

Cooking Well with Diabetes

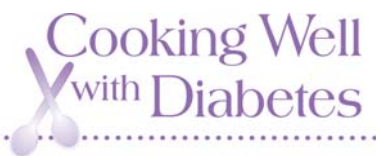
In 2003, the Texas AgriLife Extension Service developed *Cooking Well with Diabetes* to reinforce the practical application of the nutrition and self-care educational series, *Do Well, Be Well with Diabetes*.

Relevance

- Type 2 diabetes is a growing health problem in Texas.
- About one million adults are thought to have the disease, and that number continues to rise.
- If left untreated, diabetes can lead to long-term health complications including heart disease, amputations, blindness, and kidney problems. These and other health complications that result from diabetes lead to higher health care costs, increased loss of time from work due to illness, and ultimately, a decreased quality of life.
- Research has shown that education is the single most important thing people with diabetes can do to improve their health status and prevent the onset of complications.
- The good news is that persons with diabetes can control their blood glucose levels and improve their overall health by following treatment plans prescribed by their physician. These treatment plans include the use of medication, the recommendation to increase physical activity, and the consumption of a meal plan to promote blood glucose control.

The dietary changes that must be accomplished may be a challenge to make for some individuals with diabetes and can include:

- how to read food labels;
- how to prepare low fat, higher fiber foods;
- how to select low fat and low sodium foods at the grocery store;



- how to prepare lower fat foods by grilling or stir-frying cookery;
- how to reduce fat, sugar, and salt in recipes;
- how to increase fiber foods;
- how to reduce calories in recipes; and
- ways to reduce weight and/or obesity.

Response

Extension agents are encouraged to invite dietitians and/or diabetes educators to be involved when teaching nutrition education to persons with diabetes. By selecting creative techniques when teaching these nutrition concepts, Extension educators can introduce these behaviors in a fun and positive manner that helps motivate clients to change. This knowledge can ultimately lead to the adoption of recommended lifestyle changes and the prevention of boredom, which eventually leads to non-compliance.

Presented in a cooking school format, teaching resources for this program include:

- four lessons with healthful recipes to cut fat, sugar, and sodium and to increase the fiber content of foods;
- Texas-style foods with an accompanying cookbook that has been available since 2004;
- some recipes with ethnic variations;
- other recipes using simple ingredients;
- an adaptation of the plate method for portion control; and
- diabetes, nutrition, and food safety tips with each recipe for cooking school demonstrations.

Online data collection instruments have been refined and improved to enhance the research potential of this program.

Results

During 2004–2008, some 92 trained agents conducted cooking schools. Though the sample was small, the positive changes made by participants were worth noting. Here are some of the most significant of those results:

- Since the inception of this program, 2,735 diabetic individuals completed registration surveys; 1,966, wrap-up surveys; and 1,247, reunion surveys providing 1,247 sets of useable data.
- The average age was 62.9 years of age, with 2,199 females (79.4 percent) and 536 males (20.6 percent).
- Some 88.9 percent of respondents had never previously participated in a cooking school.
- The average hemoglobin A1c was reported at 6.9.
- When asked about the type of meal plan they followed, some 10.6 percent (280) answered diabetes food exchanges; carbohydrate counting, 20.8 percent (595); plate method, 4.7 percent (108); 7.2 percent (206) other meal plans; and 46.2 percent (1,088) receiving no meal plan at all.
- Responses on the registration, wrap-up, and reunion surveys documented an increased knowledge of utilizing healthy food choices for persons with diabetes, the plate method for portion control, and an overall knowledge increase in lifestyle choices (for example, modifying recipes to cut fat, sugar, and salt and increase fiber).
- The 2008 evaluations revealed that 82.8 percent (402) could recognize starchy vegetables; at least 75.2 percent (356) knew how to make foods taste sweeter by adding vanilla; and 91.8 percent (492) knew which cooking method would not reduce the fat content of the food. Many other food preparation techniques were learned during the Cooking Well lessons.

Success Stories

- “Paying more attention and reading food labels has helped me learn how to reduce salt, sugar, and fat without changing the flavor.”
- “Cooking and eating for diabetes is so much easier than I thought it could be. Now I am able to keep my blood glucose in control.”
- “Now that I am using the plate method, my blood glucose is better controlled.”
- “At McDonald’s and other fast-food restaurants now, I am making better selections such as salads or fruits instead of French fries, eating a small hamburger with no cheese and only ½ of the hamburger bun, asking for mustard and no mayonnaise, and eating one or two pancakes without butter instead of 3 buttered pancakes. It’s given me the information to help me make better choices when eating out.”
- One participant reported that she was starving before the series. Now she’s controlled her weight by making wise selections of more fiber, knows how to better control portion sizes, recognizes foods high in starch, eats more lean meats, and enjoys the new recipes she was given in class.
- Another diabetic woman reported that she is cooking differently for her family: adding more fiber, recognizing foods with more starch that affect her blood glucose, controlling portion sizes, using more herbs and spices instead of salt, using cooking methods without added fat, and has learned to substitute non-caloric sweeteners for sugars in her recipes.
- A male participant lost 130 pounds from his participation in both *Do Well, Be Well with Diabetes* and *Cooking Well with Diabetes*. He noted: “The message was very clear – a need to make lifestyle changes.” Both his wife and daughter have also joined him in this new lifestyle of eating more healthful foods and increasing daily activities. His wife no longer has to shop at “special” female stores. He commented to his county agent: “The work that you do has saved my life and the life of my family. We are much happier now, and we enjoy life to the fullest.”
- “Great suggestions that are easy to put into practice. As a result, I lost 50 pounds last year by eating smaller portions, less starchy vegetables and carbohydrates.”

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