

Nutritional Management of Diabetes

Nutrition is often said to be the cornerstone of diabetes care.¹ The nutritional management of diabetes can affect long term health and quality of life. The goal for nutritional management is optimal metabolic control through a balance between food intake, physical activity, and if necessary, medication to avoid complications.²

All people with diabetes should receive individual advice on nutrition from a registered dietitian (RD).¹ The registered dietitian can apply the nutrition guidelines while considering current intake, individual energy needs, lifestage, lifestyle, and any medical conditions of the individual with diabetes.

In type 2 diabetes, nutritional goals aim for improved glycemic and lipid levels and weight loss when required. In type 1 diabetes, the goal of nutritional intervention is improved glycemic control through coordination of food, especially carbohydrates, doses of insulin, and physical activity.

A healthy diet for a person with diabetes, as for a person without diabetes, follows the principles of Canada's Food Guide to Healthy Eating.

The following summary highlights the Canadian Diabetes Association National Nutrition Committee revised nutrition guidelines for people with diabetes (1999).

Recommendations for the Nutritional Management of Diabetes Mellitus.²

Carbohydrate	▲ Total carbohydrate: 50-60% of daily energy requirements, which can include added sugars up to 10% of daily energy requirements.
Total dietary fibre	▲ Adults: at least 25-35 g/day. ▲ Children: 5 g plus 1 g/year of age as a guide. ▲ Should include both soluble and insoluble fibre.
Protein	▲ Adults: at least 0.86 g/kg/day. ▲ Children: RNI for age and gender.
Fats	▲ Total fat: [30% of daily energy requirements. ▲ Saturated and polyunsaturated fats: each [10% of daily energy requirements. ▲ Use of monounsaturated fats should be encouraged where possible. ▲ Fish rich in omega-3 fatty acids should be consumed at least once per week.
Alcohol	▲ Alcohol consumption should be limited to 5% of total energy requirements or two drinks per day, whichever is less. ▲ Regular alcohol intake can contribute to weight gain, poor glycemic control, and elevated lipids.
Sweeteners	▲ Nutritive and nonnutritive sweeteners may be used moderately as part of a well-balanced diet. ▲ Use of saccharin and cyclamate is not recommended during pregnancy and lactation. ▲ Aspartame is contraindicated in individuals with phenylketonuria.
Micronutrients (vitamins & minerals)	▲ Routine use of vitamin or mineral supplements is not recommended for people with diabetes except in cases of inadequate food consumption or other special needs. ▲ Daily vitamin and mineral requirements should be obtained from a well-balanced diet.

It is important that other members of the Diabetes Health Care Team reinforce and support the changes in eating habits that the registered dietitian has recommended for the person with diabetes.

Sometimes, we unknowingly send messages to patients through the words we use. For example: Don't say: "Your sugars are bad so I'm sending you to the dietitian." Say instead: "Making changes in eating habits is not easy. I think it would be very helpful if you could make an appointment with a registered dietitian and discuss your diet changes."

Registered dietitians work in area hospitals, community health centres, and privately in clinics. Many are Certified Diabetes Educators (CDE) and teach at various Diabetes Education Programs. The hospitals which have programs include the Ottawa Hospital: Riverside, General, and Civic campuses, as well as the Queensway-Carleton Hospital. A list of these Diabetes Education Programs is available from the Ottawa and District Branch of the Canadian Diabetes Association (613) 521-1902.

Usually, there is a waiting period (on average one month) to see a registered dietitian in a hospital, either for individual or group counselling. There are several registered dietitians, who are also Certified Diabetes Educators, who work in private practice and are able to see individuals sooner but for a fee. Some third party health care plans cover this fee. For further information, please contact:

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References:

1. 1998 Clinical practice guidelines for the management of diabetes in Canada. Supplement to Canadian Medical Association Journal, October 1998, 159(8 suppl).
2. Guidelines for the Nutritional Management of Diabetes Mellitus in the new millennium: Highlights from the Canadian Diabetes Association Position Paper. Canadian Diabetes., Fall 1999., Volume 12, No. 3.

Attached is a copy of the "Nutrition Guidelines for Type 2 Diabetes" which can be used for patient counselling, prior to diet counselling with a registered dietitian.