and Judith Wylie-Rosett, Ed.D., a registered dietician, who is with Albert Einstein College of Medicine, New York.

Dr. Neil J. Stone, professor of clinical medicine at Northwestern University, Chicago, is similarly cautious. "The new guideline acknowledges that based on available data, there are choices when it comes to choosing a weight loss regimen for the short term. This is not an endorsement of lifelong marked carbohydrate restriction, and the general public as well as diabetics need to consider reasonable carbohydrate intake for nutritional balance, as [carbohydrates] can provide important sources of energy, fiber, vitamins, and minerals," he said in an interview.

But Dr. Eric C. Westman, director of the Lifestyle Medicine Clinic at Duke University, Durham, N.C., believes that low-carb diets can play an important role in diabetes

management. "Carbohydrates, especially sugar and starch, are the main factors in the diet that raise blood glucose. Carbohydrate-restricted diets are as effective, and sometimes even more effective, than medication therapy for type 2 diabetes.

"[With obesity], carbohydrate-restricted diets have the advantage over medication because most people then lose weight, which then improves insulin resistance. Those with type 2 diabetes who are taking medications should consult a physician trained in using the carbohydrate-restricted approach, to ensure a safe reduction and possibly elimination of medication," he said in an interview.

Other guideline revisions include:

► The addition of new tables that list screening recommendations and diagnostic cutpoints for gestational diabetes, summarize interventions and results of diabetes prevention trials, and summarize evidence for statin therapy in diabetics.

► A more explicit recommendation to consider testing for prediabetes in asymptomatic patients of any age who are overweight and have additional risk factors for diabetes.

► Metformin, in addition to lifestyle counseling, as an option in those at high risk and who are obese and aged under 60 years.

► Continuous glucose monitoring might be a supplemental tool to self-monitoring of blood glucose for selected patients with type 1 diabetes, especially those with hypoglycemic unawareness.

► More information in the hypoglycemia section about prevention and hypoglycemia unawareness, with the recommendation that patients who have hypoglycemic unawareness or episodes of severe hypoglycemia raise their glycemic targets to strictly avoid hypoglycemia for at least several weeks, with the aim of partially reversing the unawareness and reducing the risk of further episodes.

► The reduction of the number of treatment recommendations for hypertension and blood pressure control to emphasize use of ACE inhibitors or angiotensin receptor blockers.

► Fewer recommendations in the dyslipidemia/lipid management section to emphasize the use of statins for most patients, along with new language stating that if patients don't reach specified targets on maximal tolerated statin therapy, an LDL cholesterol reduction of about 40% from baseline is an alternative goal. Triglyceride levels of less than 150 mg/dL and HDL cholesterol levels greater than 40 mg/dL in men and more than 50 mg/dL in women are desirable, though "cholesterol-targeted statin therapy remains the preferred strategy." ■