



# SELF-MONITORING OF BLOOD GLUCOSE

## FOR PEOPLE WITH TYPE 1 AND TYPE 2 DIABETES

### ISSUE

There has been some recent debate in the diabetes care community regarding the importance and value of self-monitoring of blood glucose (SMBG) among people with Type 2 diabetes.

### MEDEC'S POSITION

#### Testing and Monitoring Blood is a Critical Component of Diabetes Management

Effective diabetes management focuses on the prevention of complications particularly through control of glucose levels. Regular blood tests (particularly HbA1c and self-monitoring) are the most effective method of assessing glucose control. Lowering HbA1c reduces microvascular and macrovascular complications. Tight glycemic control can reduce complications in Type 1 and Type 2 diabetes.

It is important to understand that self-monitoring of blood glucose is an educational tool that should be used in conjunction with a comprehensive diabetes management plan that includes:

- Patient education in techniques and blood glucose level targets
- Specific recommendations on frequency and timing
- Identifying hypoglycemic and hyperglycemic patterns
- Healthcare follow-up based on results with specific recommendations for responding to out-of-target blood glucose values

#### Knowledge Promotes Better Judgement

People with Type 2 diabetes benefit from SMBG by understanding the effects of medication, food intake, exercise, illness, stress, travel, etc. on their glucose levels. With a blood glucose monitor, they are equipped with an effective device that allows them, in conjunction with their health care professional, to act to bring their glucose levels to the target zone.

Effective diabetes management focuses on the prevention of complications particularly through control of glucose levels.

However, good and consistent control is difficult to achieve for a variety of reasons. Diabetes is a chronic and primarily self-managed disease requiring both medical management and challenging lifestyle modification. SMBG serves to improve patients' ability to adhere to recommendations, modify their food intake and maintain motivation for doing so.

It's a simple fact that people with either Type 1 or Type 2 diabetes are unable to predict their blood glucose levels accurately without monitoring devices.

## MEDEC'S POSITION (CONTINUED)

### Several Studies Urge SMBG

Part of the reason for a debate on the value of SMBG for non-insulin-using Type 2 diabetics stems from the difficulty of designing and conducting studies that demonstrate the link between the SMBG and improvements in glucose control because of all the variables involved.

One of the most important examinations of SMBG is contained in the Canadian Diabetes Association's 2003 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. The section on SMBG provided specific recommendations for the

frequency of testing and conditions of use, recognizing the value to overall diabetes management. This was developed in conjunction with a thorough appraisal and evaluation of the relevant literature. Guidelines were developed and reviewed by an Expert Committee of 61 members representing key stakeholders.

In addition to the 2003 CDA publication, a number of guidelines and recommendations for SMBG have been developed worldwide including the ADA, IDF, AADE, AACE/ACE, AAFP, and WHO. They all support SMBG testing at various levels as a part of effective diabetes management.

## BACKGROUND OVERVIEW

Diabetes is an increasingly common chronic disease, and a leading cause of heart disease. More than 2 million Canadians have diabetes and this is expected to increase to over 3 million by the end of the decade.

Diabetes has many serious complications, which are all impacted by persistently elevated blood glucose levels. Diabetes and its complications cost the Canadian healthcare system an estimated \$13.2 billion every year.

## EFFECTIVE DIABETES MANAGEMENT FOCUSES ON THE PREVENTION OF COMPLICATIONS PARTICULARLY THROUGH CONTROL OF GLUCOSE LEVELS.

## ABOUT MEDEC

- MEDEC is the national industry association representing medical device and diagnostic companies. Our members are dedicated to serving the healthcare community through research and development and the provision of high quality medical products and services that benefit Canadians – safely and efficaciously.
- MEDEC members are committed to advancing healthcare in Canada by ensuring patients have access to safe medical device technologies.
- Member companies represent a range of medical devices such as operating room devices and hospital equipment, as well as medical specialties such as cardiovascular, orthopaedic, ophthalmic, diabetes, and in-vitro diagnostics.
- MEDEC's mission is to strengthen and grow the industry in Canada by working closely with governments, medical associations and the public to establish an environment that supports the adoption of new technology from both regulatory and reimbursement perspectives.
- MEDEC members are committed to the highest standards of professional conduct. MEDEC has designed and adopted a Code of Conduct to promote ethical business practices and socially responsible industry conduct to govern interactions with healthcare professionals.