Easy-to-understand information about your diabetes medications

• How they work
• What you should know
• What to ask your doctor

www.diabetes.ca  1-800-BANTING
(1-800-226-8464)
Knowledge is good medicine

Diabetes management depends on understanding your medications

by Morna Cook BScPh

We know that more than two million Canadians have diabetes. We also know that about half of these individuals already had the disease for several years before they were diagnosed, and 20 to 30 per cent already have complications affecting their eyes, kidneys, feet or heart. Studies show that even modest reductions in blood glucose levels can help delay or even prevent these complications.

When you learn that you have diabetes, you need to make immediate changes. Choose healthier foods and increase your activity level. Work toward long-term targets for your weight and physical activity level. You’ll not only improve your heart and lung fitness, you’ll reduce your blood glucose levels and insulin resistance, maintain a healthy weight, and improve your emotional and physical well-being.

Experts agree that reducing your A1C to 7% (6%, if safely achievable) or lower in six to 12 months and keeping it at that level will give you the best chance for a healthy future. The A1C (or glycated hemoglobin) test gives you an average of your overall blood glucose levels over the past three months. It’s useful because it gives a picture of your overall diabetes control.

To achieve the goal of an A1C 7% or lower, your doctor may want you to start using prescription medications because they’re good tools to help you manage your blood glucose, blood pressure and cholesterol levels. Use the targets that your diabetes care team determines are right for you as your signposts to continued good health.

Unfortunately, studies show that diabetes is a progressive disease that, with time, usually requires more intervention to maintain glucose control. Over time, your body and your blood glucose targets may change and so may your medications. Don’t feel that you have somehow failed when you need to change your medications; you’re merely responding to your body’s evolving needs. Also, as researchers learn more about the disease, new medications will be developed, offering more options to people who have the disease.

It is important to be an informed consumer of your diabetes medications. This guide will answer some of your questions and may even help you formulate other questions you may want to ask your healthcare team. Knowledge is powerful medicine, indeed!

Other places to look for more information include the Canadian Diabetes Association’s 2003 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada (found at www.diabetes.ca/cpg2003), which the healthcare professionals on your diabetes management team follow. Other websites worth checking include Canada’s Physical Activity Guide to Healthy Active Living at www.healthcanada.ca/paguide and Canada’s Food Guide to Healthy Eating at www.healthcanada.ca/foodguide.
Monitoring blood glucose levels
Blood glucose levels are commonly measured in two ways — with a laboratory blood test and by self-monitoring with a blood glucose meter. The A1C laboratory test is a measurement of the average of your blood glucose levels over the previous three months. The table below lists the recommended targets for A1C and blood glucose levels determined through self-monitoring.

Treating high blood glucose levels
To lower blood glucose levels, lifestyle modifications are important and provide benefits beyond managing diabetes. However, lifestyle changes alone are often not enough to lower blood glucose levels to the recommended targets. If healthy eating and increased activity do not bring your blood glucose levels to target within two or three months, the Canadian Diabetes Association’s Clinical Practice Guidelines recommend starting drug therapy. The longer that blood glucose levels stay above a healthy level, the higher the risk of developing complications.

If you have type 1 diabetes, you will always require insulin. If you have type 2 diabetes, you will be asked to make lifestyle changes and may be treated with pills and/or insulin. As type 2 diabetes results from both insulin resistance (the body’s inability to use insulin properly) and insulin deficiency (due to the pancreas’ inability to secrete enough insulin), it often requires treating both problems. For this reason, you may need two or three medications to manage your blood glucose levels.

The Clinical Practice Guidelines recommend the following approaches to managing high blood glucose levels in type 2 diabetes. The goal: to lower your A1C to 7% or lower within 6 to 12 months.

Getting off to a good start
When you find out that you have diabetes, your doctor will choose medications based on how high your blood glucose levels are. If they’re very high (an A1C of 9% or above), it’s important to quickly lower them to the target of 7% or lower; this requires immediate treatment with at least two pills or insulin. If pills are preferred, the Clinical Practice Guidelines recommend using two pills from different classes of oral diabetes medications such as, metformin and an insulin sensitizer.

If your A1C is below 9%, metformin is recommended alone or in combination with a medication from another class, preferably an insulin sensitizer. Other classes of medication may be added or substituted, depending on your response to therapy and whether you had any side effects.

The longer you have diabetes, the more challenging it becomes to maintain optimal blood glucose management. Your treatment will need to be adjusted and intensified over time.

Cynthia Lank is a freelance editor and writer in Halifax, Nova Scotia. She was the executive editor of the Canadian Diabetes Association’s 2003 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada.

 Shoot for the goal
Diabetes treatments aim to lower blood glucose and reduce complications

By Cynthia N. Lank
Tip

Schedule regular appointments with your physician. Report any new symptoms, including mood changes as depression occurs at a higher rate in people with diabetes.

How to Use This Table

1. Find the name of your medication in the list below. (Both generic and brand names are listed.)
2. Turn to the page beside your medication name. Each medication belongs to a drug family, or class. Medications that have similar actions in the body are grouped in the same drug class. This guide provides information on drug classes as well as on the medications within each class.

My prescription label says............Turn to page X

- Acarbose®..........................................................................page 7
- Actos® ................................................................................page 5
- Amaryl®..............................................................................page 6
- Avandamet® ......................................................................page 7
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- Repaglinide........................................................................page 6
- Rosiglitazone .....................................................................page 5
- Starlix®...............................................................................page 6
- Xenical®.............................................................................page 8

Note: Generic drug companies often place a prefix at the beginning of drug names, for example, Apo, Novo, Gen and Ratio. To find your medication on this list, remove the prefix; for example, Apoglyburide can be found under Glyburide.

Questions you should ask about your medications

Diabetes medications work best when they’re taken exactly as prescribed. Ask your doctor or diabetes educator these important questions:

- How often and when do I need to take my pills and/or insulin?
- Do I take my medications with meals? If so, do I take them right before each meal or at a certain time after each meal? (These are particularly significant questions because some diabetes medications are specifically designed to work between or after meals.)
- When should I expect to see a reduction in my blood glucose levels?
- What should I do if I miss a dose of my medication?
- Should I expect any side effects? If so, is there anything I can do to reduce them?
- Do these medications cause hypoglycemia (low blood glucose levels)? If so, how do I recognize, prevent and treat hypoglycemia?
- How should I store these medications?
- Are there generic versions that might cost less?
- Will these medications interact with other (non-diabetes) prescription medications that I’m taking?
- Will they interact with herbal remedies or over-the-counter medications, such as cough syrup?
- Can I safely drink alcohol while taking these medications?
- If I become pregnant, could these medications be dangerous to my baby? If so, what are my options for birth control?

You may need to try several combinations of medications at different dosages to find what works best for you. Speak with your doctor or diabetes educator if you’re having trouble remembering to take your medications or if you’re bothered by side effects. Medications will only work if you take them, and your doctor and diabetes educator can help you find the simplest, most effective treatment.
Biguanides

**Medication in this class**

Metformin is the only medication in this class that’s available in Canada. It’s sold as a generic drug and under the brand names Glucophage® and Glumetza™, the latter of which is a slow-release form of the medication.

**How this medication works**

This drug acts mainly by helping the liver reduce glucose production. It also helps muscles use glucose from the bloodstream. Both of these actions reduce blood glucose levels.

**Advantages**

Metformin is the recommended pill for most people with type 2 diabetes and is especially recommended for individuals who are overweight. Metformin does not cause weight gain or hypoglycemia and works well in combination with some other diabetes pills and insulin. There is some evidence that metformin can reduce the risk of heart problems and improve lipid (blood fat) levels.

**What you should know**

This medication may cause nausea, diarrhea and gas when you first start taking it. Taking the pills with meals and increasing the dose slowly can reduce these side effects. In some people, metformin can affect the absorption of vitamin B12. If your B12 levels are low, your doctor will recommend a vitamin supplement. In addition, if used in people with significant heart, kidney or liver problems, metformin can cause a rare but serious condition called lactic acidosis.

Insulin Sensitizers

**Medications in this class**

There are two medications in this class: rosiglitazone, which is sold under the brand name Avandia®, and pioglitazone, which is sold under the brand name Actos®.

**How these medications work**

These medications increase the body’s sensitivity to its own insulin, allowing the cells to use glucose more efficiently. The pills are recommended in combination with other diabetes pills. For people who are overweight and unable to reach their blood glucose targets, the Clinical Practice Guidelines recommend an insulin sensitizer in combination with metformin. For individuals who have very high blood glucose levels when they’re diagnosed, the Clinical Practice Guidelines recommend this combination as the initial treatment.

**Advantages**

Insulin sensitizers do not cause hypoglycemia (low blood glucose levels). New evidence suggests that insulin sensitizers can possibly reduce the risk of heart disease. As well, a major clinical study (called ADOPT) is underway to determine whether insulin sensitizers can also preserve the ability of the pancreas to secrete insulin in humans.

**What you should know**

It can take up to three months for insulin sensitizers to reach full effectiveness. Take the pills exactly as prescribed, even if there is no immediate improvement in your blood glucose.

Many doctors try other medications before prescribing an insulin sensitizer, because insulin sensitizers are more expensive than other diabetes pills. However, there is evi-
dence that these pills have the most benefit if taken earlier, rather than later, in the course of type 2 diabetes.

Insulin sensitizers can cause fluid retention and increase total body fat, thereby contributing to weight gain.

People with congestive heart failure or significant liver disease must not take these medications. Your doctor may order liver function tests to rule out active liver disease before prescribing this medication.

The use of insulin sensitizers in people who already take insulin is not an approved combination in Canada. The combination is approved in the U.S., however. If your doctor prescribes insulin and an insulin sensitizer in combination, he or she will explain that there may be an increased risk of fluid retention or congestive heart failure and may monitor your health for any early changes.

A few cases of macular edema (swelling of the retina in the area responsible for central vision) have been reported with rosiglitazone. The risk of this happening is very low. In most cases, the condition improved or returned to normal when the dose was reduced or the drug was stopped. If you notice a change in your vision after starting an insulin sensitizer, inform your doctor and have your eyes checked.

Insulin Secretagogues

Although these pills are commonly prescribed for diabetes, the Canadian Diabetes Association’s Clinical Practice Guidelines recommend them only as a third choice. The Association recommends that for most people, metformin and insulin sensitizers should be tried first.

Insulin secretagogues fall into two classes: sulfonylureas and non-sulfonylureas.

How these medications work
Secretagogues work by stimulating the pancreas to secrete more insulin. All secretagogues reduce blood glucose levels equally well, except for Starlix®. (See below.)

Sulfonylureas

Medications in this class
There are three medications in this class that are sold in Canada: glyburide (sold as a generic and under the brand names DiaBeta® and Euglucon®), gliclazide (sold as a generic and under the brand names Diamicron® and Diamicron MR®) and glimepiride (sold under the brand name Amaryl®). Two other drugs, chlorpropramide and tolbutamide, are available in Canada but are rarely used.

How these medications differ from one another
These medications work in the same way, but differ in how long they take to work. Amaryl™ and Diamicron MR® are long-acting and need to be taken only once a day. Compared to glyburide, they cause less weight gain and less hypoglycemia. Glyburide is more likely to cause weight gain and very low blood glucose levels (hypoglycemia); it is not the medication of choice for people who are at high risk of hypoglycemia (such as the elderly).

What you should know
All of the sulfonylureas can cause hypoglycemia; however, there is usually less risk using gliclazide or glimepiride. If you are taking a sulfonylurea, learn how to recognize, prevent and treat low blood glucose levels. In addition, there is a small chance of an allergic reaction if you are allergic to sulfa antibiotics. If you are prescribed a sulfonylurea, make sure you let your doctor know if you have a history of allergic reaction to other types of sulfa drugs.

Non-sulfonylureas

Medications in this class
There are two medications in this category that are available in Canada: repaglinide (sold under the brand name GlucoNorm®) and nateglinide (sold under the brand name Starlix®).

How these medications work
Like the sulfonylureas, non-sulfonylureas work by stimulating the pancreas to secrete more insulin; however, they are designed to do this for four to five hours, just covering mealtime.

Advantages
These non-sulfonylureas work quickly and lower blood glucose levels after a meal. They are especially useful
Make and keep appointments with your dietitian, an important member of the diabetes healthcare team.

for people who have irregular meals, such as shift workers, and for those whose blood glucose levels tend to be high after meals. As well, they are less likely to cause hypoglycemia than sulfonylureas.

What you should know
Both GlucoNorm and Starlix need to be taken with every meal, which can be challenging for some people. If you have to skip a meal, do not take the pill planned for that meal. As hypoglycemia is a risk, people taking this medication need to learn how to recognize, prevent and treat low blood glucose levels.

The main difference between GlucoNorm® and Starlix® is that Starlix® isn’t as effective in lowering blood glucose levels.

Combination Pills
Combination pills, which mix common diabetes medications into a single pill, reduce the number of pills you need to take. They can also save you money because you pay only one pharmacy dispensing fee.

The fixed combination of doses, however, means there is less flexibility to tailor dosages to individual needs.

The only combination pill currently available in Canada is Avandamet® [Avandia® (rosiglitazone) plus metformin]. It’s available in several fixed-dose combinations.

Alpha-glucosidase Inhibitors
Medication in this class
The only medication in this class is acarbose, sold under the brand name Prandase®.

How this medication works
Prandase® lowers blood glucose levels after meals. Taken with the first bite of a meal, Prandase® works in the intestine to block an enzyme that breaks complex carbohydrates (such as those found in bread and potatoes) into glucose, which is a simple carbohydrate. This slows down the absorption of glucose from these foods, giving the pancreas more time after meals to secrete enough insulin to lower blood glucose levels.

Advantages
Prandase® does not cause hypoglycemia and there are no serious side effects. One major study has shown that the medication can help prevent the development of diabetes in people with prediabetes. It can be used in combination with other oral diabetes medications and with insulin.

What you should know
Prandase® can cause unpleasant side effects such as gas, bloating and flatulence. To reduce these side effects, a low starting dose can be prescribed, and then the dose can be slowly increased. Although Prandase® won’t cause hypoglycemia, many people who take it also take other diabetes medications that can cause hypoglycemia. If hypoglycemia develops while taking Prandase®, it must be treated with dextrose tablets, honey or milk. Because of the way Prandase works, some typical treatments for hypoglycemia – such as table sugar, regular soft drinks or fruit juice – are not effective. People with chronic intestinal disease should not take Prandase®.
Tip
A dietitian can help you develop a meal plan that accommodates your lifestyle and is flexible, while respecting your ethnic background and religious requirements.

Anti-obesity Drugs

Medication in this class
Although there are other weight-loss medications, only orlistat (sold under the brand name Xenical®) is approved for the treatment of diabetes in people who are obese.

How this medication works
Xenical® is taken with meals and works in the intestine to decrease the absorption of the fat from foods. The undigested fat is then eliminated in the feces.

Advantages
Xenical® is typically recommended for individuals who are obese and as part of a strategy to lose weight and avoid regaining lost weight, while improving blood glucose levels.

What you should know
Most people who take Xenical® lose modest amounts of weight if they also reduce their caloric intake and adopt a regular exercise program. The medication is not a replacement for a healthy meal plan and regular activity. Those who take Xenical® must adhere to a low-fat diet and divide their fat, carbohydrate and protein intake over three meals per day. With a high-fat diet, excess fat in the intestine can result in fatty or oily stools or even in the inability to control bowel movements. This medication can reduce the absorption of some vitamins, so a multivitamin is usually recommended. Although Xenical® is approved as a medication to lower blood glucose levels, its effect is modest. Because of its weight-loss and blood glucose-lowering effects, though, Xenical® can help some people with prediabetes avoid developing diabetes.

Insulins

People with type 1 diabetes require insulin every day of their life. People with type 2 diabetes often need insulin to help them meet their blood glucose goals. In type 2 diabetes, insulin can be taken alone or with diabetes pills.

Insulins are classified by their duration of action (how long they work). They also differ in their onset of action (how quickly they start working) and when this action peaks (when they are most effective). Insulin is measured in units. By understanding how your insulin works, you can time your meals, snacks and exercise. If you take insulin, you need to monitor your blood glucose levels regularly.

The insulin regimen your doctor prescribes will depend on your treatment goals, lifestyle, diet, age, general health, risk of low blood glucose and financial circumstances. The goal of any insulin regimen is to mimic, as closely as possible, insulin secretion in people without diabetes. In people without diabetes, the pancreas provides a constant supply of insulin (called basal insulin) and secretes extra insulin when needed, such as when you eat (called bolus or meal insulin). Your insulin regimen, therefore, will have a basal component to provide some level of insulin at all times, as well as a bolus component to lower blood glucose levels after meals.

The best way to learn about insulin is by consulting a diabetes educator. Ask your doctor for a

Tip
A dietitian can help you develop a meal plan that accommodates your lifestyle and is flexible, while respecting your ethnic background and religious requirements.
referral. A diabetes educator will help you learn about injection options (syringes, jet injectors, pens, pumps), how to adjust your insulin dose based on your monitoring results, how to time your meals and snacks, how to match your carbohydrate intake to your insulin dose, the effects of exercise, and how to care for and store your insulin. Importantly, you will learn how to prevent, recognize and treat low blood glucose levels (hypoglycemia).

Many people with type 2 diabetes resist taking insulin. They feel that taking insulin means that they’re sick or have somehow “failed” to manage their diabetes. Needing insulin does not mean that you have failed in any way. Some people find it helpful to think of insulin therapy as a natural hormone replacement therapy. In other words, insulin injections simply replace a natural hormone that the body can no longer produce in sufficient quantities.

Other individuals resist taking insulin because they’re afraid of needles or feel it will be embarrassing to give themselves injections in public. Insulin pens are an excellent alternative to syringes; they’re virtually painless and can be used discreetly. Also, using an insulin pen can help reduce dosing errors. ❏

<table>
<thead>
<tr>
<th>Types of insulin</th>
<th>Brand names (generic name in brackets)</th>
<th>Basal/bolus</th>
<th>Dosing schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rapid-acting analogue</strong> (clear)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onset: 10–15 minutes</td>
<td>Humalog® (insulin lispro)</td>
<td>Bolus</td>
<td>Usually taken right before eating or to lower high blood glucose</td>
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<tr>
<td>Peak: 60–90 minutes</td>
<td>NovoRapid® (insulin aspart)</td>
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<td></td>
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<tr>
<td>Duration: 4–5 hours</td>
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<tr>
<td><strong>Short-acting</strong> (clear)</td>
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<tr>
<td>Onset: 0.5–1 hour</td>
<td>Humulin®-R</td>
<td>Bolus</td>
<td>Taken about 30 minutes before eating, or to lower high blood glucose</td>
</tr>
<tr>
<td>Peak: 2–4 hours</td>
<td>Novolin®ge Toronto</td>
<td></td>
<td></td>
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<tr>
<td>Duration: 5–8 hours</td>
<td></td>
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<tr>
<td><strong>Intermediate-acting</strong> (cloudy)</td>
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<tr>
<td>Onset: 1–3 hours</td>
<td>Humulin®-N</td>
<td>Basal</td>
<td>Often taken at bedtime, or twice a day (morning and bedtime)</td>
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<tr>
<td>Peak: 5–8 hours</td>
<td>Novolin®ge NPH</td>
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<tr>
<td>Duration: up to 18 hours</td>
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<tr>
<td><strong>Extended long-acting analogue</strong> (Clear and colourless)</td>
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<tr>
<td>Onset: 90 minutes</td>
<td>Lantus® (insulin glargine)</td>
<td>Basal</td>
<td>Usually taken once or twice a day</td>
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<tr>
<td>Peak: none</td>
<td>Levemir® (insulin detemir)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration: 24 hours</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Premixed</strong> (cloudy)</td>
<td></td>
<td></td>
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<tr>
<td>A single vial contains a fixed ratio of insulins (the numbers refer to the ratio of rapid- or fast-acting to intermediate-acting insulin in the vial)</td>
<td>Humalog® Mix 25™ (20/80, 30/70)</td>
<td>Combination of basal and bolus insulins</td>
<td>Depends on the combination</td>
</tr>
<tr>
<td></td>
<td>Humulin® (10/90, 20/80, 30/70, 40/60, 50/50)</td>
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Adapted from the Canadian Diabetes Association’s 2003 Clinical Practice Guidelines
Targeting complications
Medications to Prevent Heart Disease and Stroke

People with diabetes are at high risk of heart disease, heart attacks and stroke. High blood glucose levels are a risk factor for these problems, but many people with diabetes also have other risk factors such as high blood pressure and abnormal blood fat levels. Obesity, an inactive lifestyle, smoking, kidney disease, and a family history of heart disease or stroke raise the risk of cardiovascular diseases even more.

According to the Canadian Diabetes Association’s *Clinical Practice Guidelines*, reducing the risk of cardiovascular disease should be the first priority in preventing diabetes complications. As discussed earlier, achieving blood glucose targets through lifestyle changes and medications is an important first step. However, it is equally important to lower blood pressure and LDL cholesterol (the “bad” cholesterol) to healthy targets, as summarized in the table on page 11. The closer you can get to these targets, the more you can reduce your risk of complications. Every little bit helps!

**Achieving blood pressure targets**

A healthy lifestyle plays an important role in managing blood pressure. Try to achieve (and maintain) a healthy weight, eat a balanced diet and exercise regularly. It can help to limit your intake of salt and alcohol.

You will also likely need medications to lower your blood pressure. The *Clinical Practice Guidelines* recommend a number of medications that can help you lower your blood pressure. They state that which medication to use first is probably less important than the fact that more than one medication is often needed.

There are more than 50 blood pressure medications available in Canada. Your doctor will choose your particular medications based on a number of factors, including your current blood pressure, your overall risk of cardiovascular and kidney disease, and what you can afford. You may need to take several different medications in order to manage your blood pressure and reach your target.

Lowering your blood pressure has the added benefit of reducing your risk of other diabetes complications, such as kidney and eye disease. Your doctor will take your blood pressure every time you visit to discuss your diabetes management. Be sure to ask for and record your results.

**Achieving cholesterol targets**

A healthy lifestyle can help you manage your cholesterol levels, but it can be difficult to reach cholesterol targets with lifestyle changes alone. More and more studies are pointing to the importance of low-
The medications of choice belong to the drug class called statins. They include lovastatin (sold as a generic and under the brand name Mevacor®), pravastatin (sold as a generic and under the brand name Pravachol®), simvastatin (Zocor®), rosuvastatin (Crestor®), fluvastatin (Lescol®) and atorvastatin (Lipitor®). To lower LDL cholesterol levels, there are several other drug classes that can be used alone or in addition to statins. You may also require medications to raise your HDL (“healthy”) cholesterol and lower other blood fats called triglycerides. Your doctor might prescribe other medications to control your blood fats if the statins are not enough to do so or if you have rare abnormalities of your blood fats. Most people with diabetes (and anyone taking cholesterol medications) should have a blood test to monitor their cholesterol levels at least once a year.

Memo to myself

When you have diabetes, you have a lot on your mind: when to eat, when to test, medication schedules. Now there is a new tool available to help you remember the habits that keep you healthy.

MemoText™ is a text-messaging service that can help people better manage their health regimen while supporting the work of the Canadian Diabetes Association. The web-based program allows users to send themselves (or others) mobile phone text messages at pre-scheduled dates and times. People can use the service to remind themselves or family members to take diabetes medications and check blood glucose levels. Studies conducted at the Joslin Diabetes Center (Harvard University, Boston, Massachusetts) indicate that people who receive text-message reminders to check their blood glucose levels, do so more often than those using other reminders.

The service costs about $6 a month, and a portion of the proceeds from each MemoText subscription will be donated to the Canadian Diabetes Association. For more information, visit www.diabetes.ca, click on “About Diabetes,” then the “Offers and Promotions” link.

Know Your ABCs

A1C: 7% or lower. (Some people with diabetes aim for 6% or lower, but this should be your target only if you and your doctor feel you can achieve it safely)

Blood pressure: 130/80 mmHg or lower

Cholesterol: LDL lower than 2.5 mmol/L*

* New clinical practice guidelines that may recommend a lower target will be issued later in 2006.

ASA therapy

Low-dose daily acetylsalicylic acid (ASA or Aspirin) therapy has been shown to reduce the risk of heart attacks and is recommended for most people with diabetes. ASA, though, is not safe for all people. Take it only on the advice and under the supervision of your doctor. If you would benefit from ASA but can’t tolerate it, the prescription medication clopidogrel (sold under the brand name Plavix®) may be another option.

Smoking

If you smoke cigarettes and want to quit, ask your doctor for help. There is no safe level of smoking and no easy way to kick the habit, but quitting smoking is one of the best ways to help your heart, improve your overall health and reduce the risk of diabetes complications.
By Rosalyn Wosnick

Sometimes, this is easier said than done. It can be a challenge keeping track of the many drugs you may have to take every day. The good news is that there are plenty of resources available to help you stay on top of your medication routine, and they’re as close as a phone call to your doctor or diabetes educator.

For example, your doctor may be able to adjust your medicine dosage and/or timing to simplify your routine. If you are taking the same drug twice each day, find out if it’s possible to combine them into a once-daily dose. Also, ask if the schedule for taking your medication can be pegged to certain events of the day, such as mealtimes, first thing in the morning or just before bedtime. This makes it much easier to remember.

Chances are your pharmacist can help you manage a complicated drug schedule by providing special medication packaging. Blister packs (where all the pills to be taken in the morning, afternoon, or evening are combined in separate “bubbles”), or dosettes (pill boxes) that organize a day’s pills into individual compartments, are both handy tools. You can even get packages with clocks attached that sound an alarm when it’s time to take your medicine.

“Educating yourself is the key,” advises Tino Montopoli, a pharmacist and Certified Diabetes Educator in Orono, Ontario, who has been living with type 1 diabetes since the age of nine. “The more you know about your diabetes, the easier it will be to stick to your medication plan and keep things under control.”

Find a diabetes educator you feel comfortable with, he suggests, and don’t hesitate to ask questions or talk about your medication concerns. This can help clear up any difficulties you may be having and even prevent problems before they arise.

Make sure you don’t run out of your medication before contacting your doctor or pharmacist for a fresh supply. Always be aware of how many refills you have, and allow enough time to see your doctor (if a renewal is needed) or to cover any unforeseen supply delays at the pharmacy. To save time, Montopoli advises taking all your medication containers to the doctor’s office when you go; that way, you can get renewals on other soon-to-expire prescriptions at one visit.

“Taking your diabetes medication is like buckling up your seatbelt,” he says. “It’s a great thing, but it can only help you if you use it.”

Mary Poppins may have believed that a spoonful of sugar makes the medicine go down, but we all know that’s not necessarily a good idea, especially for people with diabetes. In real life, the best way to ensure you get the medication you need – and get the most from it – is to take it exactly as directed.

Life can be hectic, and staying on top of your medication schedule requires special attention. Here are a few ideas that might help:

- Make sure you understand each medication you’re taking and why you’re taking it. If you’re not certain, ask your doctor or diabetes educator to explain.
- Find out what side effects might be associated with your drugs, and which symptoms should be reported.
- Never stop taking a prescribed medication without checking with your healthcare provider, even if you don’t feel any effect from it. Many drugs, especially blood pressure or cholesterol pills, make a difference you usually can’t detect.
- Deal with one pharmacy for all your medications, and be sure to talk to your pharmacist before taking any drugs, including over-the-counter (non-prescription) and herbal products. This will help prevent medication-related problems, such as drug interactions, and lead to a closer relationship with your pharmacist – an accessible and valuable healthcare resource.