

The What, Why, and How of Diabetes Monitoring

What Needs to be Measured?	Why?	How Often?
Weight	<p>Achieving and maintaining a healthy weight has many health benefits including:</p> <ul style="list-style-type: none"> improved control of your blood sugar, blood pressure, cholesterol, and overall diabetes management reduced risk for cardiovascular disease and complications such as heart attack and stroke improved energy, and well-being 	Weight should be monitored by a member of your healthcare team at least every 3 months.
BMI	<p>The Body Mass Index (BMI) is a method of estimating your body fat levels based on your weight and height. While it may not be the most accurate way to determine body fat, it is a quick and easy way to determine whether an individual is underweight, overweight, or within a healthy range for their age, and height. For most adults, a BMI of 25 or higher is overweight, which increases the risk of health problems such as diabetes, and heart disease.</p>	BMI should be determined by a member of your healthcare team at least every 3 months.
Waist Circumference	<p>Waist circumference helps determine the health risks associated with excess fat around the waist. A waist circumference of 102 cm or higher in men, and 88 cm or higher in women is associated with diabetes, heart disease and high blood pressure</p>	Waist circumference should be measured by a member of your healthcare team at least every 3 months.
A1C	<p>A1C is a blood test that measures your average blood sugar levels over the past two to three months. A1C is like a report card for your blood sugars. It provides a more accurate picture of how well your diabetes management plan is working. The goal for most people with diabetes is an A1C of less than or equal to 7%. However, your A1C goal may be different, and should be discussed with your healthcare team. Studies have shown that reducing your A1C closer to your target will reduce your risk of heart disease, kidney disease, eye problems, nerve damage, and foot problems.</p>	For most people with diabetes, an A1C blood test should be done every 3 months.
Glucose Meter/Lab Comparison	<p>It is important to ensure your glucose meter is calibrated and producing accurate home blood sugar readings. This calibration is done by comparing blood sugar readings from your machine, against readings from a lab test, to ensure results are within 15% of each other.</p>	Calibration of your glucose home monitoring machine should be done once a year.

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Immunizations	It is important to get your influenza/flu vaccine once every year. As well, speak to your doctor about getting a pneumococcal vaccine; you only need to get it once, with a repeat booster vaccine if you are older than 65 years of age. These are to keep you healthy, because diabetes puts you at greater risk of certain infections.	Once a year for the influenza vaccine. One time for the pneumococcal vaccine, and one booster if you are older than 65.
Blood Pressure (BP)	Blood pressure is the pressure put on your blood vessels, when the heart pumps blood. The top number is the pressure when your heart contracts/pumps, and the bottom number is the pressure when the heart relaxes and fills with blood again. Target blood pressure for people with diabetes is less than 130/80 mmHg. High blood pressure increases your risk of many health problems such as heart attack, heart disease, stroke, kidney damage, eye problems, and sexual dysfunction.	Your healthcare provider should check your blood pressure at every visit. You can also check your blood pressure at home, which, if done properly, is a better reflection of your usual blood pressure.
LDL-C and Non-HDL cholesterol	These blood test measures the amount of “bad” cholesterol, that can build up in your arteries, increasing your risk for heart attack and stroke. The targets for most people with diabetes are an LDL-C of less than 2.0 mmol/L and Non-HDL of less than 2.6 mmol/L. You can lower your cholesterol through both medications and your diet!	If at target, your LDL-C should be measured once a year. If not at target, your cholesterol should be measured at every visit with your primary healthcare provider.
eGFR	eGFR or Estimated Glomerular Filtration Rate is a lab test to see how well your kidneys are functioning. An eGFR of less than 60mL/min may suggest that you have kidney disease/damage. It is important to know how well your kidneys are working, because it can affect which medications are safe to take, and what dose is most appropriate for you.	This kidney test is usually done upon diagnosis of diabetes, and then once a year thereafter. If you have kidney disease (eGFR < 60) you may need to have this test done more often.
ACR	ACR is another kidney test that is used to detect kidney damage in people with diabetes. It is a urine test, that measures the amount of a protein called albumin in your urine. A certain level of albumin in your urine may be a sign of kidney damage. Note: ACR can be falsely elevated with a bladder infection or menstruation so don't have it done during these times	ACR urine test is usually done upon diagnosis of diabetes, and then once a year thereafter.
Eye Exam	Over time, diabetes can cause damage to the blood vessels in the back of the eye, which can lead to blindness. Eye damage (also known as “diabetic retinopathy”) is best detected with something called a dilated eye exam. Diabetes can also increase your risk of other eye problems such as macular edema and cataracts, which your eye doctor can test for as well.	An eye examination, including a dilated eye exam should be done upon diagnosis of diabetes, and then once a year thereafter.

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Foot Exam	Diabetes can cause nerve damage and poor blood flow to the legs, which can result in foot injuries that are difficult to feel/detect, and are more difficult to heal. Unnoticed and untreated foot injuries can become infected and lead to more serious complications such as foot amputation. Your healthcare provider should perform a foot exam to check for changes in the shape and sensations of your feet, as well as for infections, ulcers, warts, callouses and corns.	A foot examination should be done at least once a year by a healthcare professional.
Nutrition Goals	Healthy eating is an important part of managing your diabetes, and can provide many additional benefits such as weight loss, reduced cardiovascular risk, and improvements to your overall health. Canada's Food Guide can be consulted for strategies to improve your nutrition. You can also speak with your healthcare provider, for referral to a registered dietitian.	Nutrition goals should be reviewed with your healthcare team every 3 months.
Physical Activity Goals	Physical activity is important in the management of diabetes as it has been shown to facilitate weight loss, improve glycemic control and reduce risk of heart disease and other diabetes complications. You should aim for 150 minutes of aerobic activity per week, and at least 2-3 days of resistance training. To avoid injury, start slow, and work your way up to Diabetes Canada's recommended physical activity targets!	Physical activity goals should be reviewed with your healthcare team every 3 months.