



"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 (<https://www150.statcan.gc.ca/n1/pub/82-625-x/2018001/article/54982-eng.htm>), 7.3% of Canadians over 12 have diabetes.

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

In 2017, an estimated 425 million people worldwide had diabetes, with estimates that the number of people with diabetes in the world will reach 629 million by 2025 (International Diabetes Federation Atlas, 2017 (www.diabetesatlas.org))

Prediabetes is a diagnostic category, which, although not Type 2 diabetes per se, it reflects the beginning process of insulin resistance and is associated with metabolic risk (especially macrovascular risks). Evidence suggests that taking action early, especially health behaviour change, 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.

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 diabetes. Diabetes presents a significant challenge and stress for diabetics and those around them. There are a number of psychological aspects of living with diabetes that interfere with function, health and quality of life. In specific, diabetes distress is a recently validated construct that refers to distress associated with the emotional burden of diabetes, the regimen of diabetes self-management, as well as interpersonal distress associated with relationships with family and friends and relationships with healthcare providers. Fear of hypoglycemia is another important psychological consequence for many people living with diabetes, as is what has come to be called psychological insulin resistance. All of these diabetes-specific psychological issues place the individual at increased risk for depressive disorders.

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

Psychologists are well trained in emotion management and behaviour change interventions. They 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.

Psychologists 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 diabetes distress, 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.

The Clinical Practice Guidelines from Diabetes Canada recommend psychological screening and support for all individuals living with diabetes. Further, diabetes self-management education is based on motivational and behaviour change interventions.

Where do I go for more information?

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

- Diabetes Canada at <http://www.diabetes.ca>
- American Diabetes Association at <http://www.diabetes.org>
- International Diabetes Federation at <https://www.idf.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/>.

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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

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