# Nutrition Update

## Nutrition Education: The Older Adult With Diabetes

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As we approach the 21st century, health professionals recognize the need to develop and implement effective health education programs for older adults. The older population is growing—it is estimated that by the year 2030 one out of five people in the United States will be over the age of 65.[1] The very old, aged 85 and above, make up the fastest growing age group in our country.[2] It is interesting to note that there are 32,000 people who are 100 years of age or older in the United States today.[3] The nonwhite older population is expected to increase at a higher rate than is the white population. The projected growth rate from 1985 to 2030 for Hispanics is 530%; blacks, 265%; and whites, 97%.[2] Thus it is important when developing health education materials and programs for the older population to include those that will target the very old as well as the minority elderly.

As the number of older individuals increases, so does the frequency of health-related problems. Older people are the primary recipients of health care resources. In 1987, health care expenditures for this group totaled $162 billion (an average of $5,360 per person), which is more than four times the amount spent for younger persons.[4] Over 80% of people aged 65 and older have one or more chronic health conditions,[5] and multiple conditions are common. Diabetes mellitus is seen in approximately 10% of older persons.[2]

In recent years, health professionals have become increasingly aware of individual learning styles, and the importance of adapting the diabetes education experience to meet individual needs. Nutrition educators have become comfortable with the fact that there is no one right way to "do diet instruction." The key is to be able to be creative and flexible enough to adapt diabetes nutrition education to the individual. This is especially true when working with the older population. There is often a tendency to stereotype this age group. However, older people are far from uniform. They vary greatly in their rate and degree of physical aging, individual abilities, and health status. Many seniors play tennis, run marathons, or walk several miles daily. Others find it difficult to walk to the mailbox or even hold that special grandchild. Many changes can occur in the 35 years between 65 and 100+. Changes that may accompany the aging process, such as hearing and vision loss and mental impairment, can effect both the method of instruction and the instruction tool that is used.

### Assessing and Planning the Learning Experience

A variety of diabetes nutrition education tools are available today. Before selecting a nutrition education tool, ask your patient and yourself some questions:

- How does the person learn best? For example, some people learn best by hearing, some by seeing, and others by experiencing. Are there sensory changes to be considered?
- What are the person's expectations of this nutrition consultation?
- What past experiences has the individual had with diets? Ask, "What worked, what did not?"
- Has the person tried exchange type diets in the past? Can the person easily think in terms of concepts such as ½ cup of noodles equals one small potato, or is it easier to identify single dietary factors, such as eat less fat, and together identify ways to do it?
- Is he or she familiar with measuring; has the patient had much food preparation experience?
- What are the goals of this particular nutrition intervention? What are the best ways to accomplish these goals? If the diet history indicates three meals, evenly distributed, but high in fat and inadequate in vitamin C, the nutrition intervention should focus on ways to eat less fat and increase vitamin C. In this instance, an exchange system instruction probably is not needed.
- What are the individual's current life priorities; what are his or her diabetes management priorities? How actively does he or she want to participate in diabetes management?

As diabetes educators, we encourage the person with diabetes to actively participate in the education process and assume responsibility for care. However, studies indicate that older adults desire to be less involved in health care processes that do younger adults.[6] The role health care providers should play in encouraging older people to assume control of their care—that is, medical empowerment—while at the same time respecting the individual's right to be dependent, provides food for thought.[7] The degree of patient involvement is also a consideration when selecting education methods.

### Selecting a Nutrition Tool

With the answers to these and other assessment questions in mind, decide which instruction tool or materials will be used. Published diabetes nutrition

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education tools include the following:

- *The Exchange Lists for Meal Planning*—may be appropriate, especially if the person has successfully used exchange-type diets in the past and desires complete information. In general, though, for most older people who are making new dietary changes, the exchange lists are an advanced level tool that provides more information than is necessary.
- *The Healthy Food Choices Poster*—combines simplified exchange concepts with guidelines for choosing healthy foods. It can be used in a variety of ways, including staged instruction of suggested dietary changes to simplified exchange meal planning.
- *Eating Healthy Foods*—is an example of a pictorial tool. Teaching with pictures can be very helpful for some people.

For others, *identifying* and listing *goals* and specific change steps to reach these goals, or *writing* down *sample menus* can be most effective. The important thing is not which tool is used, but that the nutrition education tool works.

## Considering Readability

Whether you are developing your own instruction tools, or selecting from those already available, it may help to consider the following suggestions for written materials.[8,10]

### Paper

- Choose a nonglossy cover and paper to eliminate glare.
- Print should strongly contrast with the page (black print on white paper).
- Pastel colors, greens, blues, and dark colors may all look alike to some older people.

### Print

- Use a 12 point (pt). type for written materials. If large print is desired, select at least a 14 pt. type.

  This is 10 pt. type.
  This is 12 pt. type.
  This is 14 pt. type.
- Select bold print.

  This is 12 pt. type.
  **This is 12 pt. bold type.**
- Use upper and lower case letters, not all caps.

  ALL CAPS ARE DIFFICULT TO READ.

  Using upper and lower case letters may be easier to read.
- Choose an uncrowded print style. Avoid italics and highly stylized type.
- Leave spaces between rows of print.

### Sentence Structure

- Shorten and simplify words and sentences for easier reading.
- When you use a comma or an *and*, ask yourself, "Would this be easier to read as two sentences?"
- See the Table for examples of how to simplify words and sentences.
- As you develop educational tools for older people, use the SMOG Readability Test,[11] the Flesch Readability Scale, or other readability indexes to help assess reading level.

One study of 325 patients with diabetes indicated that materials written at the eighth grade level would be understood by 78% of these patients.[12] Creators of educational materials are often concerned that a lower reading level may be viewed as demeaning. In actuality, greater comprehension may be achieved by lowering the reading level, even for the more highly educated population.

**Simplifying Text for Older Readers**

**Simplify Words**

| Instead of | Use |
|---|---|
| attempt | *try* |
| beverage | *drink* |
| determine | *find out, choose* |
| eliminate | *skip* |
| groceries | *food* |
| itemize | *list* |
| lipids | *fat* |
| metabolize | *use, burn* |
| monitor | *check, watch* |
| nutritious | *healthy* |
| participate | *do, join* |
| physician | *doctor* |
| purchase | *buy* |
| utilize | *use* |

**Simplify Sentences**

Being overweight makes diabetes management more difficult.
*Extra weight makes blood sugar harder to control.*

Reduce caloric intake.
*Eat less food.*

Reduce the fat in your dietary intake.
*Eat less fat.*

Increase your physical exercise.
*Get more exercise.*
*Be more active.*

## Planning the Educational Process

It is important to think not only about the instructional tool, but also about the educational setting. Sound planning will help to improve the educational process[9,10]

### Physical Setting

- Select a quiet, well-lit, glare-free setting.
- Arrange the seating for direct eye contact. The older person may hear better and be able to see the message by reading your lips as you speak. Eye contact also enables the educator to observe signals of comprehension, questions, and tiredness, as well as build rapport with the patient.
- Include family members or other care-givers in the education process.

### Speaking Style

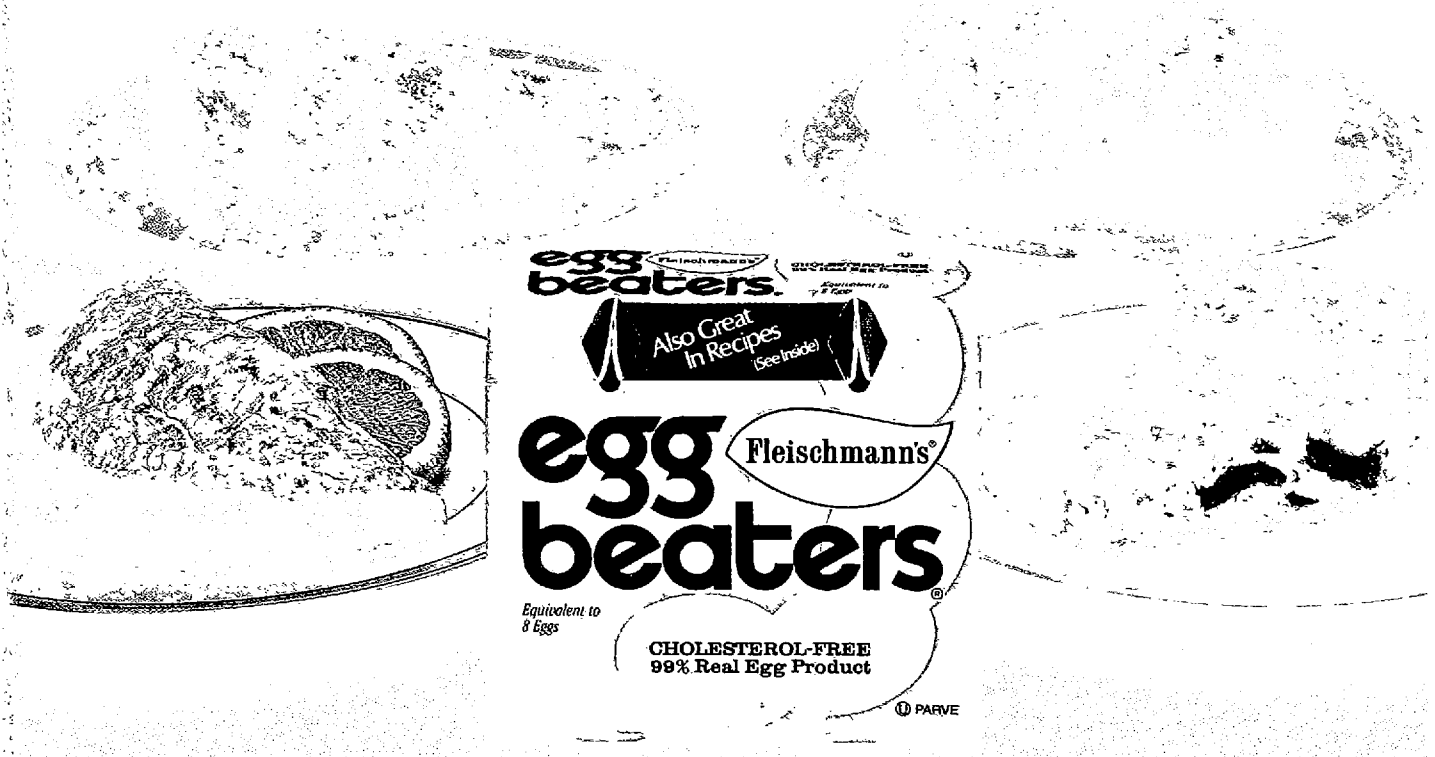
- Speak slowly and clearly.
- Be heard, but don't shout.
- Use words that are familiar, and ask questions as you go to see if you are being heard and understood.

### Session Objectives

- Plan short sessions that build sequential learning. It is best to limit the session time to 20 minutes.
- Involve the older person. "We've identified several areas to work on. Which one would you like to start with?" "What is one small change you could make this week?"
- Focus on a single topic. The topic should have no more than three major points that are clear, simple, positive, and relevant to the person's life-style and knowledge base. Presenting too much information in too short a time may create anxiety, and limit the learning experience.

*The Diabetes Nutrition Information Series* (American Dietetic Association) is one example of single-concept instruction. Eight two-page tools have been developed that include topics such as Becoming Aware of What You Eat, Losing Weight, and Sweetening Your Foods.

*Noninsulin-Dependent Diabetes: A Curriculum for Patients and Health Professionals* is another tool that pro-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vides single-concept diabetes education. The curriculum, divided into Initial Management, Home Management, and Improvement of Life-style sections, includes 49 single-topic modules, written in an easy-to-read style. Fourteen nutrition modules include What Foods Should I Eat? and Weight Loss (level 1), Healthy Food Choices, and Practical Tips for Planning Meals (level 2), and Eating Away from Home, What Does the Label Say, and Taking Charge of Your Diet (level 3). Modules include long-term and short-term goals, and ideas for small-step changes and commitments to reach these goals. The single-topic modules encourage personalized instruction and sequential learning.[13,14]

- Use small-step changes. For example, the goal or topic might be *eat less fat.* Small-step changes could include using turkey instead of bologna in sandwiches; using 1 teaspoon instead of 1 tablespoon of margarine on a potato; or trimming the fat from meat before cooking.
- Incorporate active learning—it is generally more effective than passive learning. Try problem solving—"What would you do if...," or ask the older person to measure servings—eg, a teaspoon of margarine or pour ¾ cup of cereal into a bowl—or to plan menus.
- Group education can provide positive active learning experiences. Older individuals often enjoy participating in nutrition games, patterned after television game shows. Many like to share recipes and food experiences.
- Use food models and familiar food containers to enhance the instruction.

### Follow-up

- Plan future follow-up during the session. Set a date and time for a telephone call 2 to 3 days after the learning-experience.
- Plan for active learning to continue. Mutually agreed upon "home assignments," such as reading labels to determine the grams of fat in three favorite convenience foods, or recording meals and snacks for two days, are examples.

## The Experienced Consumer

It's also important to consider some other factors when planning nutrition education for the older person with diabetes. First, keep in mind that older people are very experienced consumers. They have had a lifetime of food shopping and preparation. In general, most older people grew up valuing healthy eating habits. They ate oatmeal long before it became fashionable. This is the age group that served two vegetables every night for dinner. Most older people are receptive to and already realize the importance of sound nutrition. It is important to recognize and build on this experience.

Be aware that eating may be the one social event older people have to look forward to during the day. It should be a pleasant event. It is important to maximize the pleasures associated with eating and lessen the anxieties while helping the older person to develop skills for making and implementing healthy food decisions. Extending a healthy life, not disrupting life-style, should be the goal.

Remember that following a diet is easier at some times than at others. It is also more of a priority to some people than to others. It is important that both the older person and the health professional recognize that foods are not "good or bad," and that people are not "good or bad" for eating or for not eating certain foods.

Recognize that older people may have many things on their mind—not just how to eat to help control diabetes. Loss of spouse and friends, reduced income, additional health concerns, or even how they are going to get home after the diet instruction may affect the priority of a nutrition education session.

## Summary

The dietitian, working with other members of the health care team, plays a very important role in developing a care plan for the older person with diabetes. Often individuals in this age group have so many health care needs that nutrition intervention may be low on the priority list. Optimum nutrition is essential to maintain health and well-being as well as to keep blood glucose levels in the target range. The dietitian who works with this population must be very skilled at multifaceted assessment. He or she must be able to correlate all the information gained to creatively design, *with* the patient and caregivers, a workable dietary intervention, and be able to adapt instruction techniques and tools for a wide variety of educational needs and abilities. Knowledge, skill, experience, confidence in judgment and, most important, sincere caring are all important to the process. Nutrition education should be individually tailored and incorporate patience, kindness, humor, understanding, and above all a respect for the differences that make each older person an individual.

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