

# Understanding Prediabetes

Did you know that in Canada, 6.1% of adults over the age of 20 have prediabetes? Having prediabetes increases the risk of progressing to Type 2 diabetes (T2D). However, there are lifestyle changes that can reduce this risk.

Prediabetes occurs when blood sugar levels are higher than normal but are not yet high enough to be classified as T2D. T2D is a chronic condition where the body is unable to use insulin properly, leading to high blood sugar that may result in other complications like heart disease or nerve damage.



## What causes prediabetes?

Our body uses blood sugar (glucose) for energy. After eating, our body breaks some of the food we eat down into glucose. The hormone insulin then helps move the glucose into our cells to be used for energy. In prediabetes, insulin does not work as well as it used to. This leads to higher blood sugar levels resulting in prediabetes. Often, there are no physical symptoms of prediabetes.

Prediabetes can develop into T2D. However, progression is not inevitable and making changes sooner can reduce the chances of developing T2D.

For people with prediabetes, it is important to know that blood sugar levels are affected by what and when you eat. Tips for eating to manage blood sugars include:

1. Limit juices and drinks with added sugar: Choose whole fruit or flavour water with lemon or lime.
2. Eat 3 meals a day, with about 4 to 6 hours between meals. This can manage blood sugar and feelings of hunger.
3. Build your plate according to Diabetes Canada: Cover half your plate with vegetables, such as broccoli, spinach, and cabbage. Cover another quarter of your plate with whole grain products or starchy vegetables such as potatoes, corn, and yams. Put protein foods on the remaining  $\frac{1}{4}$  plate such as lentils, tofu, meat, fish, and eggs. Visit [diabetes.ca/nutrition](https://diabetes.ca/nutrition) to find the healthy eating section with additional tips.

4. Choose foods with fibre: Fibre slows down digestion and helps maintain stable blood sugar levels. Include whole grains like oats, quinoa, and barley along with vegetables and fruits to boost your fibre intake. Aim for 30 grams or more per day. Visit [ahs.ca/nutritionhandouts](https://ahs.ca/nutritionhandouts) and search Fibre for more information about foods with fibre.



5. Choose unsaturated fats: Prediabetes increases the risk of developing heart disease. Replacing saturated fat in the diet with unsaturated fat can help decrease this risk. Unsaturated fat can also help improve insulin sensitivity.

- Foods high in unsaturated Fats:
  - Soft margarine
  - Oils: canola, olive, peanut, sunflower
  - Avocado, nuts and seeds, nut butters
  - Ground flax seeds, chia seeds, or hemp seeds
  - Fish instead of other animal proteins
- Foods high in Saturated Fats:
  - Coconut oil, lard, butter, hard margarine
  - Red meat, deep fried foods, processed cheeses
  - Cream and ice cream

## Getting active to prevent prediabetes

Physical activity is a powerful tool in managing prediabetes. Physical activity helps your body use insulin to lower blood sugar levels. Start slowly and build up to 30 minutes each day, 5 to 7 days a week. Brisk walking, swimming, cycling, or any other activity you enjoy is a great place to start. Resistance training such as lifting weights or bodyweight exercises can also be beneficial for building muscle and improving blood sugars.

Remember that physical activity is cumulative and does not need to be completed in one session. Even a brief 10-minute walk after a meal has been shown to improve blood sugar levels. For more information visit [csepguidelines.ca](https://csepguidelines.ca).

Excess body weight is a factor that may contribute to having prediabetes and the development of

T2D. A reduction as little as 5% of initial weight can greatly reduce the risk of developing T2D for example for a person who weighs 90 kg (200 lb), 5% weight loss would be 4.5 kg (10 lb). Rather than focusing on rapid weight loss, aim for gradual, sustainable changes. Visit [ahs.ca/nutritionhandouts](https://ahs.ca/nutritionhandouts) and search Eating Well for Weight and Health to learn more about weight management.

Making changes can help reduce risk while still maintaining an enjoyable lifestyle. However, change can be hard, especially if we try to make too many changes too fast. Set achievable goals and take small, gradual steps to ensure that your approach is sustainable.

Consider ways to support your health that work for you and seek guidance from healthcare providers for personalized advice.

## Wellness Articles

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