

Ketogenic diet and diabetes

The ketogenic (keto) diet is a very low carbohydrate, moderate protein, high fat diet. While some short-term benefits have been shown for people living with diabetes following a keto diet, more research is needed on the long-term effects and safety. If you are thinking of trying a keto diet, talk with your healthcare provider about it first, especially if you are pregnant or living with other chronic health conditions in addition to diabetes.



Principles of the keto diet:

1 High fat, moderate protein, very low carbohydrate eating pattern

2 Eliminates most foods with carbohydrate

3 Low carbohydrate intake forces the body to use fat to produce fuel (ketones produced and used instead of glucose)

Potential benefits of keto diet:

- Short-term studies show benefits for people with type 1 including improved A1C and reduced insulin needs
- Short-term benefits for people with type 2 include improved A1C, weight loss and reduced medication use
- Long-term benefits and risks of this eating pattern are still unknown for people living with diabetes. More research is required.

Things to consider

Risk of hypoglycemia and/or hyperglycemia: Very low carb intake can lead to low blood sugar and make traditional treatment methods less effective. Speak to your healthcare team before making any changes to medication or insulin to prevent risks of too high and too low blood sugar.

Vitamin & mineral deficiencies: Reducing whole grains and fruit can lead to nutrient deficiencies depending on dietary choices made. Try to include a variety of low carb foods to help reduce the risk of deficiencies.

Low fibre intake: Reducing carb containing foods can lead to a low fibre intake. Fibre is important for digestion and disease prevention so choose low carb options that are high in fibre where you can.

Increased risk of heart disease: The higher fat intake in this eating pattern can increase risk of heart disease. Look to limit saturated fat and focus on healthier unsaturated fat sources.

The balanced plate vs keto diet

	Balanced Plate	Keto Diet
CARBOHYDRATES	45% to 60%	20%
PROTEIN	15% to 20%	30%
FAT	20% to 35%	50%

Note: This table highlights the major differences between the recommended way of eating while living with diabetes and the keto diet. The balanced plate eating pattern encourages variety from different foods making it easier to meet nutrient requirements and maintain over the long-term.

References:

www.guidelines.diabetes.ca, www.ncbi.nlm.nih.gov

The bottom line

- People with diabetes following a keto diet should seek support from a dietitian to create a safe, culturally appropriate and sustainable plan.
- Following a keto eating pattern can be done in a healthy way when choices are low in saturated fat and high in vitamins, minerals and fibre.

