



Food Safety and Its Importance for the Diabetes Educator American Association of Diabetes Educators Practice Advisory

Introduction

Diabetes self-management education and training (DSME/T) plays an essential role in the management of diabetes. DSME/T serves to help in reducing the risk of costly and debilitating conditions, including cardiovascular disease, kidney failure, blindness and lower limb amputations. Diabetes educators are essential to effective self-management of diabetes and related behavior change. Much of the emphasis of DSME/T is on eating and meal planning. This includes the knowledge of food safety and how it can negatively affect the person with diabetes. With recent outbreaks of food borne illnesses, issues surrounding food preparation with resultant morbidity and mortality, the diabetes education team must include food safety as part of risk reduction.

Background

A 2006 publication from the United States Department of Agriculture began with the following definition: *“When certain disease-causing bacteria or pathogens contaminate food, they can cause foodborne illness. Foodborne illness, often called food poisoning, is an illness that comes from a food you eat.*

- *The food supply in the United States is among the safest in the world— but it can still be a source of infection for all persons.*
- *According to the Centers for Disease Control and Prevention, 76 million persons get sick, 325,000 are hospitalized, and 5,000 die from foodborne infection and illness in the United States each year.*
- *Many of these people are very young, very old, or have weakened immune systems and may not be able to fight infection normally.*
- *Since foodborne illness can be serious — or even fatal — it is important for you to know and practice safe food-handling behaviors to help reduce your risk of getting sick from contaminated food.”*

Because diabetes can affect multiple organs and systems of the body, the person with diabetes is more susceptible to infection. People with diabetes are especially vulnerable to food-borne illnesses because their immune system may not immediately recognize harmful bacteria or other pathogens. This delay in the body’s natural response to foreign invasion increases the risk for infection. Diabetes may impact the gastrointestinal (GI) system by damaging the acid producing cells in the stomach, and by increasing food transit time resulting from nerve damage in the stomach and intestines. This can encourage the growth

of harmful bacteria and other pathogens in the GI tract. Diabetes may also affect kidney function which can encourage the growth of harmful bacteria, toxins, and other pathogens in urogenital system as well.

Food handling, preparation and consumption requires ongoing attention to detail to avoid food-borne illness. Doing so contributes to maintenance of good health among those with diabetes.

Role of the Diabetes Educator

Diabetes educators are important members of the care team and provide evidence-based, patient-centered care to people with diabetes. Educators help the person with diabetes to learn how to:

- make wise food choices when eating at home or eating out (avoiding uncooked and improperly stored foods)
- handle and prepare food safely
- be an informed shopper (e.g., able to read labels and expiration dates)
- know the symptoms of food borne illnesses
- problem solve and implement a food borne illness action plan

It is important that the diabetes educator: include and reinforce the aforementioned suggestions as part of the education curriculum, keep current on the food safety issues and assist people with diabetes in obtaining this information from reliable sources.

References and Supplemental Information

U.S. Department of Agriculture, Food Safety and Inspection Service. Food Safety for People with Diabetes: A need-to-know guide for those who have been diagnosed with diabetes. Sept 2006. http://www.fsis.usda.gov/PDF/Food_Safety_for_Diabetics.pdf. Accessed November 1, 2011.

Food and Drug Administration
www.cfsan.fda.gov

Centers for Disease Control and Prevention
1-888-232-3228 (24-hour recorded information)
www.cdc.gov/foodsafety

National Center for Infectious Diseases/Traveler's Health
www.cdc.gov/travel/index.htm

National Center for Infectious Diseases /Water-Related Diseases
www.cdc.gov/ncidod/diseases/water/index.htm

Gateway to Government Food Safety Information
www.foodsafety.gov

Partnership for Food Safety Education (Fight BAC!®)
www.fightbac.org