POLICY & PROCEDURE NUMBER:
DEPARTMENT: *Dietary* **SUBJECT:** ***Nutrition Management of Diabetes Mellitus***

APPROVAL DATE: February 2011 **REVISION DATE:** February 2015
REVIEW DATE: May 2018; Oct 2019; Dec. 2020

POLICY:

The Canadian Diabetes Association (CDA) states that diabetes in the elderly is metabolically distinct from diabetes in younger people and that the approach to therapy should be different.

Nutrition management of diabetes mellitus will be provided to residents with diabetes in a manner that is consistent with the currently recommended liberalized diet approach for the elderly living in long term care, per the 2013 CDA Clinical Practice Guidelines, and will consider the general health and overall quality of life of each resident.

OBJECTIVES:

Recognizing that restrictive dietary management of diabetes in the elderly may not be advantageous and may lead to impaired nutrition intake and/or under nutrition, the objectives of diabetes mellitus management for residents in long term care are:

To recognize the importance of both diet and blood glucose control to overall resident health and quality of life.

To provide nutrition interventions that imposes the least dietary restrictions for the resident and promotes enjoyment of meals.

To meet the overall nutrition and hydration needs of the resident while achieving or maintaining safe blood glucose levels and preventing hypoglycemia.

PROCEDURE:

1. All residents on admission with a diagnosis of diabetes (Type 1 or Type 2) are initially placed on a "modified diabetic diet" until assessed by the RD. It will then be determined that an individual's diabetes mellitus (DM) management requires more individualized management, OR the resident's DM can be appropriately managed with a Regular Diet. The CDA recommends that regular diets may be more appropriate for

elderly nursing home residents instead of "diabetic diets" that cause unnecessary restrictions.

2. Residents who are currently on "modified diabetic diets" and whose blood glucose levels are within target goals can be switched over by the RD to a "trial" regular diet with more frequent blood glucose monitoring until it has been assessed by the RD and MD that there are no negative consequences to the more liberalized approach.

3. Routine schedules for laboratory and capillary blood glucose monitoring are established within the Home, as ordered by the MD, Nurse practitioner or according to medical directives, and as outlined in the Diabetes Glucose Monitoring Protocol*.

4. Healthy elderly people with diabetes should be treated to achieve the same blood glucose targets as younger persons. In the elderly or persons with limited life expectancies or multiple co-morbidities, prevention of hypoglycemia should take priority over attainment of glycemic targets, and in fact these populations may benefit from higher preprandial blood glucose and A1C targets. A1C targets are < 8.5% for the frail elderly.

5. Food choices and portion sizes, as established and provided for the regular diet, are also considered appropriate for those residents requiring a more controlled approach form the basis of the "modified diabetic menu" as noted on the therapeutic spreadsheets. Residents needing a very individualized approach will have their menu also listed on the therapeutic spread sheets with appropriate identification (i.e. specific diabetic and renal meal plan)

6. Residents' meals are provided at consistent times each day, and balanced carbohydrate distribution is considered when planning menus for all meals and snacks throughout each day. Planned menus are based on *Eating Well with Canada's Food Guide* in order to help meet the nutritional needs of all residents.

7. The suggested carbohydrate distribution of 45-60 grams per meal and 15-30 grams for afternoon and evening snacks represents approximately 45-60% of the total energy of the diet coming from mixed carbohydrate sources (225 – 300 g per day for 2000kcal menu)

8. The need and type of snacks may be individualized for each resident and are based on *whether* the resident requires oral diabetes medication and/or insulin to manage their diabetes, as well as what *type* of medication or insulin is required. If the resident has unusual swings in blood glucose levels requiring specific snacks at specific times, this is indicated on the nutrition care plan by the Registered Dietitian.

9. Some residents may not want or need snacks, depending on personal preference, weight management goals and a minimal risk of hypoglycemia.

10. Provision of fruit juices, sweet drinks and regular soft drinks in-between meals is often discouraged on the "modified diabetic diet" in order to minimize fluctuations in blood glucose levels. Water, energy free beverages and milk are encouraged for hydration and nonnutritive sweeteners may be used as part of the "modified diabetic diet". Regular diets include fruit juices and sweet drinks and this additional carbohydrate content needs to be considered when providing a regular diet or a resident may do better with sugar free beverages in place of fruit juice between meals.

11. Residents with diabetes who remain on a modified diabetic diet may eat a regular portion of dessert at lunch and supper, as per the planned menu or otherwise as indicated according to their Nutrition Care Plan, as designated by the RD.

12. The RD is made aware of foods brought into any resident on a regular basis from outside the Home* so that these foods can be worked into the resident's meal plan. The resident's Nutrition Care Plan reflects these special circumstances.

13. The RD ensures that specific interventions are outlined in the individualized Nutrition Care Plan for any resident who is overweight and requires energy control, or who requires extra calories or protein or additional dietary interventions for concomitant medical conditions.

14. It is suggested that the Recreation/Activation department informs the Dietary Department when foods and beverages are provided at special events in order that these extras can be worked into the daily meal plans by the RD and to minimize residents receiving extra treats from the food / snack cart.

15. A policy and procedure is established and followed for meal replacements when residents with DM do not consume all or part of their meals*. Every effort is made to substitute uneaten foods with similar solid alternatives, as required. A liquid nutrition supplement, specifically formulated for diabetes, can be used; however, there is little evidence that use of this specialized formula improves glycemic control in this population and, therefore, regular supplements not specially formulated for diabetes may be acceptable at the discretion of the RD.

16. Not all residents with diabetes need their meals replaced to prevent potential hypoglycemia due to receiving medication for DM; however, they may still require a replacement due to their individual nutrition and hydration status. The Registered Dietitian may indicate on the nutrition care plan which individual residents may benefit from being offered a nutrition supplement when a full meal is not consumed in order to minimize the risk of hypoglycemia and/or to assist in meeting weight management goals.

17. The Registered Dietitian should be notified if a resident requires nutrition supplements for uneaten foods for more than *three* consecutive days, as this may indicate that a change in dietary intervention is required.

18. Home staff are provided with educational updates on diabetes management and, in particular, updates are provided by the Registered Dietitian on the nutritional management of diabetes and the elderly and the value of a regular diet in overall diabetes management and quality of life.

19. When it is assessed that a resident with diabetes may benefit from a more stringent dietary regime than that indicated on the regular / modified diabetic diet, an individualized meal plan is established by the Registered Dietitian, in consultation with the resident and/or the SDM and with the MD. The effectiveness of a more controlled intervention is assessed on an ongoing basis.

References:

"*The Use of No Concentrated Sweets Diet in the Management of Type 2 Diabetes in Nursing Homes*"; JADA**,** December 2001. Vol. 100 Number 12

"*Liberalized Diets for Older Adults in Long Term Care",* ADA Position Statement; *JADA* September 2002 Volume 102 Number 9

"*Successful use of a sucrose-containing enteral formula in diabetic nursing home elderly*" Diabetes Care 2006: 29: 698 – 700

"*Dietary management of nursing home residents with non-insulin –dependent diabetes mellitus*" Am J Clin Nutr 1990; 51: 67 - 71

"Canadian Diabetes Association 2013 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada", Canadian Diabetes Association 2013, pages S 184-S190

"*Dietary management of nursing home residents with non insulin dependent diabetes mellitus*", American Journal of Clinical Nutrition 1990 51: 67 – 71

Relevant Regulations:
Ontario Regulation 79/10 made under the **Long-Term Care Homes Act, 2007**

Nutrition care and hydration programs

68.

(2) Every licensee of a long-term care home shall ensure that the programs include,

(b) the identification of any risks related to nutrition care and dietary services and hydration;

(c) the implementation of interventions to mitigate and manage those risks;

Menu planning

71.

(1) Every licensee of a long-term care home shall ensure that the home's menu cycle,

(b) includes menus for regular, therapeutic and texture modified diets for both meals and snacks