



"Psychology Works" Fact Sheet: Diabetes

What is diabetes?

Diabetes is a well-understood disease that results from either pancreatic beta cell failure (Type 1 diabetes) or insulin resistance (Type 2 diabetes).

According to Health Canada, in 2008/09 6.8% of Canadians are living with diabetes. Using data from blood samples, about 20% of those with diabetes are undiagnosed. The overall prevalence is higher in males (7.2%) than females (6.4%).

The majority of Canadians with diabetes have Type 2 diabetes (90%), which is strongly associated with obesity, inactivity, and unhealthy eating patterns.

Between 1998/99 and 2008/09 the prevalence of diabetes among Canadians increased by 70%. At this rate, it is estimated that 3.7 million Canadians will be living with diabetes by 2018/19.

Prediabetes has recently been added as a diagnostic category. Although prediabetes is not Type 2 diabetes per se, it reflects the beginning process of insulin resistance. Evidence suggests that taking action early can delay the onset of Type 2 diabetes.

The key to living well with diabetes is to avoid problems which arise from prolonged hyperglycemia (elevated blood glucose levels) or repeated episodes of hypoglycemia (low blood glucose levels).

In order to achieve a balance, individuals with diabetes must regulate their behavior on a daily basis.

How is diabetes treated?

Many people think that diabetes treatment is very straightforward once the right amount of medication or insulin has been determined. Unfortunately, management is much more complicated.

The treatment of diabetes includes following a daily routine of medication or insulin usage, self-testing blood glucose levels multiple times per day (twice a day if on pills and four times per day if on insulin), and a specific diet and exercise/activity.

All of these tasks must be performed multiple times per day in a highly coordinated fashion. Diabetes is a disease that is managed primarily by a complicated regime of self-care behaviour.

Diabetes self-care is difficult for a number of reasons. For example, the demands of diabetes self-management can be overwhelming. Ideally, when people learn new and complicated routines they try out new behaviours in a gradual way, eventually making them part of the new routine.



Yet, with diabetes, the individual must quickly learn a large number of new behaviours and they must begin performing them all immediately and at once (e.g., the newly diagnosed individual is instructed in self-testing, dietary modifications, medication/insulin usage, and exercise at a minimum).

Further, diabetes self-care is complex involving the multiple impacts of several factors that work in opposite directions. For example, activity, insulin and the passage of time lower blood glucose, whereas food and stress elevate blood glucose.

In general, research shows behaviour changes occur best when simple changes are made first and change occurs gradually over time. However, the individual with diabetes has to try to manage all of the factors simultaneously and right away.

Another principle of successful behaviour management is the opportunity to take breaks or "time out" from difficult tasks. However, there are no weekends off, no vacations, and no retirement. The demands of diabetes self-care are constant.

Finally, diabetes management can be frustrating because effort does not always produce predictable results. There are times when individuals do all that they are asked and still their control is not what they expect.

What can psychologists do to help people with diabetes?

Psychologists can play a valuable role in helping people live well with people with diabetes. Diabetes presents a significant challenge and stress for people with diabetes and those around them.

Psychologists are well trained in behaviour change interventions. They understand the problems in diabetes self-care and can help the individual to overcome the difficulties and to change their behaviour.

In addition to the behavioural demands of diabetes there are emotional and social problems that can arise. Diabetes is often perceived as a burden.

It can be hard to accept the disease and feelings of depression (feeling overwhelmed), anxiety (fear of complications or hypoglycemia) and frustration (with the demands of self-care or the medical system) are common.

Recent research has identified the concept of diabetes distress, which is specific to diabetes and can be measured in terms of emotional burden of living with diabetes, distress associated with the tasks of diabetes care, distress associated with relationship challenges involving family/friends as well as healthcare providers.

Young people, especially young women with Type 1 diabetes, are at risk for developing eating disorders (weight loss through insulin omission).



Many individuals with Type 2 diabetes resist going on insulin due to psychological issues (such as fear of insulin or feelings of failure due to the inability to control blood glucose with medication and lifestyle factors).

Social problems can result from diabetes as well. Many individuals who do not have diabetes find it difficult to understand the needs of someone with diabetes. Even if they mean well, often those without diabetes act in ways that are not supportive. For example, friends can encourage a person with diabetes to eat something they shouldn't because "once can't hurt".

Psychologists work with individuals with diabetes in a number of ways. They can help the newly diagnosed individual to understand the impact of this diagnosis and their role in managing it. They can problem solve to help them learn the daily behaviours needed for successful maintenance.

They are trained to recognize and treat psychological distress including depression and anxiety that can develop when living with an unpredictable disease.

Psychologists can be helpful in assisting the individual to develop and maintain the motivation needed to follow the daily routine of self-care. As well, family therapy and strategies to deal with social pressures are often beneficial to those with diabetes and their loved ones.

Are psychological interventions effective?

A number of research studies have evaluated the role of psychological interventions in diabetes. Behaviour change interventions have been shown to be helpful in improving self-care and diabetes control. A recent study of Type 2 diabetes demonstrated the importance of stress management.

Reducing depression and anxiety has also been shown to help improve the quality of life of those with diabetes. Further, recent studies have shown that psychological interventions can also improve motivation to perform the self-care behaviours.

Where do I go for more information?

The following websites provide useful information on diabetes and self-care:

- Canadian Diabetes Association at <http://www.diabetes.ca>
- American Diabetes Association at <http://www.diabetes.org>

You can consult with a registered psychologist to find out if psychological interventions might be of help to you. Provincial, territorial and some municipal associations of psychology often maintain referral services. For the names and coordinates of provincial and territorial associations of psychology, click <http://www.cpa.ca/public/whatisapsychologist/PTassociations/>.



This fact sheet has been prepared for the Canadian Psychological Association by Dr. Michael Vallis, Capital District Health Authority and Dalhousie University.

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Your opinion matters! Please contact us with any questions or comments about any of the *Psychology Works* Fact Sheets: factsheets@cpa.ca

Canadian Psychological Association
141 Laurier Avenue West, Suite 702
Ottawa, Ontario K1P 5J3
Tel: 613-237-2144
Toll free (in Canada): 1-888-472-0657