

# PATIENT EDUCATION AND RESOURCES

## Information for Patients

### I have diabetes. What can I do?

---

'Remember the ABCDE's'. Also see the resources on page 2.

#### **A** A1C–Blood Glucose Control:

Good control of blood sugar levels can benefit in many years of improved health. Talk to your care provider about how to control and check your blood sugar. Your care provider may prescribe medications and/or insulin for you.

#### **B** Blood Pressure:

High blood pressure can lead to eye disease, heart disease, stroke and kidney disease, so people with diabetes should try to maintain a blood pressure level below 140/90. You may need to change your eating and physical activity habits and/or take medication.

#### **C** Cholesterol:

High cholesterol usually means high LDL cholesterol. People with diabetes have an increased risk of cardiovascular disease, like a stroke, even if their LDL is 'normal' and can have even higher risk if it is high. Healthy eating, weight management, and regular physical activity can help you lower your LDL cholesterol, but your care provider may also discuss medication to help you reach your goals.

#### **D** Drugs (medications):

Your care provider may discuss medications with you that can help protect your heart.

#### **E** Exercise and Healthy Eating:

Regular physical activity helps your body lower blood sugar levels, promotes weight loss, reduces stress and enhances overall fitness. What, when, and how much you eat all play an important role in regulating blood sugar level.

#### **S** Smoking Cessation:

People with diabetes who smoke may have increased risk of heart attack, stroke, and poor glucose control. Talk to your care provider about ways to quit smoking or see [www.quitnow.ca](http://www.quitnow.ca) or call 1 877 455-2233 (toll free in BC).

### What is hypoglycemia?

---

Hypoglycemia means that your blood sugar level has dropped to less than 4 mmol/L and it can be dangerous. It can be caused by:

- Doing more physical activity than normal
- Not eating on time or enough
- Taking too much of your diabetes medication
- Drinking alcohol

### What are the symptoms of hypoglycemia?

---

- Dizziness, shakiness
- Sweating
- Weakness, drowsiness
- Intense hunger
- Headache
- Looking pale
- Sudden moodiness or behaviour changes
- Confusion
- Faster heart rate
- Tingling or numbness on your tongue or lips

If you have any of these symptoms, check your blood sugar levels right away. If you don't have your meter with you, play it safe and treat the symptoms anyway.

### How do I treat hypoglycemia?

---

Eat or drink a fast-acting carbohydrate. The best choice is 15g of glucose tablets or gel (dextrose made from starch) or sucrose (table sugar made from cane or beet sugar) tablets or solution. If this is not available, try:

- 15ml (3 tsp) or 3 packets of table sugar dissolved in water
- 175ml (3/4 cup) of juice or regular soft drink
- 6 Life Savers® (1=2.5g of carbohydrate)
- 15ml (1 tbsp) of honey
- If you are taking Acarbose medication, use glucose (dextrose) or honey or milk to treat hypoglycemia. Avoid sucrose (table sugar).

Hypoglycemia happens to everyone with diabetes from time to time, even if you're doing all you can to manage your diabetes. But if you have hypoglycemia often, it may mean your medication needs to be adjusted. Be sure to talk to your doctor and always wear your MedicAlert® identification. For information on MedicAlert® see the resources section.

## Carbohydrates and GI Index

---

Carbohydrates are the sugars and starches in foods that your body uses for energy. They are found in grains and cereals, dried peas and beans, fruits and vegetables, milk and yogurt, as well as sugar and sugar-containing foods. Some carbohydrates are broken down and absorbed quickly while others are broken down slowly.

The glycemic index (GI) is a system of grouping carbohydrate foods based on how they affect your blood sugar levels. See the GI index guide on page 3.

## What are the benefits of using low GI foods?

---

- Can help to 'even out' the highs and lows (more stable blood sugar)
- Can lower triglycerides & 'bad' cholesterol and may help your 'good' cholesterol
- May help you feel full for longer & eat less at the next meal or snack

### Helpful Tips:

Introduce low GI foods gradually - include at least one low GI food at each meal and monitor their effects on your blood sugar level. A high GI food & a low GI food make an intermediate GI meal.

Eat a variety of foods each day – do not exclude foods based only on the GI value. High GI foods are still good sources of energy.

- Watch the amount of carbohydrates you eat at each meal and snack.
- Check your blood glucose before & after meals to see if you are eating the right amount and type of carbohydrate.
- Aim to keep your blood glucose between 5 & 10 mmol/L one to two hours after meals.
- Choose low GI foods more often but remember that eating large amounts of low GI foods can still make blood glucose levels too high.

## Low GI Menu Ideas

See below for meal suggestion and the brief GI index reference guide.

### Breakfast

- Use a low GI bread or cereal (see GI reference guide), low fat milk and fruit.
- Old fashioned oats with low fat milk and fruit.
- Poached egg on multigrain toast with a fresh orange.

### Lunch Break

- Soups and sandwiches with a green salad or raw vegetables offer quick lunch solutions all year round.
- Sandwich made with a sprouted grain bread. Fill with tuna, salmon, lean meat or chicken; add lettuce, sprouts tomatoes &/or cucumber.

### Dinner

- Base your meal on a low GI starch. Add plenty of vegetables & keep protein portions moderate
- Grilled lean meat, chicken or fish (2-4 oz, 120g). Serve with green vegetables and 2/3 cup brown rice.
- Vegetarian chili and a green salad with low fat salad dressing.

### Snacktime

To keep your energy up between meals, try the following nutritious snacks:

- Low fat yogurt with fresh fruit and a couple almonds.
- Whole wheat pita and hummus.
- Stoned wheat thins or Ryvita™ with low fat cottage cheese.

## Resources:

---

**HealthLink BC** website at [www.healthlinkbc.ca](http://www.healthlinkbc.ca) or call 8-1-1 (for TTY call 7-1-1).

**Canadian Diabetes Association** website at [www.diabetes.ca](http://www.diabetes.ca) or call toll free 1 800 226-8464 for further information.

**Canada's Food Guide** offers healthy eating tips and is available in multiple languages. See <http://healthycanadians.gc.ca>.

For assistance to quit smoking, see [www.quitnow.ca](http://www.quitnow.ca) or call 1 877 455-2233 (toll free in BC).

Your care provider may refer you to a local **Diabetes Education Centre**. Some centres accept self referrals. These centres have courses and information to help you manage your diabetes. In some parts of the province there are a number of other professionals who may assist you in the management of diabetes (**A Diabetes Team**). Members of your diabetes team may include: a physician or nurse practitioner, a nurse educators, nutritionists &/or specialists (example eye &/or foot doctors). Your care provider will provide a referral if necessary.

<b>A brief GI index reference guide</b>			
	<b>Low GI Foods (55 or less) These give a slow rise in blood glucose levels</b>	<b>Medium GI Foods (56-69) These give a medium rise in blood glucose levels</b>	<b>High GI Foods (70+) These give a quick rise in blood glucose levels</b>
<b>Breads</b>	Heavy mixed grain 100% Stone ground whole wheat Pumpernickel Sprouted grain** (Silver Hills™, Healthy Way™) Corn tortilla	Whole wheat Pita Rye Barley flour bread Chapatti or Roti Whole wheat tortilla	White bread White bagel Kaiser roll Mantou (steam buns)
<b>Cereals</b>	All Bran original™ Bran Buds with psllium™ Steel cut or large flake oats Oat bran Red River™	Raisin Bran™ Bran Chex™ Grapenuts™ Life™ Shredded wheat™ Quick cooking oats	Bran flakes Cornflakes Cheerios™ Rice Krispies™ Rice Chex™ Instant cream of wheat
<b>Rice, Pasta &amp; Other Grains</b>	Parboiled or converted rice Barley Bulgar (cracked wheat) Buckwheat/Kasha Bean thread noodles Pasta (al dente) Mung bean noodle Appam or Idiappam Quinoa Wheat kernel	Basmati rice Brown rice Corn meal Couscous Wild rice Soba noodle Rice noodle Rice vermicelli Udon	White rice Jasmine rice Glutinous rice Short grain rice Instant rice Sticky rice Millet Chinese Northern white noodle Plain steamed glutinous rice roll
<b>Starchy vegetables</b>	Sweet potato Yams Taro Plantain, green Cassava	New or white potato Breadfruit Sweet corn Plantain, ripe	Baking, Russet, Idaho potatoes Instant potatoes French fries
<b>Other</b>	Legumes (Chick peas, Chana dal, kidney beans, lentils, soy beans, split peas, baked beans) Dhokla (steamed cake of wheat and chickpea flour)	Black bean soup Green pea soup Oatmeal cookies Ryvita™ crisps Stoned Wheat Thins™ Popcorn Oatcakes Digestive biscuit	Vanilla wafers Rice cakes Soda crackers Pretzels Melba toast Graham wafer
GI values are as a percentage of value of glucose. GI of glucose =100. Note: sprouted grain breads likely have low GI due to composition but not all varieties have been tested.			

Table adapted from:

- Foster-Powell K, Holt SHA, Brand-Miller JC. International table of glycemic index and glycemic load values Am J Clin Nutr. 2002;76:5-56 - As cited by <http://www.diabetes.ca/diabetes-and-you/healthy-living-resources/diet-nutrition/the-glycemic-index>
- Glycemic Index and Diabetes, Patient Handout <http://vch.eduhealth.ca/PDFs/FL/FL.860.G525.pdf>