Patient-centered, evidence-based responses to common questions and comments about nutrition for diabetes

Katrina Hoch, UW Nutritional Sciences Program, MS-Nutrition Student & Dietetic Intern

Rationale
Patients with diabetes are faced with an important job of self-management. Unlike patients with many other chronic conditions, who may be instructed to take a prescribed pill once or twice each day, patients with diabetes must monitor, understand, and manage their diets, their blood sugar, their physical activity, and their medications, as well as the interactions between these four areas. A diagnosis of diabetes often means becoming educated about the pathophysiology of this disease, the composition of foods, the mechanisms of different drugs, and the associated lifestyle implications. Given the importance of self-care and self-management for patients with diabetes, it is essential that clinicians provide patient-centered, evidence-based information about nutrition.

This poster lists some common questions and comments about nutrition from patients with diabetes, and evidence-based, patient-centered answers to those questions and comments. The intended audience for this information is clinicians of any kind who see patients with diabetes but who do not have specific expertise with diabetes or with diabetes nutrition classes, this includes nurses, physicians and pharmacists who specialize in diabetes care but do not have specific training in nutrition counseling, and dietitians who do not have specific training in diabetes care.

Methods
The frequently asked questions and comments were drawn from observations and interactions with patients during a three-week diabetes counseling and education rotation. During individual counseling sessions and group diabetes nutrition classes, issues that are most confusing to patients and comments that come up frequently were documented. The information used to compose the answers was drawn primarily from the American Diabetes Association’s 2013 Nutrition Therapy Recommendations for the Management of Adults With Diabetes and some of the trials, reviews, and meta-analyses on which those recommendations were based.

Final Product
The material conveyed in this poster can be used to create a handout for clinicians who work with patients with diabetes but do not have specific expertise in diabetes nutrition. Such a handout could be helpful in two ways:

1) It introduces questions and comments about nutrition that often come from patients with diabetes. This allows clinicians to be prepared for the types of things they will hear from patients.

2) It provides possible responses based on available evidence and on analysis of this evidence by respected professional organizations, translated in ways that are useful and practical for patients, and that address common sources of confusion.

If all clinicians provide patient-centered, evidence-based nutrition information to patients with diabetes, patients will hear consistent messages from all their providers, and will have effective tools for improving or stabilizing their health.

1. I’ve heard that now that I have diabetes, I’m not allowed to eat carbohydrates.
   - You need to be aware of the amount of carbohydrates you’re eating, and control your portion sizes, but you do not need to avoid carbohydrates entirely.
   - Let’s review what foods are sources of carbohydrates: fruits, grains, starches, beans, vegetables, milk, and sweets/sugar.
   - When choosing carbohydrates, whole food sources are better than processed sources, because whole foods contain additional nutrients and will keep you full longer. For example, regular oatmeal will keep you full longer than many boxed breakfast cereals.

2. What should I do if I slip up and eat a slice of cake after a high-carbohydrate dinner?
   - Try not to think of foods as “good” or “bad.” Almost everyone likes sweet foods, and it’s okay to have an occasional piece of cake.
   - One strategy to control blood sugar in the future is to give yourself permission to have a small portion — and enjoy it.
   - Go for a walk afterwards. Exercise is insulin sensitizing and will help move the glucose out of your bloodstream and into your cells.
   - Take a blood glucose reading 1-2 hours later to see how it affected you.

3. I try to avoid fruit and beans because I know they contain carbohydrates.
   - Fruit and beans contain carbohydrates, but they are healthy choices.
   - Whole fruit contains fiber, and beans contain both fiber and protein. These nutrients take longer to digest than starch or sugar.
   - Longer digestion time means a slower, more gradual blood sugar rise and a longer-lasting feeling of fullness between meals.

4. If brown rice and quinoa are better for me than white rice, can I eat more of them?
   - Brown rice and white rice both contain 45 grams of of carbohydrates per cup, and quinoa contains only slightly less. This means you should not eat larger portions of whole grains such as brown rice or quinoa.
   - If your portions are the same size, there are reasons to substitute whole grains such as brown rice and quinoa for white rice: whole grains contain fiber and other nutrients, and they may help you feel full longer.

5. I’m confused by food labels – what should I look for?
   - Look at “total carbohydrates,” not “sugar.” Many carbohydrates turn into sugar when they are digested. “Sugar-free” may not mean carbohydrate-free.
   - Look at serving sizes — they’re often smaller than you’d expect, and your portion may be several servings without your realizing it.
   - A food labeled “non fat” or “low fat” may be high in carbohydrates. Check the nutrition facts panel to determine the amount.

6. When I found out I had diabetes, I bought a juicer immediately, to get started with healthy eating.
   - It’s best to eat your fruits and vegetables rather than making them into juice.
   - When you have diabetes, liquids such as juice can raise your blood sugar quickly. Your body does not have to do much work to digest it or break it down. The fiber in whole fruits and vegetables slows this process because it takes longer to digest.
   - If you’re unsure, check your blood glucose before and after eating your favorite fruits and vegetables. Then compare these results to the results you get from checking before and after drinking juice made from the same fruits and vegetables.
   - Juice can also be easy to drink rapidly and in large quantities.

7. I keep a candy bar in my backpack, so I always have one available if I have a low blood sugar.
   - Treat a low blood sugar with carbohydrate foods or drinks that your body will digest fast, such as juice or glucose tablets. This means do not use candy bars, cookies, as fat and protein will slow digestion and recovery from the low. It will take longer to feel better.
   - Use the “rule of 15”: if your blood glucose is lower than 70 mg/dL, eat 15 grams of fast-acting carbohydrates (4 glucose tablets or 4 oz juice), wait 15 minutes, then test again.
   - To treat a low blood sugar, use real sugar, not artificial sweeteners, the sugar substitutes found in diet foods and sugar-free foods.

Selected References

Special thanks to Alison Evert at the Diabetes Care Center; Maureen Chomko at UW Neighborhood Clinics, and Judy Simon at UWMC Roosevelt Clinic.