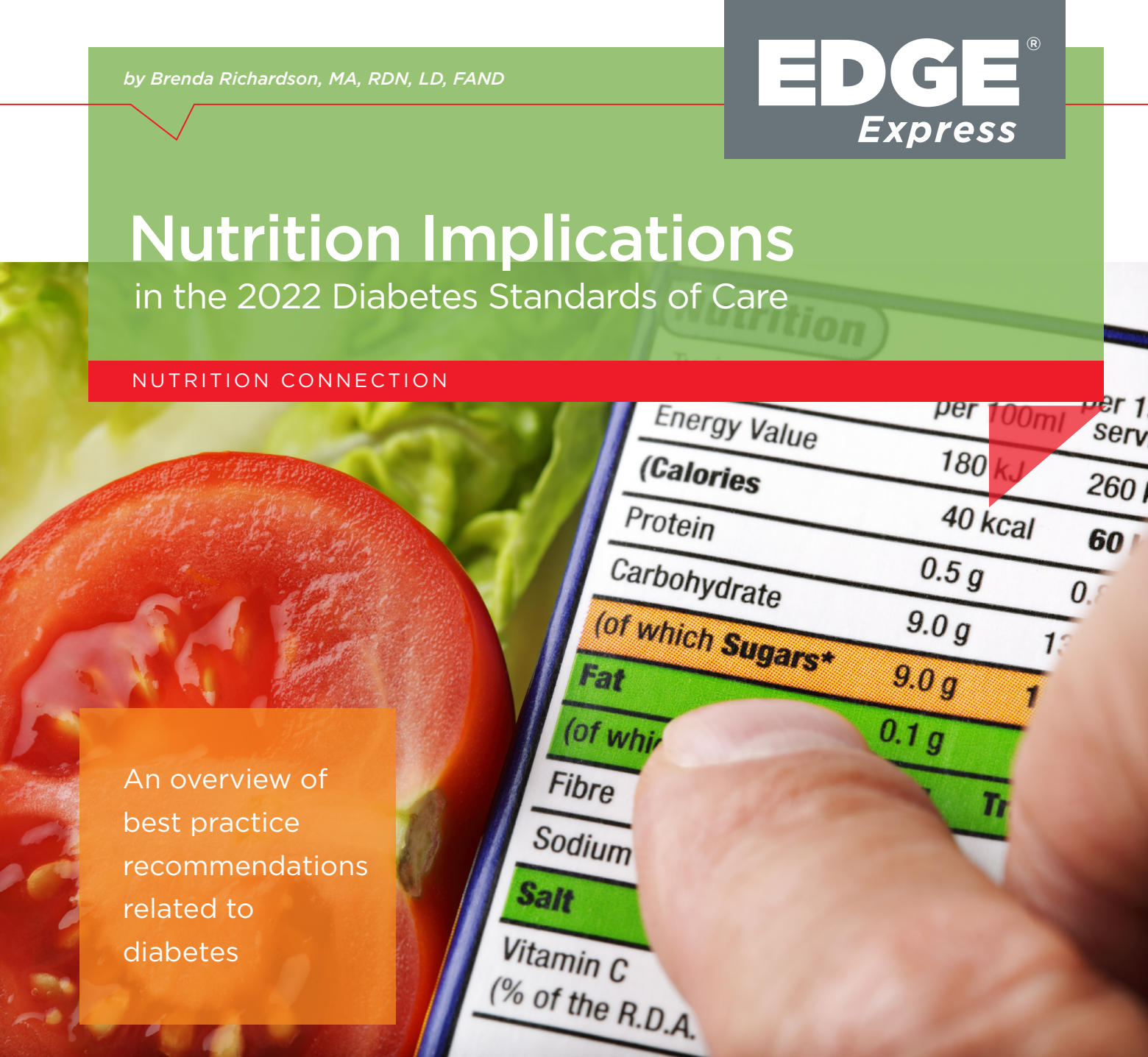


Nutrition Implications

in the 2022 Diabetes Standards of Care

NUTRITION CONNECTION



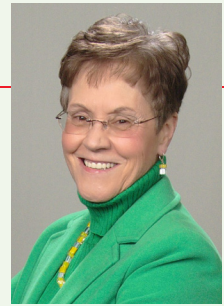
An overview of
best practice
recommendations
related to
diabetes

In today's challenging world of providing health care, it's difficult to balance management of daily operations while also keeping current with "best practice" standards of care. This article provides an overview of best practice recommendations related to diabetes—a complex, chronic disease which affects how a person's body turns food into energy.

With diabetes, the body either doesn't make enough insulin or can't use it as well as it should. Diabetes self-management education and support are critical to preventing acute complications, reducing the risk of long-term consequences, and supporting quality of care and life.

The field of diabetes care continues to change rapidly with new research, emerging technology, and better treatments that can improve the health and well-being of people with the disease. Since 1989, the American Diabetes Association (ADA) "Standards of Medical Care in Diabetes," referred to as the Standards of Care, is updated and published annually to provide clinicians, researchers, and others with the components of diabetes care, general treatment goals, and tools to evaluate quality of care. The recommendations contained therein are not intended to exclude clinical judgment, but should be applied in the context of excellent clinical care, with consideration for individual preferences, goals, and values.

Continued on page 2



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Continued from page 1

The ADA Standards of Care includes topics of screening, diagnostic, and therapeutic actions for children, adolescents, and older adults. These recommendations are known or believed to favorably impact health outcomes, and many of these interventions are cost-effective.

DIABETES STATISTICS AND MANAGEMENT

Diabetes continues to be prevalent in the United States with 88 million people or 1 out of 3 individuals having prediabetes. Many are unaware of the diagnosis (84 percent), and nearly 50 percent of those over age 65 have prediabetes. By 2030, it's predicted there will be more than 72 million adults over 65.

A1C is a common blood test used to diagnose diabetes and manage blood sugar levels. The A1C test is also called the glycated hemoglobin, glycosylated hemoglobin, hemoglobin A1C, or HbA1c test. An A1C test result reflects a person's average blood sugar level for the past two to three months. The higher the A1C level, the poorer the blood sugar control and the greater the risk of diabetes complications.

When we look at how well diabetes has been managed in recent years, the proportion of patients with diabetes who achieve recommended

A1C, blood pressure, and LDL cholesterol levels has fluctuated. (LDL stands for low-density lipoproteins, and is often called the “bad” cholesterol, because a high level leads to cholesterol buildup in the arteries.)

In addition to the impact diabetes has on the daily lives of those who have it, the disease poses a significant financial burden to individuals and society. It's estimated that the annual cost of diagnosed diabetes in the U.S. in 2017 was \$327 billion, including \$237 billion in indirect medical costs and \$90 billion in reduced productivity. After adjusting for inflation, the economic costs of diabetes rose by 26 percent from 2012 to 2017. This is related to the increased prevalence of diabetes and the higher cost per person with diabetes.

NUTRITION AND STANDARDS OF CARE IN DIABETES

The ADA's 2022 Standards of Medical Care in Diabetes contains more than 200 pages and includes 17 sections on improving care, screening, diagnosis, prevention/delay, behavioral change, technology, obesity/weight management, pharmacology, cardiovascular and chronic kidney disease, and considerations for the older adult. Each topic includes in-depth information

on current research that was reviewed and used in making the recommendations. Nutrition management and considerations are provided throughout the document.

While all recommendations in the Standards of Care are critical to comprehensive care, ADA recommendations are assigned ratings of A, B, or C, depending on the quality of the evidence supporting the recommendation.

Recommendations with an A level of evidence are based on large well-designed clinical trials or well-done meta-analyses. Generally, these recommendations have the best chance of improving outcomes when applied to the population for which they are appropriate. Recommendations with lower levels of evidence may be equally important, but are not as well supported.

Expert opinion E is a separate category for recommendations in which there is no evidence from clinical trials, or there is conflicting evidence.

Some key recommendations from Section 5 for Facilitating Behavior Change and Well-being to Improve Health Outcomes are included with this article.

Continued on page 4

The American Diabetes Association (ADA) Standards of Medical Care in Diabetes—2022 can be used by the healthcare team as current “best practice” guidelines for diabetes care.

MEDICAL NUTRITION THERAPY

TOPICS AND RECOMMENDATIONS

Effectiveness of nutrition therapy

- An individualized medical nutrition therapy program as needed to achieve treatment goals, provided by a registered dietitian nutritionist (RD/RDN), preferably one who has comprehensive knowledge and experience in diabetes care, is recommended for all people with type 1 or type 2 diabetes, prediabetes, and gestational diabetes mellitus.

Eating patterns and macronutrient distribution

- There is no ideal macronutrient pattern for people with diabetes; meal plans should be individualized while keeping total calorie and metabolic goals in mind.
- A variety of eating patterns can be considered for the management of type 2 diabetes and to prevent diabetes in individuals with prediabetes.
- Reducing overall carbohydrate intake for individuals with diabetes has demonstrated the most evidence for improving glycemia and may be applied in a variety of eating patterns that meet individual needs and preferences.

Carbohydrates

- Carbohydrate intake should emphasize nutrient-dense carbohydrate sources that are high in fiber (at least 14 g fiber per 1,000 kcal) with minimal processing. Eating plans should emphasize nonstarchy vegetables, fruits, and whole grains, as well as dairy products, with minimal added sugars.

Protein

- In individuals with type 2 diabetes, ingested protein appears to increase insulin response without increasing plasma glucose concentrations. Therefore, carbohydrate sources high in protein should be avoided when trying to treat or prevent hypoglycemia.

Dietary fat

- An eating plan emphasizing elements of a Mediterranean-style eating pattern rich in monounsaturated and polyunsaturated fats may be considered to improve glucose metabolism and lower cardiovascular disease risk.
- Eating foods rich in long-chain n-3 fatty acids, such as fatty fish, nuts and seeds, is recommended to prevent or treat cardiovascular disease.

Nonnutritive sweeteners

- The use of nonnutritive sweeteners as a replacement for sugar-sweetened products may reduce overall calorie and carbohydrate intake as long as there is not a compensatory increase of energy intake from other sources. Overall, people are encouraged to decrease both sweetened and nonnutritive-sweetened beverages, with an emphasis on water intake.

*Source: ADA Standards of Medical Care in Diabetes—2022.
Many additional MNT topics and recommendations can be found in the full Standards of Care.*



NUTRITION THERAPY GOALS

The overall goals of nutrition therapy for adults with diabetes are:

- To promote and support healthful eating patterns, emphasizing a variety of nutrient-dense foods in appropriate portion sizes, to improve overall health and:
 - achieve and maintain body weight goals
 - attain individualized glycemic, blood pressure, and lipid goals
 - delay or prevent the complications of diabetes
- To address individual nutrition needs based on personal and cultural preferences, health literacy and numeracy, access to healthful foods, willingness, and ability to make behavioral changes, and existing barriers to change
- To maintain the pleasure of eating by providing nonjudgmental messages about food choices while limiting food choices only when indicated by scientific evidence
- To provide an individual with diabetes the practical tools for developing healthy eating patterns rather than focusing on individual macronutrients, micronutrients, or single foods

WHAT THESE STANDARDS MEAN TO THE CDM, CFPP

The Certifying Board for Dietary Managers (CBDM) outlines the Scope of Practice for a Certified Dietary Manager, Certified Food Protection Professional and states that the CDM, CFPP credential indicates that an individual has the education and experience to competently perform the responsibilities of a foodservice manager in a non-commercial setting.

CDM, CFPPs work together with Registered Dietitian Nutritionists (RDNs) to provide quality nutritional care for clients in various settings. The CDM, CFPP Scope of Practice includes competencies and associated tasks that CDM, CFPPs are qualified to perform.

For a CDM, CFPP, implementing the ADA's Standards of Medical Care in Diabetes as "best practice" will involve incorporating tasks such as:

- Review nutrition screening data and calculate nutrient intake
- Interview and identify client-specific nutritional needs/problems
- Identify food customs and nutrition preferences based on race, culture, religion, and food intolerances
- Modify diet plans as needed following standards of nutrition care/evidence-based guidelines

- Implement and include in the nutrition care plan prescribed diet orders, special nourishments, supplemental feedings
- Document in the medical record
- Review intake records, conduct visual meal rounds, and document food intake
- Participate in care conferences and review effectiveness of nutrition care
- Utilize evidence-based educational materials to teach clients and staff about basic diet information
- Utilize approved diet manuals to support menu development and modifications to honor client cultural preferences/intolerances
- Ensure accurate preparation and serving of therapeutic diets and nutritional supplements
- Comply with federal safety and sanitation regulations and guidelines

CONCLUSION

Today's challenging world of providing health care requires successfully balancing daily operations while also keeping current with "best practice" standards of care.

The ADA's Standards of Medical Care in Diabetes—2022 is an authoritative source that can be used by the healthcare team as current "best practice" guidelines for diabetes care. The 2022 Standards of Care with all 17 sections can be viewed and downloaded from https://diabetesjournals.org/care/issue/45/Supplement_1

It's important to remember that nutrition is a critical component of effective prevention and management of diabetes. The CDM, CFPP plays a vital role in collaborating with the RDN and other members of the healthcare team to provide optimal nutrition care and services. **E**

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CE Questions: Nutrition Connection



This Level II article assumes that the reader has a thorough knowledge of the topic. The desired outcome is to facilitate application of knowledge into practice by drawing connections among ideas and using information in new situations.

Reading *Nutrition Implications in the 2022 Diabetes Standards of Care* and successfully completing these questions online has been approved for 1 hour of continuing education for CDM, CFPPs. CE credit is available ONLINE ONLY. To earn 1 GEN CE hour, access the online CE quiz in the ANFP Marketplace. Visit **www.**

ANFPonline.org/market and select “**Edge CE Articles**” within the Publications Section. If you don’t see your article title on the first page, then search the title, “*Nutrition Implications in the 2022 Diabetes Standards of Care.*” Once on the article title page, purchase the article and complete the CE quiz.

1. In the United States, 1 out of ____ individuals has prediabetes.
 - A. 3
 - B. 5
 - C. 7
2. In the United States, the estimated cost of diabetes in 2017 was:
 - A. \$277 billion
 - B. \$307 billion
 - C. \$327 billion
3. There is no ideal macronutrient pattern for people with diabetes; meal plans should be ____ while keeping total calorie and metabolic goals in mind.
 - A. Eliminated
 - B. Fortified
 - C. Individualized
4. Carbohydrate intake should emphasize nutrient-dense sources that are high in fiber, at least ____ grams of fiber per 1,000 Kcal and minimally processed.
 - A. 10
 - B. 14
 - C. 18
5. An eating plan emphasizing elements of a ____ eating pattern may be considered to improve glucose metabolism and lower cardiovascular disease risk.
 - A. Mediterranean-style
 - B. Low fat
 - C. Low protein
6. One goal of nutrition therapy for adults with diabetes is to maintain the pleasure of eating by providing ____ messages about food choices, while limiting food choices only when indicated by scientific evidence.
 - A. Written
 - B. Nonjudgmental
 - C. Verbal
7. The CDM, CFPP Scope of Practice includes several nutrition-related tasks that CDM, CFPPs are qualified to perform including:
 - A. Review nutrition screening data and calculate nutrient intake
 - B. Modify diet plans as needed following standards of nutrition care/evidence-based guidelines
 - C. Both A and B

NEW CDM, CFPP SCOPE OF PRACTICE NOW AVAILABLE

The Certifying Board for Dietary Managers (CBDMD) recently updated the Scope of Practice for the Certified Dietary Manager, Certified Food Protection Professional (CDM, CFPP). The new document, dated March 2022, outlines the tasks a CDM, CFPP is qualified to perform. Visit <https://www.CBDMDonline.org/cdm-resources/cdm-cfpp-scope-of-practice>