

Medical Nutrition Therapy for People With Diabetes Mellitus

**American Association
of Diabetes Educators**

***Currently there
is a committee
considering
a revision of this
Position Statement**

medical nutrition therapy is integral to total diabetes care and management. To effectively integrate nutrition into the overall management of diabetes requires a coordinated professional team effort with the patient. For example, the registered dietitian (RD) initiates the nutrition assessment and recommends nutritional care that meets therapeutic goals that are within the reach of the patient's available resources. The RD is knowledgeable about current nutrition principles and meal-planning recommendations for diabetes and is skilled in translating the recommendations into food choices for the patient. The entire healthcare team supports and reinforces the nutrition prescription and helps the patient problem solve specific eating issues and deal with eating disorders.

The goals of medical nutrition therapy in diabetes are to

- promote optimum health
- normalize blood glucose levels
- improve blood lipid levels
- reduce the potential for long-term complications (such as retinopathy, nephropathy, and neuropathy)
- achieve and maintain a reasonable body weight
- encourage healthy eating habits

Strategies employed by the RD to achieve these goals will vary with the individual patient's lifestyle, eating habits, food preferences, and readiness/willingness to make the necessary changes.

A planned education process must be implemented in order to effectively accomplish the goals of medical nutrition therapy. This

process involves several critical phases: assessment, goal setting, intervention, evaluation, and documentation and communication.

NUTRITION ASSESSMENT

Nutrition self-management training for the person with diabetes starts with a nutrition assessment. A thorough nutrition assessment should include, but is not limited to, the following steps:

- Obtain a thorough psychosocial, educational, and lifestyle history, including previous diet instruction(s).
- Identify the current diabetes regimen.
- Assess the degree of glycemic control.
- Review the nutrition history using food records, 24-hour recall, and/or a food frequency form.
- Review the medical chart for laboratory values.
- Identify special problems, such as weight, eating disorder, hypoglycemia, or dyslipidemia.
- Obtain current height, weight, circumferences, waist/hip ratio, and/or BMI as baseline anthropometrics.
- Assess nutritional adequacy of the patient's current intake.
- Determine the patient's feelings and beliefs about food.

GOAL SETTING

Individualized meal planning allows the patient the opportunity to participate in developing the meal plan and realizing ownership of his or her treatment. Identifying problems and establishing short-term goals with the RD ensure progress toward the ultimate long-term meal-planning goals. Goals—not rules, regulations, or dogmas—should be emphasized. The negotiated nutritional goals should be patient-selected, realistic, measurable, and integrated with overall diabetes management goals.

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NUTRITION INTERVENTION: INDIVIDUALIZED MEAL- PLANNING APPROACHES

A variety of meal-planning approaches are available based on the lifestyle, self-management capabilities, and motivation of each person with diabetes. These approaches may include, but are not limited to

- the American Diabetes Association/
American Dietetic Association
Exchange Lists for Meal Planning
- carbohydrate counting
- Dietary Guidelines for Americans
using the Food Guide Pyramid
- calorie and/or fat-gram counting
- preplanned menu approaches
- total available glucose (TAG)
- point systems

Nutrition teaching tools do not stand alone; they must be used as part of a planned education process. The goal of nutrition intervention is to facilitate positive behavior, not simply to transfer knowledge. If individualized meal plans are designed to meet specific medical, psychological, and social needs instead of being presented as a dictated, pre-determined formula, patients are likely to feel empowered about food choices.

NUTRITION EVALUATION: FOLLOW-UP AND REFINEMENT OF GOALS

The RD must take responsibility for evaluating outcomes. Education goals and medical parameters (outcomes) need to be reviewed and revised to ensure effectiveness of the medical nutrition therapy. Specific outcomes in desirable ranges (eg, blood glucose, lipid levels, weight changes, and glycosylated hemoglobin) can be used to evaluate whether the nutrition

prescription is appropriate. If it is not, modifications in the nutrition self-management plan are indicated.

Because the treatment of people with diabetes spans the life cycle, individualized meal plans need to be revised periodically to meet both lifestyle alterations and changes in the person's medical condition (eg, pregnancy or development of complications). This necessitates periodic follow-up visits to assess the appropriateness of the meal plan as it pertains to individual needs, nutrient adequacy of food choices, weight changes, activity level and incorporation of planned exercise, hyperglycemia or hypoglycemia, and special situations (eg, weekends, holidays, or swing shifts). Updates on current issues, such as non-nutritive sweeteners or food labeling, need to be individually tailored for each person with diabetes.

DOCUMENTATION AND COMMUNICATION

Assessment, treatment plans, goals, and outcomes are important and required information that must be documented and communicated to both the professional team and the patient. Communication with the team can occur on a variety of levels: verbally, during case management meetings and continuous quality management reviews, or written in the progress notes in the patient's medical chart. The patient will more readily follow through with nutrition self-management if the RD verbally reviews the mutually agreed-upon goals and objectives, has the patient provide feedback on understanding of the goals and objectives, and supports them with a written contract in simple, realistic, short-term, measurable behaviors.

SUMMARY

Effective nutrition self-management training requires an individualized approach so that the person with diabetes will have the skills to successfully manage the role of food in the overall diabetes care plan. An individualized education process that facilitates medical nutrition therapy must include the following steps:

- Perform a thorough assessment of past/current self-care behaviors, medical and psychosocial history, and readiness to accept personal responsibility.
- Set mutual therapeutic goals (outcomes) for diabetes management with the professional team and patient.
- Establish initial nutrition priorities considering individual medical factors and recommended nutritional prescriptions (eg, calorie level, percent of contributions of macronutrients).
- Plan the nutrition intervention by negotiating meal timing, distribution, snacks, activity, and medication administration.
- Translate the nutrition prescription into an appropriate and usable format by selecting an appropriate meal-planning approach with the patient.
- Document assessment, goals, prescription, plan, and outcomes.
- Periodically evaluate the effectiveness of the nutrition prescription and revise as needed, considering individual medical and motivational factors.

position STATEMENT

B I B L I O G R A P H Y

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