

Diabetes Self –
Management
Education



LIVING WELL WITH DIABETES



Whether you have recently been diagnosed with diabetes or have been living with your condition for some time, the information in this book can help you better manage your condition and live a healthier life. This book is best used with the individual teaching and diabetes workshops offered at Providence St Mary Medical Center.

Content

Understanding Diabetes

Defining Diabetes in Basic Terms, Self-Care Behaviors Necessary for Diabetes Self-Management
[Page 3](#) and find out more: www.DiabetesAnswers.org/node/6

Taking Medications

Diabetes is a progressive condition. Depending on what type a person has, their healthcare team will be able to determine which medications they should be taking and help them understand how your medications work. They can demonstrate how to inject insulin or explain how diabetes pills work and when to take them.

[Page 6](#) and find out more: www.DiabetesAnswers.org/node/601
[All about insulin page 9](#)

Healthy Eating

Being able to make healthy food choices every day is very important. If you understand how the foods you eat affect your blood sugar (also known as blood glucose), you can make smart food choices that help control your diabetes better.

[Page 19](#) and find out more: www.DiabetesAnswers.org/node/598

Problem Solving

A person with diabetes must keep their problem-solving skills sharp because on any given day, a high or low blood glucose episode or a sick day will require them to make rapid, informed decisions about food, activity and medications.

[Page 29](#) and find out more: www.DiabetesAnswers.org/node/603

Monitoring

Daily self-monitoring of blood glucose provides people with diabetes the information they need to assess how food, physical activity and medications affect their blood glucose levels.

[Page 40](#) and find out more: <http://wadepage.org/node/600>

Healthy Coping

An important part of the diabetes educator's work is identifying the individual's motivation to change behavior, then helping set achievable behavioral goals and guiding the patient through multiple obstacles. They can provide support by encouraging you to talk about your concerns and fears and can help you learn what you can control and offer ways for you to cope with what you cannot.

[Page 48](#) and find out more: <http://wadepage.org/node/604>

Being Active

Being active is not just about losing weight. It has many health benefits like lowering cholesterol, improving blood pressure, lowering stress levels and improving your mood. If you have diabetes, physical activity can also help keep your blood sugar levels closer to normal, which helps you successfully manage your diabetes

[Page 54](#) and find out more: <http://www.diabetesanswers.org/node/599>

Reducing Risks

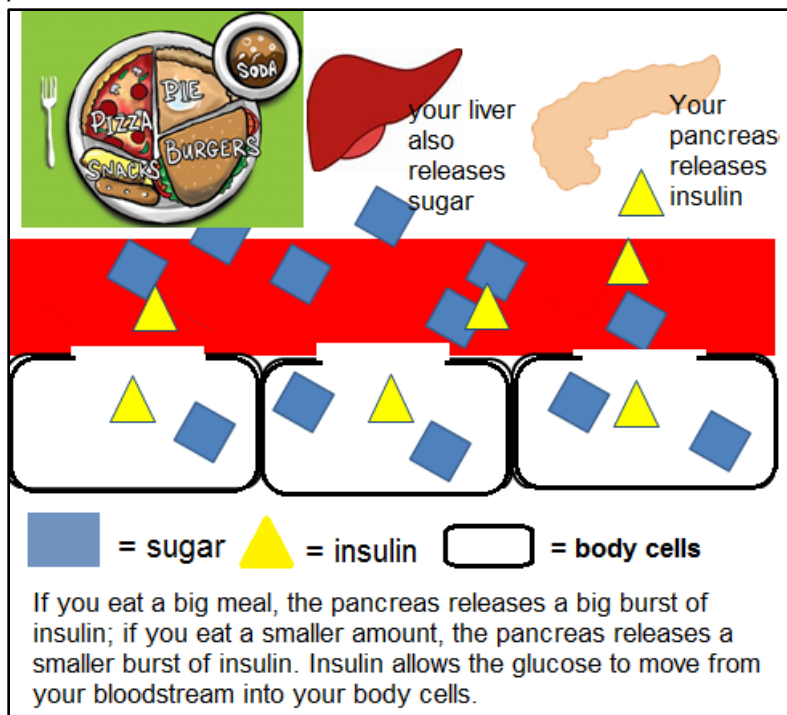
Diabetes educators assist patients in gaining knowledge about standards of care, therapeutic goals, and preventive care services to decrease risks. Skills taught include smoking cessation, foot inspections, blood pressure monitoring, self-monitoring of blood glucose, aspirin use and maintenance of personal care records.

[Page 57](#) Find out more: www.DiabetesAnswers.org/node/602

What is Diabetes?

Normally most of the food you eat breaks down into glucose, which is the same thing as sugar. As you digest the food, glucose passes from your intestines into your bloodstream. You need glucose. It is your body's main source of energy. But to use glucose for energy, it must first get into your body cells. Glucose can't move into the cells by itself. It needs insulin to help. Insulin is a hormone made by the pancreas, which is the organ behind your stomach.

Most of the time, the pancreas releases just a small steady stream of insulin. But after a meal, your pancreas releases a burst of insulin



When you are fasting (meaning you have not eaten in the past eight hours), the normal blood glucose range is below 100 mg/dl . After eating a meal, food causes the blood glucose to rise, but it will stay under 140 mg/dl within the two hours after a meal. As insulin moves the glucose into the cells, your blood glucose level begins to go down again.

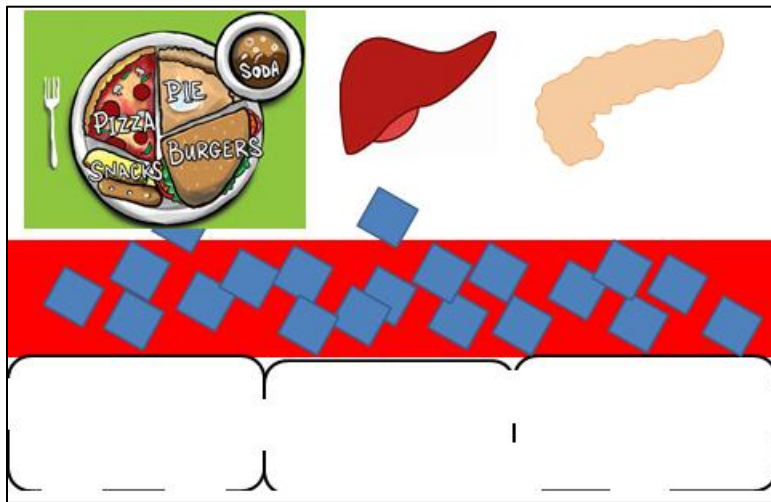
If your blood glucose level ever drops too low (< 70 mg/dl), your body automatically takes steps to correct the problem. Your liver holds an extra store of glucose just in case you ever need it. For example, if you go too long without eating, your liver will release some of this stored glucose back into the

bloodstream. This glucose is the fuel that gives you energy until you can eat a meal.

So, to summarize the normal process: The right amount of insulin from the pancreas keeps your blood glucose level from going too high. Glucose stored in the liver keeps your blood glucose level from dropping too low. The blood glucose level normally stays between 70 to 99 mg/dl before eating and less than 140 mg/dl within the two hours after a meal.

When diabetes occurs, your pancreas makes little or no insulin, or your body cells don't respond to the insulin that is produced. In either case, glucose cannot properly move into the body cells. Glucose builds to high levels up in the bloodstream. Even though glucose is available in your blood, your body cells can't use it. Your cells now lack the energy they need to keep your body working properly.

Type 1 Diabetes



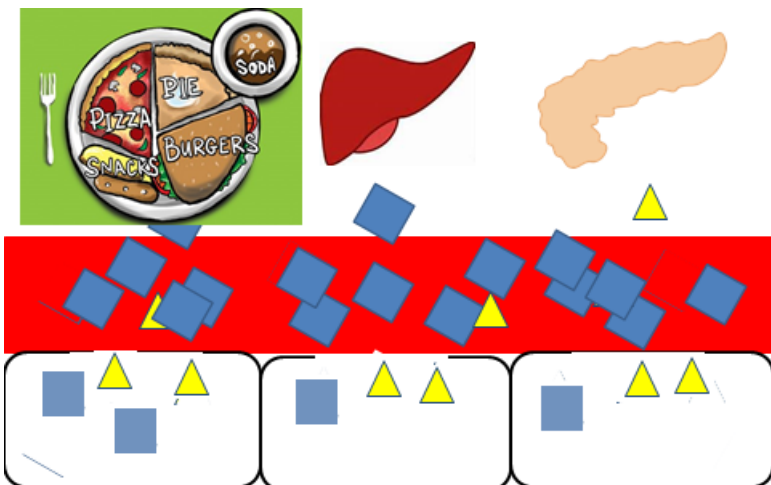
In type 1 diabetes, little or no insulin is released by the pancreas. The body's immune system turns against itself, destroying the pancreas cells that produce insulin. Normally, the immune system only attacks and destroys invaders like infection. Scientists don't know exactly why the immune system attacks the pancreas, but it's believed that it may be triggered by a virus. Genetic tendencies and the environment may also play a role in why a person gets type 1 diabetes. Only about 10 percent of all people with

diabetes have type 1. A person with type 1 diabetes must take insulin every day to stay alive. It is more likely to begin in childhood or the early adult years, but it can happen at any age.

Type 1 diabetes usually develops quickly. Symptoms may include: - extreme thirst - excessive urination – tiredness - constant hunger - weight loss - blurred vision

Type 2 Diabetes

The most common form of diabetes is type 2, accounting for about 90 percent of all diabetes cases. It tends to occur later in life, but can occur earlier if certain risk factors are present.



A person is more likely to develop type 2 diabetes if they have the following risk factors:

- Family history of diabetes
- Overweight or obese
- History of gestational diabetes
- Inactive lifestyle or having had a baby weighing more than 9 lbs –

Race/ethnicity background:
African American, Asian American, Hispanic/Latino, American Indian, Native Hawaiian or other Pacific Islander

As type 2 diabetes develops, the pancreas is still producing some insulin. But the body cells don't respond as they should. This is called insulin resistance. When the body cells are resistant, it takes more and more insulin to

As type 2 diabetes develops, the pancreas is still producing some insulin. But the body cells don't respond as they should. This is called insulin resistance. When the body cells are resistant, it takes more and more insulin to

move glucose into the cells. So the pancreas begins to release a higher than normal amount of insulin. This extra insulin production may keep the blood glucose normal, or close to normal, for many years. Type 2 is a progressive condition. Eventually, the pancreas cannot keep up with the demand.

Insulin production starts to decline. When there is no longer enough insulin released from the pancreas, the blood glucose level rises too high. Over the years, the pancreas may eventually stop making insulin altogether. Also, in type 2 diabetes, the liver releases extra glucose into the bloodstream, raising the glucose level even higher.

Uncontrolled Type 2 diabetes is a progressive condition. Eventually, the pancreas cannot keep up with the demand. Insulin production starts to decline. When there is no longer enough insulin released from the pancreas, the blood glucose level rises too high. Over the years, the pancreas may eventually stop making insulin altogether. Also, in type 2 diabetes, the liver releases extra glucose into the bloodstream, raising the glucose level even higher

Gestational Diabetes is another common diabetes diagnosis it occurs in pregnant women who have never had diabetes before but who have high blood sugar levels during pregnancy. Usually goes away after pregnancy but indicates a high risk of type 2 diabetes. If you have gestational diabetes ask your doctor or diabetes educator for more information

GOOD NEWS

You can control your diabetes with healthy eating, being active and if needed taking medications.

Avoid these complications by controlling your diabetes:

- Eye disease
- Amputations
- Heart attack or stroke
- Kidney disease
- Sexual dysfunction

I understand that I have ☐ Type 2 diabetes ☐ Type 1 diabetes
☐ Pre diabetes ☐ Gestational diabetes ☐ don't know

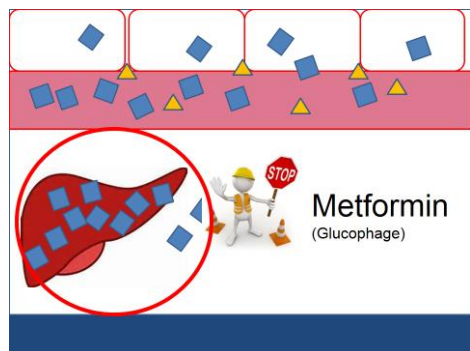
Other conditions:

- | | |
|--|---|
| <input type="checkbox"/> High Blood Pressure | <input type="checkbox"/> High Cholesterol |
| <input type="checkbox"/> Drug Allergies | <input type="checkbox"/> Problems with Kidneys |
| <input type="checkbox"/> Problems with Eyes | <input type="checkbox"/> Numbness, Tingling or Pain In Feet |
| <input type="checkbox"/> Arthritis | <input type="checkbox"/> Asthma |
| <input type="checkbox"/> Short Of Breath | <input type="checkbox"/> Sleep Apnea or Trouble Sleeping |
| <input type="checkbox"/> Sexual Dysfunction | <input type="checkbox"/> Depression |
| <input type="checkbox"/> Anxiety or Stress | <input type="checkbox"/> Currently Pregnant |

Taking Medications

If you need to have diabetes medications, it is easier for your doctor to adjust your medications when you're eating habits are not changing. You need to contact your MD if your BS levels are elevated. Often people will just let their Blood Sugars run high until the next visit. **DON'T DO THIS!**

Types of Diabetes Pills

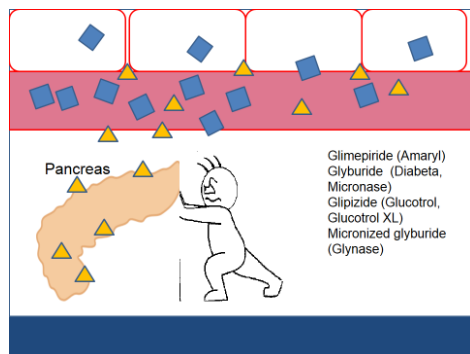


Biguanides

Metformin

These pills help control the amount of glucose in your blood. They do this by decreasing the amount of glucose made by your liver and helping your muscles use insulin more effectively. These medications are usually taken with each meal.

Possible side effects include: diarrhea, nausea, vomiting, abdominal bloating, excess gas (flatulence) and Metallic taste in mouth

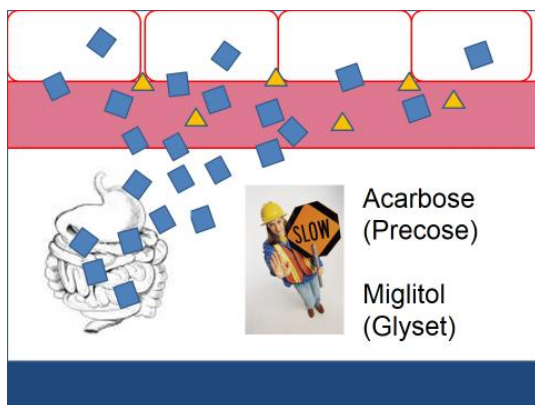


Sulfonylureas

Chlorpropamide (Diabinese) glipizide (Glucotrol and Glucotrol XL), glyburide (Micronase, Glynase, and Diabeta), and glimepiride (Amaryl)

These pills help the body make more insulin. They are usually taken 30 minutes before a meal.

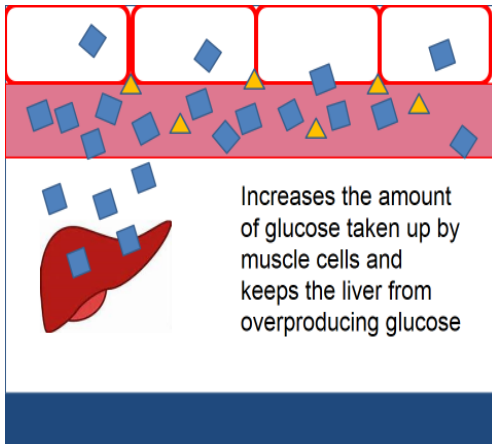
Possible side effects include: hypoglycemia, headache, dizziness, drowsiness



Alpha-glucosidase Inhibitors

Acarbose and Miglitol

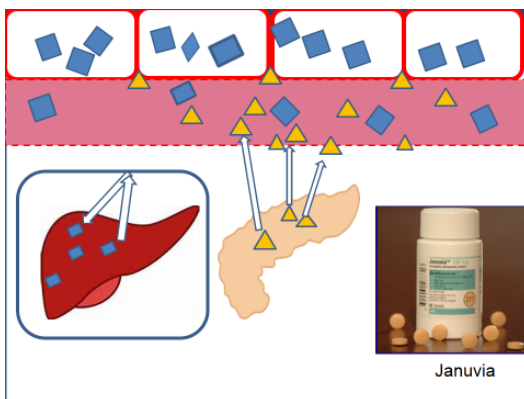
These pills slow the digestion of sugars and starches. They can help keep your blood sugar from going too high after a meal. Take them with the first bite of each main meal. Possible side effects include: abdominal pain, diarrhea and excess gas (flatulence)



Thiazolidinediones

Pioglitazone (Actos) and Rosiglitazone (Avandia)

These pills help your muscle cells use insulin better. Your doctor may order lab tests to check the function of your liver before prescribing these pills and regularly while you are taking them. possible side effects include: upper respiratory tract infections, headaches, weight gain, swelling



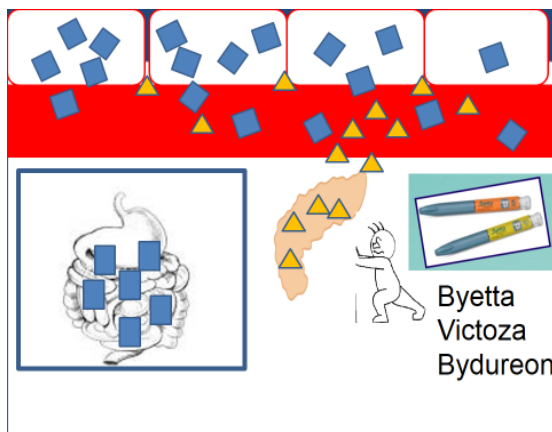
DPP-4 Inhibitors

Sitagliptin (Januvia)

Saxagliptin (Onglyza)

Linagliptin (Tradjenta)

These pills help lower blood sugar levels in people with type 2 diabetes. They are less likely to cause hypoglycemia. They are taken once a day. Possible side effects include: upper respiratory tract infection, stuffy or runny nose, sore throat, headache



Incretins

Byetta

Bydureon

Victoza

These are a group of hormones that cause an increase in the amount of insulin after eating, even before blood glucose levels become elevated. They also slow the rate of absorption of nutrients into the blood stream by reducing gastric emptying and may directly reduce food intake

Those with pancreatitis should not take DPP-4 or Incretins. Call your healthcare provider right away if you have pain in your stomach area (abdomen) that is severe, and will not go away. The pain may happen with or without vomiting and may be felt going from your abdomen through to your back.

Combination Medications for Type 2 Diabetes

Glucovance® = metformin + Diabeta®

Avandamet® = metformin + Avandia®

Janumet® = metformin + Januvia®

Metaglip® = metformin + Glynase®

Actoplus Met® = metformin + Actos®

These medications may help keep your blood glucose within your target range. They also help your pancreas make more insulin and may help your muscles use insulin more effectively. Side effects depend on which type of combination you use. Your healthcare provider can tell you more.

Check the pills or injectable medication you are taking

- ☐ Glucophage (Metformin)
- ☐ Glimepiride (Amaryl)
- ☐ Glipizide (Glucotrol)
- ☐ Glipizide ER (Glucotrol XL)
- ☐ Glyset or ☐ Precose
- ☐ Actos or ☐ Avandia
- ☐ Prandin or ☐ Starlix
- ☐ Januvia
- ☐ Byetta (injectable)

- ☐ Other

Check any insulin you are taking

- RAPID ACTING
 - ☐ Apidra (Insulin Glulisine)
 - ☐ Humalog (Insulin Lispro)
 - ☐ Novolog (Insulin Aspart)
- SHORT ACTING
 - ☐ Humulin or Novolin R (Regular)
- INTERMEDIATE ACTING
 - ☐ Humulin or Novolin (N NPH)
- LONG ACTING
 - ☐ Lantus (Insulin Glargine)
 - ☐ Levemir (Insulin Detemir)

- ☐ Other

- ☐ I don't take any medication for diabetes
- ☐ I don't know what medications I take for diabetes
- ☐ I take a medication to lower blood pressure
- ☐ I take a medication to lower cholesterol
- ☐ I take aspirin ever day ☐ I take multivitamins
- ☐ I take Herbal or alternative medications: _____
- ☐ I consistently remember to take my medications as directed

GOALS

- ☐ Miss fewer medications ☐ Carry a wallet ID with list of medications
- ☐ Take medications on time
- ☐ other

Managing Your Blood Sugar Levels with Insulin

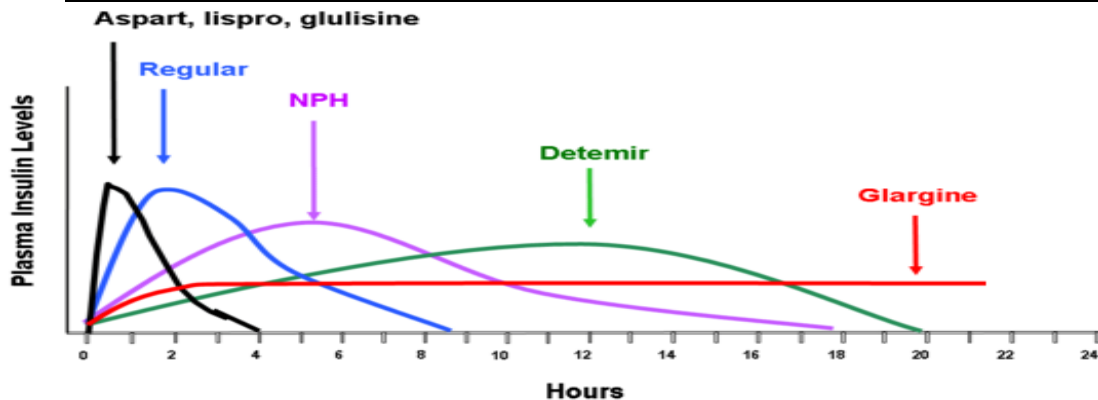
By, Jaci Hodnefield OHSU Nursing Student

Insulin is a hormone made by your pancreas, an organ that sits behind your stomach.

- Insulin is needed to move glucose, the sugar in your blood, from your bloodstream into your body's cells.
- Your body's cells use the sugar in your blood as fuel to do their work or they store the sugar in your cells to use later
- If you are taking insulin you should know how it works such as its onset, peak and duration. Study the table and chart below, find your insulin



Insulin Preparation	Onset of action	Peak	Duration of Action
Humalog) Novolog Apidra	<15 minutes	1-2 hours	3-6 hours
Regular	30 to 60 minutes	2 to 4 hours	6-10 hours
Regular U-500	30 to 60 minutes	2 to 4 hours	Up to 24 hours
Lantus (Glargine) Levemir*(Detemir)	1-2 hours	Usually no peak	Up to 24 hours
*Levemir may have a slight peak after 12 hours and possibly last 18 hours			
Premixed Insulin	Onset of action	Peak	Duration of action
Novolin or Humulin 70/30 (70% NPH and 30% Regular)	30- 60 minutes	2-10 hours	10-18 hours
Humalog 75/25 Novolog 70/30 Humalog 50/50	10-30 minutes	1-6 hours	10-24 hours



Injection Areas

The areas that you can inject insulin are:

- Abdomen
- Upper arms
- Thighs
- Buttocks

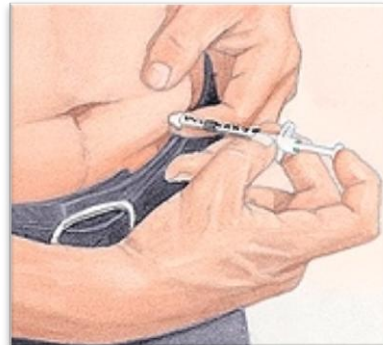


Figure 1

Same time, same place...

- Insulin works at different rates when given into different parts of the body.
- Use the same area at the same time each day for steady blood sugar levels

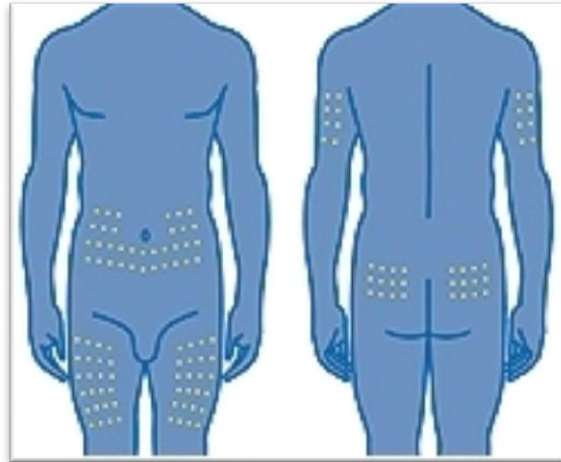


Figure 2

Insulin begins to work:

- The fastest in the abdomen
- Slower in the arms and thighs
- Slowest site is the buttocks

Healthy skin:

- To keep your skin healthy change the point at which you inject the insulin (see figure 2).
- Move the place of injection a fingers width from last injection point.

Special Warning about Exercise:

Insulin works faster if you inject it before exercising. Injecting insulin into a part of the body you are going to exercise causes insulin to work faster, and in return your blood sugar level will be low.

- For example, if you inject your insulin in your thigh before going running, your insulin will work faster, and your blood sugars will be low.



How To Prepare And Inject A Single Dose Of Insulin

Injecting Insulin With A Needle And Syringe

Supplies:

- A syringe
- Alcohol wipes
- Your bottle of insulin

A sharps container (a hard metal or plastic container for needle disposal such as a coffee can or laundry soap



container).



2. Look at your insulin, make sure your clear insulin is clear and your cloudy insulin is free of clumps.

Make sure you have the right insulin, **check the label**

1. First, wash and dry your hands



3. If you are using a cloudy insulin, make sure the insulin is mixed by rolling the bottle slowly between your hands or tip it upside-down, back and forth about 20 times.

Do NOT shake



4. Know the number of units you are taking

My Insulin Worksheet

Knowing how your insulin works, helps you plan when you need to inject your insulin. The goal of insulin is to keep your body's blood sugar levels in your target range.

Write down the insulin you are taking along with the onset, peak and duration of the insulin.

- Onset is when your insulin starts to work.
- Peak is when the insulin is working the best.
- Duration is how long the insulin works.

Insulin	Onset	Peak	Duration

It is important to know your insulin. Keep track of the dose in number of units, what times to inject the insulin, times to eat and times to check your blood sugar level.

Insulin	Dose	Time to Inject	Time to Eat	Times to Check Your Sugar
Regular	2 units			

Time: 7 8 9 10 11 12 1 2 3 4 5 6

Legend: L= Lunch D= Dinner S= Snack

5. Wipe the top of the insulin bottle with alcohol



6. Twist the cap from the needle off. Pull air into the syringe by pulling the plunger back to the number of units of insulin you need.



7. Stick the needle into the center of the top of the bottle, and inject air into it.



8. With the needle still in the bottle, turn them upside down, covering the needle tip with insulin. Pull the plunger back slowly to the number of units you need. Check for air bubbles inside the syringe. If you see a bubble, push the insulin back into the bottle and repeat.



9. Remove the syringe from the bottle. Make sure the needle does not touch anything.



10. Clean your skin with alcohol and let air dry.

11. Hold the syringe like a pencil. If your needle is 5 mm or longer pinch your skin up. If your needle is 4 mm or shorter inject straight into your skin.



12. Push the needle into your skin at a 90 degree angle. Thin people may inject at a 45 degree angle. Push the plunger in gently and smoothly. Count to 5, and pull the needle straight out.



13. Dispose of the needle in a sharps container, such as a coffee container or laundry soap container. In Walla Walla you can bring your sharps container to the local landfill.



How to Use an Insulin Pen

Gather your supplies.

- Your insulin pen
- A needle
- Alcohol wipes, or cotton balls and alcohol
- A sharps container



1. Wash and dry your hands



2. Make sure your clear insulin is clear, or your cloudy insulin is free of clumps. Check to make sure your insulin pen has the correct insulin. Know how



many units of insulin you are taking.

3. Pull the outer cap of the pen off.



4. Wipe the rubber seal at the top with alcohol. Take the protective paper tab off of your needle. Screw the needle onto the pen tightly. Remove the outer needle cap. Keep it



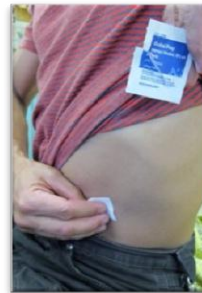
handy for when you are ready to throw it away.



5. Take off the inner needle cap. Prime your pen. Dial your pen to 2. Point the pen strain up and push the injection button. You should see insulin come out of the needle tip. Set your dose. Dial your pen to the correct number of units in your prescribed dose.



6. If you are taking a cloudy insulin, roll it between your hands least 15-20 times.



7. Clean your skin with alcohol and let air dry.



8. Hold the pen as in the picture, with your thumb on the plunger. If your needle is 5 mm or longer pinch your skin up. If your needle is 4 mm or shorter inject straight into your skin. Push the needle into your skin at a 90 degree angle. Thin people may inject at a 45 degree angle. Push the injection button. Pull the pen straight out.



9. Put the outer needle cap back on the needle. Unscrew the needle from the pen and drop it into your sharps container. Store your insulin with the cap on.

Sample Insulin Worksheet

Knowing how your insulin works, helps you plan when you need to inject your insulin. The goal of insulin is to keep your body's blood sugar levels in your target range.

Look at the **examples**, and then make your own plan on the next page.

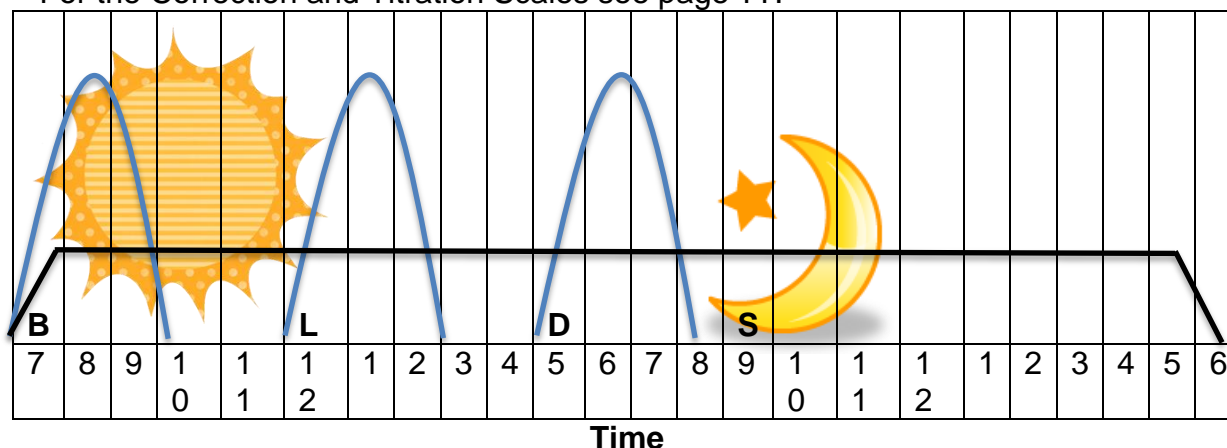
- **Onset** is when your insulin starts to work.
- **Peak** is when the insulin is working the best.
- **Duration** is how long the insulin works.

Insulin	Onset	Peak	Duration
Lantus	1 hour	none	24 hour
Novolog	5-10 min	1 hour	2 – 4 hours

It is important to know your insulin. Keep track of the dose in number of units, what times to inject the insulin, times to eat and times to check your blood sugar level.

Insulin	Dose	Time to Inject	Time to Eat	Times to Check Your Sugar Level	
Lantus	20 units	Bed time	NA	Bed time	Fasting
Novolog	Correction Scale*	Before meal	Right away	Before meal	2 hour after meal
Novolog	Titration Scale*	Before meal	Right away	Before meal	2 hour after meal

*For the Correction and Titration Scales see page ??.



B = Breakfast L = Lunch D = Dinner S = Snack

Caution: those taking Insulin are at risk for low blood sugar. The good news is that low blood sugar is easy to treat see page 38 for the rule of 15 for mild low blood sugar and page 39 for severe low blood sugar. If you are having low blood sugar frequently (more than once a month) please contact your primary care provider.

My Insulin Worksheet

Knowing how your insulin works, helps you plan when you need to inject your insulin. The goal of insulin is to keep your body's blood glucose levels in your target range.

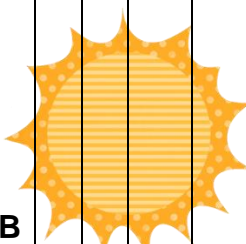

Write down the insulin you are taking along with the onset, peak and duration of the insulin.

- **Onset** is when your insulin starts to work
- **Peak** is when the insulin is working the best
- **Duration** is how long the insulin works

Insulin	Onset	Peak	Duration

It is important to know your insulin. Keep track of the dose in number of units, what times to inject the insulin, what times to eat and times to monitor your blood sugar.

Insulin	Dose	Time to Inject	Time to Eat	Times to Check Your Sugar Level	

																										
B					L						D			S												
7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6			

Time

B = Breakfast L = Lunch D = Dinner S = Snack

Corrective Scale + Titrating Carbohydrates

This is a pre meal option that is commonly recommended for type 1 diabetics and some Type 2 diabetics who are dependent on insulin for good control. It is assumed that those using this option are also taking long acting insulin such as Lantus or Levemir. Your physician, nurse or diabetes educator should help you fill out this worksheet.

Corrective Scale

Check your blood sugar before the meal. Find the range that your blood sugar falls in (see the first column). Check the amount of insulin to be drawn up if any (see column 2). Then count the carbs you are planning to eat. Use the simple formula describe below under *Titrating Carbohydrates* add more insulin depending on the amount of carbohydrates you plan to eat.

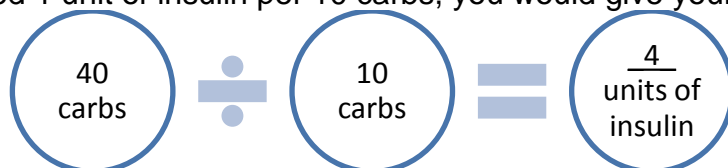
Blood Sugar	Insulin
< 60	*Follow guidelines for low blood sugar
60 – 150	
151 – 200	
201 – 250	
251 – 300	
301 – 350	
351 – 400	
>400 call physician	

Titrating Carbohydrates

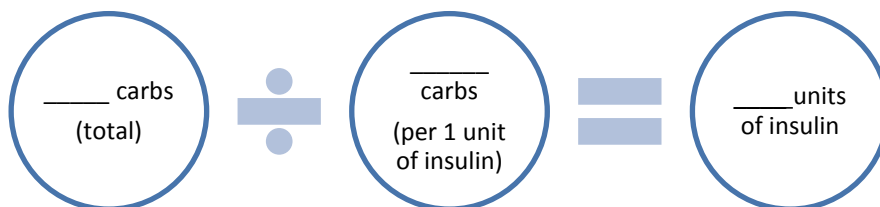
Titrating carbohydrates means being able to count the carbohydrates you are going to eat and take insulin according to the amount of carbs.

The formula is: 1 unit of insulin per the number of carbs suggested by your primary care provider.

For example, if you eat 40 carbs during your meal, and your primary care provider suggested 1 unit of insulin per 10 carbs, you would give yourself 4 units of insulin



Fill in this diagram with the suggested amount of carbs from your primary care provider.



Healthy Eating

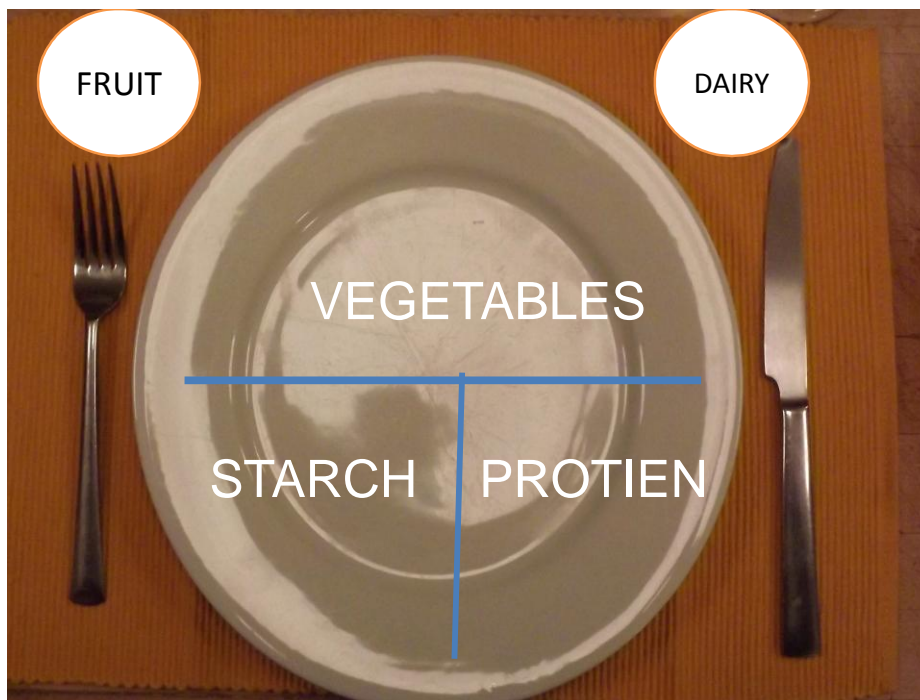
Plate Method for Diabetes Meal Planning

What is the Plate Method?

The Plate Method is an easy way to set up healthy meals for yourself and your family. No weighing, no carrying around measuring cups, and no expensive “Special Foods”.

It can be used to help you eat healthy, lose weight, lower cholesterol, and manage your diabetes. Planning your food intake is the 1st step in controlling your blood sugars, and diabetes. When you eat healthy you feel better and your family eats better also. It helps them learn good eating habits for life. To begin with you need a basic plate. Guess what? Plates have gotten *bigger*, so the amount of food we eat has increased, and waist lines have followed. A basic sized plate is 9 inches. Take a ruler and measure across your plate, if the part where you put your food is 9 inches across, you have the right sized plate . . . if not, measure your salad plate. It may be just what you are looking for. DO not use an oversized plate and plan on only filling it part way – you will be more tempted to overeat.

Now let's look at your bowl for cereal & soup. A good sized bowl is the one you get a cup of soup in at a restaurant. You need a small bowl that holds about 1 cup.



Next, you need a small dish, the type you get desserts in at buffet restaurants. It holds about 1/2 cup.

If you are not sure what size bowl and dish to use, use measuring cups to find out exactly how much the bowl will hold. Measure out 1 cup of dry rice (or cereal) into a bowl. If the bowl looks fairly full, it is the perfect size bowl. Now measure out 1/2 c of dry rice (or cereal) into a small dish. If the dish looks fairly full it is

the right size dish to use.

Now that you are using the right dishes, you are ready. Make sure and put the oversized dishes & bowls out of sight so you do not use them again.



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Vegetables: take up $\frac{1}{2}$ of the plate. This may be more vegetables than you are used to. That's O.K. By increasing your vegetables, you are bringing your meals back into balance and adding fiber, vitamins and minerals you might have been missing. Vegetables also help to fill you up without filling you out!

It's best not to fill the $\frac{1}{2}$ plate with only 1 veggie. You get tired of even your favorite foods that way. Try a small salad and $\frac{1}{2}$ a cooked vegetable so you have more variety.

*Some vegetables are higher in starch/ carbohydrate. These vegetables belong in the Bread and Starch section of the plate. Corn, Peas, Yams, Potatoes, & Winter Squash fit in this section, not on the Vegetable

Section (Winter Squash is squash that has a hard shell). So just to review- Corn and Peas are not on the vegetable section of the Plate.



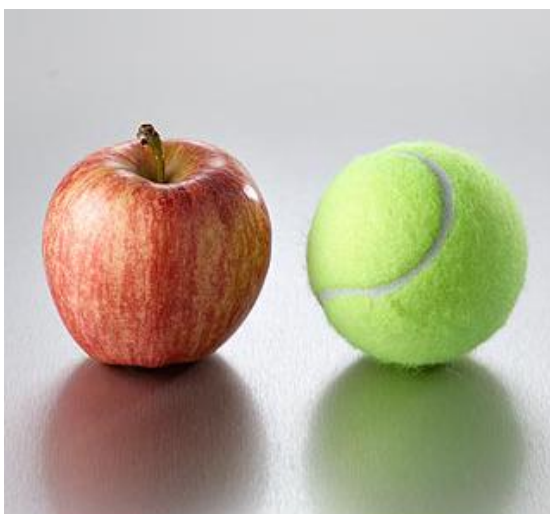
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Starch: This $\frac{1}{4}$ th of the plate is where your Breads/ Starches/ and Grains stay. You can eat a variety of foods in this group. Examples are noodles, rice, bread, cereal, crackers, small tortillas, potatoes, and dried beans (chili). For cereal and soup use the small bowl; it fits right on this $\frac{1}{4}$ th of the plate. Some vegetables are higher in starch/carbohydrate. These also belong in this group and include corn, peas, yams, and winter squash.



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Protein: This $\frac{1}{4}$ th of the plate is where you put your meats. You can use any type of meat, fish, poultry, tofu, eggs, and nuts. These are high in protein, but are sometimes high in fat. Remove visible fat before cooking & eating. Remember, low fat foods are better for your heart and your waistline. Healthier cooking choices include baked, broiled and boiled items with little fat added. Healthier fats can be found in fish such as salmon and mackerel, and nuts (except coconut).



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Fruit: A serving of fruit is 1 small piece, like a small apple, small orange, or small orange.

Use your *small dish* to hold fruits like applesauce and fruit cocktail. It holds a $\frac{1}{2}$ cup. When using canned fruit, lite-packed and juice-packed are the best choices. Juice servings are about $\frac{1}{2}$ of a small coffee cup. Remember, juice does not fill you up. You will feel fuller if you eat a small orange instead of drinking juice.

Some fruits have less starch/carbohydrate, so you can eat a little more of them. These bonus foods are melons and berries, use your small bowl for the right serving size.

Dairy: Find a small coffee cup or glass that holds about 1 cup for foods in this section. Fat Free milk, Skim milk, 1% milk, and Lite yogurt are your best choices.



Use a small dish for servings of Lite ice cream and sugar-free pudding to add variety. You will need 3 servings per day from this group to get enough calcium. Teens and adolescents need 4 servings. If you do not drink milk talk to your Registered Dietitian/ Educator about ways to add calcium to your diet. Calcium from milk products can help control blood pressure and help you lose weight easier. Calcium is also important for strong bones.

Now you can set up Lunch & Dinner meals

- You can put any meat you want on the $\frac{1}{4}$ th plate for meat.
- Place any Bread/Starch food you want on the $\frac{1}{4}$ th Plate for Breads
- Any vegetable can go on the $\frac{1}{2}$ for Veggies (except vegetables which are a starch, and go on the $\frac{1}{4}$ th plate for Breads/ Starches/ Grains). Any Fruit can go in the small dish for fruits. Any Milk product goes in the Milk section

Now let's look at the Breakfast

You have a $\frac{1}{4}$ th of the plate for meat, a $\frac{1}{4}$ th of plate for Breads / Starch / Grain, a dish of fruit, any kind you want and a milk serving.

To set up a Breakfast meal

- You can choose to put any meat you want on the $\frac{1}{4}$ th plate for meat.
- Any Bread/Starch / Grain food you want on the $\frac{1}{4}$ th plate for Breads.
- Any Fruit which goes in the small dish for fruits.
- Any Milk serving which goes in the Milk section.

1 Fruit = 1 Milk = 1 Bread/Starch

Milk, Fruits and Breads/Starches/Grains all affect your blood sugar levels about the same amount. That is why these foods can be traded for one another. So, if you do not want fruit for lunch, you could have another serving of milk. These foods each break down into sugar, a natural fuel, in the body. Maybe you are thinking you should avoid these food groups? No. You need a variety of foods from all the food groups to be healthy.

With the Plate Method you can start to control your blood sugar levels. When you eat about the same amount of food on your plate at each meal, you can help avoid blood sugar swings. It is best not to skip a food group. You need the nutrients from each food group to stay healthy. A diet low in fruits and whole grains is also low in fiber and many vitamins and minerals.

You cannot trade meat and vegetable servings.

What are Basic Portion Sizes?

for 1/4th a plate, or small dish, or small coffee cup

- One deck of cards – ½ chicken breast, small pork chop, steak, hamburger patty, fish filet
- One piece - one slice toast, or one small apple, or small banana
- One half - hamburger bun, English muffin, large banana, or grapefruit
- 1/2 cup - mashed potatoes, cut up fruit, or juice
- One cup - milk, yogurt, melon, berries, or soup

Question – What about snacks?

Plan on saving the fruit serving at meals and have it later between meals as a snack.

Question – What about desserts?

Your fruit can be traded for a small dessert - use the small dish to help watch the serving size. If you trade too often, your weight may suffer. Also make sure the serving size of desserts is small so it does not raise your blood sugar.

Question - I'm not a big eater. I can't eat that much food.

You do not need to fill the parts of the plate top full. Remember the key is CONSISTENCY. Eat about the same amount of food on each section of the plate at each meal. If you have your favorite mashed potatoes one day, you should not have more on that section of your plate than the day when you had plain noodles. This will help you even out your blood sugars.

- For very small eaters and kids try eating 1/4th plate of vegetables
- Kids may need an extra snack of fruit or bread or milk between meals

Question – My husband needs more food than me?

For men we usually add an extra Bread/ Starch/ Grain serving at each meal. Just use a 2nd small dish like you use for fruits for the extra Bread /Starch/ Grain serving. You can add the extra serving between meals as a snack. Your Registered Dietitian/Educator can help you tailor the diet to your exact needs.

Question – We eat more meat than that.

- Yes, most people eat more protein and fat than we need.
- By using only a 1/4th a plate of meat you may lower your weight & cholesterol. It's the healthy thing to do!

Question - My husband drinks large glasses of Milk with meals.

- Often we get too many calories from our beverages. If he needs to lose weight, try cutting down to the smaller size of milk, or 2 small cups of milk.

- Remember to drink more water. Try at least 3 glasses a day. (Many people recommend 8 glasses of water a day).

Question - What about eating out?

- When eating out, simply order smaller servings and follow the Plate Method set up.
- Fill a to-go box with the extra food items before you begin your meal. It makes it easier to avoid over eating.
- Salad bars are a great way to get your vegetables but make sure to limit those with lots of mayonnaise. Remember potato salad and macaroni salad go on the Bread/Starch/Grain section of your plate- Not the Vegetable portion

Question - What about FATS: Margarine, Salad dressings, Whip cream, Sour cream and Spray Pam?



- Try to use less! Be skimpy
- Mayonnaise- Try Lite or Fat Free.
- Try Lite Salad Dressings or Fat Free, always add on the side, even at home.
- Sour Cream- Try Lite or Fat Free.
- Spray Pam- count 1, 2, 3 & stop Spraying.
- Gravy- use Fat Free, or use fat free broth, & always be skimpy and serve in a small side dish. When making homemade, skim the

fat off the meat broth.

Remember people with Diabetes are at a higher risk for heart attacks and strokes so try to limit fat intake, especially hard (saturated) fats. Your MD should check your cholesterol at least once a year. If you can not lower your cholesterol with your diet, it is recommended you take medication.

Question - What are the best ways to cook meats?

grilled, broiled, baked, boiled, steamed

limit these methods: fried, breaded, with sauce, sautéed

Question - I'm following the Plate Method, what else can I do to lose weight?

Make sure the food stacked the highest on the plate is the vegetables. Do not let the foods touch each other. Example: my meat cannot touch my mashed potatoes. By doing this you make the serving size of foods slightly smaller.

Question - How can I learn more?

- To learn more about your meal plan and ways to tailor it to your needs: Talk with a Registered Dietitian

Carbohydrate Counting

Sometimes milk – fruits - and bread/starch/grain food groups are called carbohydrate foods. Some people with diabetes count carbohydrates at each meal. That means that they get a certain number of carbohydrate foods at each meal. Using the basic Plate you have 3 servings of carbohydrate foods at each meal, which is 45 grams of carbohydrates at each meal.

All that means is that you have 1 serving of Milk and 1 serving of fruit and 1 serving of Bread/Starch/Grain at each meal. Easy, huh?

1 Fruit = 1 Milk = 1 Bread/Starch/Grain and they all equal about 15 grams of carbohydrates, or 1 carbohydrate serving.

More on <http://wadepage.org/node/598>

Reading Food Labels

Nutrition Facts			
Serving Size 3 oz. (85g)			
Amount Per Serving		As Served	
Calories 38		Calories from Fat 0	
		% Daily Value	
Total Fat 0g		0%	
Saturated Fat 0g		0%	
Cholesterol 0g		0%	
Sodium 0g		2%	
Total Carbohydrate 0g		3%	
Dietary Fiber 0g		8%	
Sugars 0g			
Protein 0g			
Vitamin A 270%	•	Vitamin C 10%	
Calcium 2%	•	Iron 0%	
Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:			
	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	80g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Serving Size: Serving size is based on the amount of food people typically eat at a given meal. This may or may not be the serving amount you normally eat. It is important that you pay attention to the serving size, including the number of servings in the package and compare it to how much you actually eat. The size of the serving on the food package influences all the nutrient amounts listed on the top part of the label. For example, if a package has 4 servings and you eat the entire package, you quadruple the calories, fat, etc. that are listed on the label.

Do not confuse portion size with serving size. A portion size is what you chose to eat -- there are no standard measures for this. A serving size is a standard amount used to help give advice about how much to eat. It helps you identify how many calories are in the foods you eat and what the nutritional content would be in a serving size. For example a slice of bread is a serving size of one for bread on the food pyramid. Yet if you eat a sandwich with 2 slices of bread, you would have

had 2 servings of bread in your portion.

Calories and Calories from Fat: The number of calories and grams of nutrients are provided for the stated serving size. This is the part of the food label where you will find the amount of fat per serving.

Nutrients: This section lists the daily amount of each nutrient in the food package. These daily values are the reference numbers that are set by the government and are based on current nutrition recommendations. Some labels list daily values for both 2,000 and 2,500 calorie diets.

"% Daily Value" shows how a food fits into a 2,000 calorie/day diet. For diets other than 2,000 calories, divide by 2,000 to determine the % Daily Value for nutrients. For example, if you are following a 1,500 calorie diet, your % Daily Value goal will be based on 75% for each nutrient, not 100%.

When it comes to fat, saturated fat, and cholesterol, choose foods with a low % Daily Value. For total carbohydrates, dietary fiber, vitamins and minerals, try to reach your goal for each nutrient.

Ingredients: Each product should list the ingredients on the label. They are listed from largest to smallest amount (by weight). This means a food contains the largest amount of the first ingredient and the smallest amount of the last ingredient.

Artificial Sweeteners



Artificial sweeteners may assist in weight management, prevention of dental **caries**, and control of blood **glucose** for diabetics. It has also been suggested that low-calorie sweeteners may stimulate the appetite, but the bulk of evidence does not support this hypothesis. Conclusive research demonstrates that artificial sweeteners have no effect on **carbohydrate metabolism**, short- or long-term blood glucose control, or **insulin** secretion, and they are thus an excellent sugar alternative for diabetics. There have been a number of health concerns related with these products, though the Food and Drug Administration (FDA) approval process for artificial sweeteners involves a

comprehensive analysis of scientific data to satisfy safety requirements. All "generally recognized as safe" (GRAS) sweeteners have undergone extensive safety testing and have been carefully reviewed by the FDA.

Effects of Alcohol on Diabetes

Read more: <http://www.livestrong.com/article/28394-alcohol-affect-blood-sugar-levels/#ixzz1vcrluLJJ>



Not only does drinking alcohol cause blood sugar to drop, it also results in increased difficulty for the body to regulate blood sugar levels. Because the liver prioritizes metabolizing alcohol over regulating other blood sugar levels, blood sugar does not receive the typical secretions of glucagon to then increase blood sugar levels. For this reason, it is important for people (especially those who have a condition such as diabetes) to consume carbohydrates or take a carbohydrate-type tablet, such as an oral glucose tablet or gel.

Long-Term Blood Sugar Control

While the immediate reaction to alcohol consumption may be low blood sugar, over time, chronic drinking can lead to high blood sugar. Frequent heavy drinkers' insulin slowly loses effectiveness in regulating blood sugar levels. This is the body's way of attempting to maintain blood sugar balance. However, the loss of insulin effectiveness can cause the blood sugar levels to rise instead of lower

when alcohol is consumed. This can have severe long-term effects, such as liver damage and diabetes. Both conditions require medical treatment and can be life-threatening if left untreated.

WEIGHT LOSS TIPS

Read more: <http://www.livestrong.com/article/293225-diabetic-diet-free-foods/#ixzz24yfuk000>



INSTRUCTIONS: Following are tips that may help you lose weight and keep it off. Ask your caregiver for the best diet plan for you.

DIET PLANS: Do not try a crash or fad diet that suggests you eat less than 1000 to 1200 calories each day. Keep your kitchen full of healthy foods on your diet plan. Eat healthy foods from all 5 food groups each day: breads, dairy, fruits, vegetables, meat and fish. Eat only small amount of fats, like 1 to 3 teaspoons each day of oils, nuts, dressings, and margarine. Bake, roast, or broil your food instead of frying.

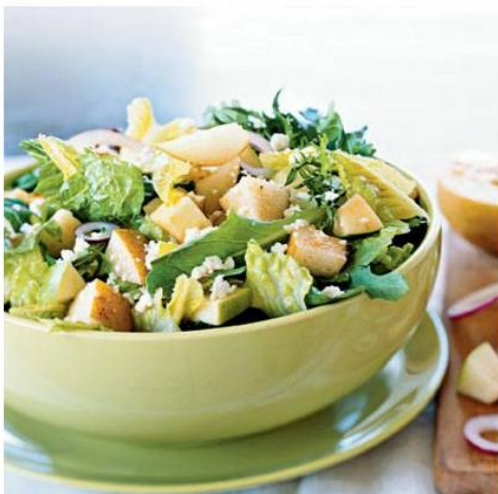
FIBER High fiber foods help with weight loss because they help fill you up. You may feel full longer because some kinds of fiber help food stay in your stomach longer. They also help prevent certain kinds of cancer if eaten over long periods of time. Eat high fiber and starchy foods, such as whole grain breads, pasta, and potatoes. Other high fiber foods are cooked dried beans, raw or steamed vegetables, and fruit. You should eat 5 or more fruits and vegetables each day. The vegetables may be eaten raw or steamed. Eat cooked vegetables without sauces and with little margarine.

FLUIDS: Drink 6 to 8 (soda-pop can size) glasses of liquid each day. Or, follow your caregiver's advice if you must limit the amount of liquid you drink. Some times when you feel a food craving, you are really more thirsty than hungry. So, make sure that you have water and other low calorie liquids available all the time. Limit fruit juices to 1 to 2 small glasses per day because they are high in calories. Limit how much alcohol you drink. Alcoholic drinks have many calories and can weaken your will power with food. Alcohol can also make you hungrier than usual.

PROTEIN FOODS: Make sure your diet plan allows plenty of protein while you are losing weight. This will help you feel stronger while you are eating a lot fewer calories. Choose meat, fish, and poultry that is very lean before cooking. Remove all fat from meats and skin from poultry before cooking. Nuts and seeds are high in fat so limit the amount you eat. Do not eat more than 3 to 4 eggs a week. Use low fat and fat-free dairy products, salad dressings, and cheeses.

SNACKS: Fresh vegetables with fat-free dip are a healthy snack food. Fat-free rice cakes and rye crackers contain fiber and starch which helps you feel full. Avoid foods high in sugar, such as candy, cookies, and pastries. Also, avoid high fat snacks, such as nuts, regular chips, and chocolate foods. Instead try baked or fat-free chips, air-popped popcorn, or fresh fruit between meals.

MEALS: Enjoy your food by sitting down and eating slowly. Mealtime should be relaxing and enjoyable. Do not skip meals. Missing a regular meal can make you even hungrier at the next one. You may then overeat without meaning to. Many people do not like breakfast. Even so, try to eat something light in the morning. It will give you energy for the busy time of day and may prevent a binge later.



Free Foods

The diabetes diet is not a restrictive diet, according to MayoClinic.com, but is a healthy eating plan designed to promote a healthy weight and normal blood sugars. The diet consists of a variety of nutritious foods eaten in moderate amounts at consistent mealtimes. Some foods on the diabetic meal plan are considered free foods and can be eaten at anytime. A diabetic free food has less than 20 calories and 5g of carbohydrate.

Beverages

Diabetic free foods can be enjoyed in moderate amounts as often as you like, according to MayoClinic.com. Drinking fluids regularly helps you stay hydrated. Adequate hydration is necessary for

everyday bodily functions and helps you maintain your energy levels. There are a number of beverage choices you can drink without guilt on the diabetic diet. Beverages on the diabetic free food list include broth, diet soda, club soda, plain coffee and tea, sugar-free drink mixes, carbohydrate-free flavored waters, tonic water, sparkling water, mineral water and plain water.

Condiments and Seasonings

Condiments and seasonings can make bland food more flavorful. You have a number of different choices you can use to enhance the flavor of your food without adding calories or carbohydrates. Condiments on the free food list include horseradish, lemon juice, lime juice, low-sodium soy sauce, mustard and vinegars. Seasonings on the diabetic free food list include cooking spray, cooking wine, flavored extracts, garlic, herbs, hot pepper sauce, pimento, spices and Worcestershire sauce.

Other Foods

Sugar-free foods are not diabetic free foods. Many sugar-free foods contain carbohydrates.

Carbohydrates in foods raise blood sugar. If a food item is labeled as sugar-free read the nutrition facts label for the carbohydrate content. A food item with more than 5g of carbohydrate per serving is not a diabetic free food. Other diabetic free foods include sugar-free gelatin, sugar-free gum, sugar substitute, salsa and tossed greens.

Portion-Controlled Diabetic Free Foods

Portion sizes count for some diabetic free foods. You can have up to three servings a day of a portion controlled diabetic free food. Examples of portion-controlled diabetic free foods include 1 tbs fat-free cream cheese, 1 tbs fat-free mayonnaise, 4 tbs fat-free margarine, 1 tbsp. of fat-free salad dressing, 1 tbs of fat-free sour cream, 2 tbs whipped topping, 1 tbs unsweetened cocoa, 1 tbs ketchup, 1 1/2 large unsweetened pickles, 1 tbs taco sauce, one piece sugar-free candy, 2 tsp, sugar-free jelly and 2 tbs sugar-free pancake syrup.



Fiber

Dietary fiber is found in whole grains, legumes, fruits and vegetables. Despite fiber being found in various foods, fiber intake among Americans is falling far short of the recommendation. The National Health and Nutrition Examination Survey found that nine out of 10 Americans are

not meeting daily recommendations for dietary fiber. Fiber has various health benefits, such as maintaining bowel health, decreasing cholesterol and providing satiety. The addition of fiber-rich foods may also be beneficial for diabetics, as fiber helps to regulate blood sugar levels after meals.

Provides Satiety

Dietary fiber is a non-digestible carbohydrate, meaning the body does not digest or absorb fiber. Rather, fiber provides bulk to stool, promotes bowel movements, binds to toxins in the gut and helps to slow down the digestion process. This slowing of digestion allows you to feel fuller faster, leading to less food consumed. For a diabetic, this can help to decrease the overall glycemic load of a meal by decreasing the amount of carbohydrates consumed at one time. This also allows for better weight management, which is another factor in glycemic control.

Regulates Blood Glucose

Since fiber helps to slow down digestion, it slows down the amount of carbohydrates absorbed into the blood. Instead of sharp, fast spikes in blood sugar after a meal, fiber slows down that process, providing a more steady and attenuated increase in blood sugar. Overall, this helps to prevent wide swings in blood sugar.

Improves Blood Pressure

While not completely understood, fiber intake has been associated with improved values of blood pressure. Fiber-rich foods are high in the minerals potassium and magnesium, which may be involved in the reduction of hypertension, or high blood pressure.

Decreases Triglycerides and Cholesterol

Triglycerides are fats that originate in some foods naturally and are synthesized from excess carbohydrates or protein. Studies indicate that increases in fiber intake leads to decreases in triglycerides. Fiber also helps to decrease cholesterol in two ways. First, fiber acts as a sponge in the gut, trapping bile and excreting it from the body. Bile is needed to digest fat and is typically recycled and used continuously. Cholesterol is needed to make bile, so when a decrease of bile occurs, cholesterol is used to synthesize more. Secondly, fiber contains a compound that acts in the liver to prevent the synthesis of new cholesterol.

Dietary Recommendation

The International Life Sciences Institute reviewed past research on fiber and its health benefits and concluded that fiber helps to prevent and manage chronic diseases. Its expert panel recommends fiber intake of 14 grams for every 1,000 calories consumed. However, research conducted specifically on diabetics from the VA Medical Center in Kentucky found that a diet including 55 percent to 60 percent from carbohydrates and 15 g to 25 g of fiber per 1,000 calories provided the best glycemic control and reduction in cholesterol levels. Diabetics are at higher risk for heart disease related to high levels of cholesterol, triglycerides, and blood pressure. Increasing fiber intake may not only improve blood sugar levels, but also help prevent heart disease

EXERCISE: Check with your caregivers before starting to exercise if you have not been exercising. Work with your caregiver to plan an exercise program special for you. Find several types of exercise that you really like and work them into your schedule. Meet with an exercise "buddy" who will help you stay active. Many health clubs have evening and morning hours which are helpful. Even 20 to 30 minutes a day of activity will help you lower your weight. It will lower the fat percent of your body weight and raise the amount of muscle you have. This increases the number of calories you burn each day.

HEALTHY EATING

Do you feel you are eating healthy? ☐ YES ☐ NO

MY GOALS FOR HEALTHY EATING

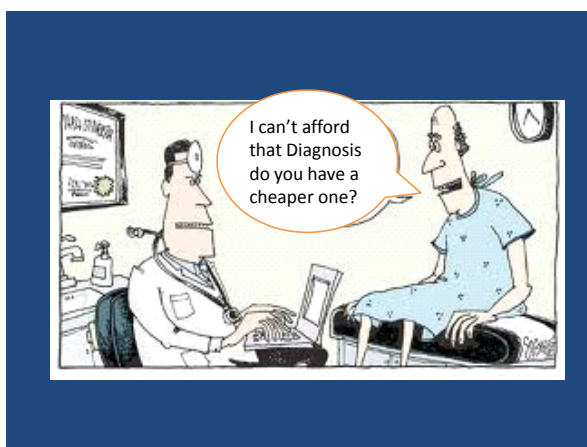
- ☐ 1500 calories and 135 to 150 grams of Carbohydrate per day
- ☐ 1800 to 2000 calories with 150 to 170 grams of Carbohydrate per day
- ☐ Follow eating schedule better ☐ Eat better food
- ☐ Overeat less often
- ☐ Lose _____ pounds in next 9 months (Current weight is _____ pounds)

Problem Solving

A person with diabetes must keep their problem-solving skills sharp because on any given day, a high or low blood glucose episode or a sick day will require them to make rapid, informed decisions about food, activity and medications. This skill is continuously put to use because even after decades of living with the disease, stability is never fully attained: the disease is progressive, chronic complications emerge, life situations change and the patient is aging.

This self-care behavior focuses on the “what ifs”—that is, what to do if your glucose is too low or too high, or what if you become sick, what would you do? Unfortunately, if your glucose is too high or too low, it may influence your problem-solving skills. Have a plan, ahead of time, so that you will know what to do.

Problem: How to Cut Health Care Cost Related To Diabetes



Many people who have diabetes - who have estimated healthcare costs totaling about three times that of the Average American without diagnosed diabetes - need help paying some of the bills. It's a good idea to start by looking for an insurance plan that covers as many diabetes-related expenses as possible. A variety of governmental and nongovernmental programs exist to help, depending on whether you qualify.

Medicare

Medicare is a government program providing health care services for people who are 65 years and older. People who are disabled or have

become disabled also can apply for Medicare, and limited coverage is available for people of all ages with kidney failure. To learn if you're eligible, check with your local Social Security office or call the Medicare Hotline listed below. Medicare now includes coverage for glucose monitors, test strips, and lancets as well as medical nutrition therapy services for people with diabetes or kidney disease when referred by a doctor. Diabetes self-management training, therapeutic shoes, glaucoma screening, and flu and pneumonia shots are also covered.

For more information about Medicare benefits, call the National Diabetes Education Program at 800.438.5383 and request copies of *The Power to Control Diabetes Is in Your Hands* and *Expanded Medicare Coverage of Diabetes Services*, or read them online at www.ndep.nih.gov (click on "Control" under "About Diabetes and Pre-Diabetes"). You can also read the booklet *Medicare Coverage of Diabetes Supplies & Services* (PDF) online or request a copy from:

Centers for Medicare & Medicaid Services 7500 Security Boulevard Baltimore, MD 21244-1850
Phone: 800.MEDICARE (633.4227) Internet: www.medicare.gov

Medicaid

Medicaid is a state health assistance program for people based on financial need. Your income must be below a certain level to qualify for Medicaid funds. To apply, talk with a social worker or contact your local department of human services. Check the government pages of your phone book.

State Children's Health Insurance Program

The U.S. Department of Health and Human Services has established the State Children's Health Insurance Program (SCHIP) to help children without health insurance. SCHIP provides health coverage for children whose families earn too much to qualify for Medicaid but too little to afford private health insurance. Consumers can obtain information about the program by calling toll-free 877.KIDS-NOW (543.7669), or by checking www.insurekidsnow.gov.

Providence St Mary Medical Center

If you need help paying for your hospital bill (including the cost of diabetes education) Our financial counselors can explain your options. You can meet in person or call 509 522 5804 or 1 800 452 3320, ext. 2237.

Health Insurance

Because health insurance is meant to cover unexpected future illnesses, diabetes that has already been diagnosed presents a problem. It is considered a preexisting condition so finding coverage may be difficult. Many insurance companies have a specific waiting period during which they do not cover diabetes-related expenses for new enrollees, although they will cover other medical expenses that arise during this time.

Recent state and Federal laws, however, may help. Many states now require insurance companies to cover diabetes supplies and education. The Health Insurance Portability Act, passed by Congress in 1996, limits insurance companies from denying coverage because of a preexisting condition. To find out more about these laws, contact your state insurance regulatory office. This office can also help you find an insurance company that offers individual coverage.

Managed Care

Most HMOs keep costs down by limiting the choice of doctors to those who belong to the network, restricting access to specialists, reducing hospital stays, and emphasizing preventive care. In most managed care plans, especially Medicare HMOs, you select a primary care physician who will be responsible for directing your care and referring you to specialists when he or she feels it's necessary. Some plans also cover extra benefits like prescription drugs.

For more information on managed care organizations, particularly the quality of care offered to patients, you may want to contact the National Committee for Quality Assurance (NCQA) at 888.275.7585 or [see www.ncqa.org](http://www.ncqa.org).

Medicare also has many publications to help you learn more about managed care. Go to www.medicare.gov on the Internet or call 800.MEDICARE (633.4227) for more information.

Health Insurance After Leaving a Job

If you lose your health coverage when you leave your job, you may be able to buy group coverage for up to 18 months under a Federal law called the Consolidated Omnibus Budget Reconciliation Act or COBRA. Buying group coverage is cheaper than going out alone to buy individual coverage. If you have a disability, you can extend COBRA coverage for up to 29 months. COBRA may also cover young people who were insured under a parent's policy but have reached the age limit and are trying to obtain their own insurance.

For more information, call the Department of Labor at 866.487.2365 or see www.dol.gov/dol/topic/health-plans/cobra.htm

If you don't qualify for coverage or if your COBRA coverage has expired, you can still seek other options:

- Some states require employers to offer conversion policies, in which you stay with your insurance company but buy individual coverage.
- Some professional or alumni organizations offer group coverage for members.
- Your state may be one of 29 with a high-risk pool for people unable to get coverage.
- Some insurance companies also offer stopgap policies designed for people who are between jobs.

Contact your state insurance regulatory office for more information on these and other options.

Information on consumer health plans is also available at the U.S. Department of Labor's website at www.dol.gov/dol/topic/health-plans/consumerinfhealth.htm

Prescription Assistance

The Partnership for Prescription Assistance (<https://www.pparx.org/Intro.php>) works with pharmaceutical companies, doctors, other health care providers, patient advocacy organizations and community groups to help qualifying patients who lack prescription coverage get the medicines they need through the public and private programs. Many patients receive free or nearly free assistance. Following is a list of pharmaceutical companies you can call regarding your particular medications as well as a state-by-state list of local assistance that is available.

Pharmaceutical Companies

- Abbott Diabetes Care Patient Assistance Program The Abbott Diabetes Care Patient Assistance Program offers assistance on blood glucose meters and strips to low-income patients in the United States. In 2006, more than 5,200 patients were approved for assistance at a retail value of approximately \$425,000. We donated nearly 3,500 blood glucose meters and more than 35,000 boxes of blood glucose strips. For more information about this program, visit www.abbottdiabetescare.com. Abbott Laboratories Abbott Patient Assistance Program Phone – 1-800-222-6885
- Ross Medical Nutritionals Patient Assistance Program Phone – 1-800-222-6885
- Amylin Pharmaceuticals, Inc. Amylin Patient Assistance Program Phone – 1-800-330-7647
- AstraZeneca Pharmaceuticals, LP AstraZeneca Foundation Patient Assistance Program Phone – 1-800-292-6363
- Aventis Pharmaceuticals Inc. Sanofi-Aventis Patient Assistance Program Phone – 1-800-221-4025
- Bayer Pharmaceuticals Corporation Bayer Patient Assistance Program Phone – 1-800-998-9180
- Bristol-Myers Squibb Company Bristol-Myers Squibb Patient Assistance Foundation, Inc. Phone – 1-800-736-0003
- Eli Lilly and Company Lilly Cares Phone – 1-800-545-6962
- GlaxoSmithKline Bridges to Access Phone – 1-866-728-4368 Commitment to Access Phone – 1-866-265-6491
- Johnson & Johnson Health Care Systems Patient Assistance Program Phone – 1-800-652-6227
- Merck Patient Assistance Program Phone - 1-800-994-2111
- Merck/Schering-Plough Pharmaceuticals Merck/Schering-Plough Patient Assistance Program Phone – 1-800-347-7503
- Novartis Pharmaceuticals Corporation Novartis Pharmaceuticals Corporation Patient Assistance Program Phone – 1-800-277-2254
- Novo Nordisk Inc. Novo Nordisk Diabetes Patient Assistance Program Phone – 1-866-310-7549
- Pfizer Inc. Pfizer Helpful Answers Phone – 1-800-706-2400 Pfizer Bridge Program (Endocrine Care) Phone – 1-800-645-1280 Pfizer Pfriends Savings Program Phone – 1-800-706-2400
- Roche Laboratories Inc. Roche Laboratories Patient Assistance Program Phone – 1-877-757-6243
- Sanofi-Aventis Sanofi-Aventis Patient Assistance Program Phone – 1-800-221-4025
- Schering-Plough Corporation SP-Cares Patient Assistance Program Phone – 1-800-656-9485
- Takeda Pharmaceuticals North America, Inc. Takeda Patient Assistance Program Phone – 1-800-830-9159 or 1-877-582-5332
- **Together Rx Access** A free savings program sponsored by Abbott, AstraZeneca, Bristol-Myers, Squibb, GlaxoSmithKline, members of Johnson & Johnson Family of Companies, Novartis, Pfizer, Sanofi-Aventis Group, Takeda and TAP Pharmaceutical Products Inc. Phone – 1-800-444-4106



Problem Sick Days

You can prepare ahead for an illness by having a sick-day meal plan:

- If your blood glucose is more than 240 mg/dl, drink one cup (8 oz.) of fluids like water, broth or sugar-free, caffeine-free tea or diet soda every one to two hours.
- If your blood glucose is less than 240 mg/dl, drink fluids with 10 to 15 grams of carbohydrate every one to two hours.
- Replace missed meals or snacks with 50 grams of carbohydrate or follow a sick-day meal plan designed for you.

- Some liquids and semi liquids to try:

Build a Sick-Day Kit

Along with your sick-day meal plan, you need a sick-day kit. The kit might include the following items:

- Extra blood glucose strips (*Do not use strips if past the expiration date.*)
- Urine ketone strips or blood ketone strips (if you have type 1 diabetes)
- Thermometer
- Doctor's phone number
- Instructions from the doctor about extra insulin coverage

DON'T FORGET — WHEN YOU ARE SICK:

- Always take your medications (insulin or diabetes pill).
- Your blood glucose levels will increase.
- Test your blood glucose (and ketones, if you have type 1 diabetes) more often.
- Keep in touch with your health care team.
- Be alert to the effects of over-the-counter drugs on your blood glucose.

Medications That Can Affect Diabetes

Some medications can have an effect on diabetes control. For this reason, always tell your diabetes health care team about any new medications you are using. This includes prescription and nonprescription drugs.

Follow these guidelines when choosing nonprescription drugs:

- Read all labels carefully.
- Check all warnings and cautions.
- Avoid products containing sugar. Select sugar-free products, and watch for sorbitol, mannitol, honey and any word that ends in “-ose” (dextrose, fructose, lactose). These are all types of sugar and contain calories.
- Select products with little or no alcohol.
- Oral decongestants raise blood glucose and should be taken only with your doctor's consent.
- Ask your pharmacist for help choosing medications.

Choosing Over-the-Counter Medications

See the chart below for examples of over-the-counter medications that have minimal to no effect on blood glucose level. Before using any over the- counter medications, discuss them with your doctor to determine if they are the best choice for you.

Cough Medications

Cepacol tablets (sugar-free)
Ceroxe DM expectorant
Colrex expectorant
Hytuss tablets
Robitussin (sugar-free)
Sorbituss syrup
Supercitin
Toclonol expectorant
Tolu-Sed
Tolu-Sed DM
Tussar-SF
Tuss-Ornade

Fever Reducers/Pain Relievers

Children's Panadol
St. Joseph aspirin-free infant drops
Tylenol or Tylenol drops
Datril
Acetaminophen

Antidiarrheals

Kaopectate
Lomotil liquid
Parepectolin
Pepto-Bismol

Be a Wise Health Care User

Taking good care of yourself, using the diabetes self-care skills you learn and seeking preventive health care should help you avoid getting sick. When you need to see the doctor or any other member of your health care team, it is important to be prepared.

You can prepare by:

- Having a written list of questions you want to ask
- Sharing concerns and symptoms
- Reviewing all medications you use, including over-the-counter drugs

When you don't feel well, the stress of being ill causes your blood glucose to rise — often even if you are eating and exercising as usual. The goal of sick-day management is to prevent a minor illness from developing into a major illness. **What to Do When You Are Sick**

- Continue to take your usual daily dose of diabetes medication. An exception to this rule is Glucophage (metformin). If you are unable to eat and drink, you may become dehydrated. Do not take Glucophage if you are dehydrated.
- Monitor your blood glucose levels every two to four hours.
- Monitor your urine or blood for ketones if you have type 1 diabetes.
- Drink extra fluids.
- Rest.
- Involve a family member or friend in your sick-day plan. Be sure there is someone available to check on you and to help you if necessary.
- Check with your health care team before you take any nonprescription medications.

WHEN TO CALL YOUR HEALTH CARE TEAM

Call right away if:

- You vomit more than once every four to six hours.
- You are unable to eat or drink.
- You have positive ketones.
- You have a fever lasting more than 24 hours.
- You have diarrhea that does not go away for more than six hours.

When you call, be prepared to tell your doctor:

- How you feel (symptoms)
- How long you have been sick
- Your blood glucose
- Your ketone results
- What you have been eating and drinking
- Your temperature
- The name and dosage of all medications you have taken



Problem: Emergencies

Recommended Items to Include in a Basic Emergency Supply Kit:

- Water, one gallon of water per person per day for at least three days, for drinking and sanitation
- Food, at least a three-day supply of non-perishable food
- Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both

- Flashlight and extra batteries
- First aid kit
- Whistle to signal for help
- Dust mask, to help filter contaminated air and plastic sheeting and duct tape to shelter-in-place
- Moist towelettes, garbage bags and plastic ties for personal sanitation
- Wrench or pliers to turn off utilities
- Can opener for food (if kit contains canned food)
- Local maps

Additional Items to Consider Adding to an Emergency Supply Kit:

- Prescription medications and glasses
- Infant formula and diapers
- Pet food and extra water for your pet
- Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container
- Cash or traveler's checks and change
- Emergency reference material such as a first aid book or information from www.ready.gov
- Sleeping bag or warm blanket for each person. Consider additional bedding if you live in a cold-weather climate.
- Complete change of clothing including a long sleeved shirt, long pants and sturdy shoes. Consider additional clothing if you live in a cold-weather climate.
- Household chlorine bleach and medicine dropper – When diluted nine parts water to one part bleach, bleach can be used as a disinfectant. Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.
- Fire Extinguisher
- Matches in a waterproof container
- Feminine supplies and personal hygiene items
- Mess kits, paper cups, plates and plastic utensils, paper towels
- Paper and pencil
- Books, games, puzzles or other activities for children



Problem: Traveling with Diabetes

Traveling takes a little bit more planning when you have diabetes ...So here are some things to consider before you pack your bags and go:

Food: When you travel, your eating times may change. Bring portable snacks to prevent low blood sugar levels, such as nuts, cheese sticks, nutrition bars, and small pieces of fruit.

Always carry glucose tablets or hard chewable candies to treat low blood sugar. If you take insulin, ask your doctor to prescribe a glucagon emergency kit. Be sure you keep it handy. Make sure the person you are traveling with knows how to use it.

Medicines and Supplies: Whether you take oral or injectable medicines, it's a good idea to bring twice as much medicine and supplies than you think you will need. When flying, always carry diabetes medicines and testing supplies with you. Never leave insulin where it may get too hot or too cold. Always keep insulin in a cool, dry place. Let airport security people know that you have diabetes and are carrying supplies with you. Make sure your supplies are in the original packaging with original prescription labels.

Managing Blood Sugar: Check your blood sugar often when traveling. Doing this will help you to better manage your diabetes while away from home and help to prevent low or high blood sugar.

Physical Activity: You may be more active or less active than usual. Remember that your activity level does affect your blood glucose. If you are sitting longer than usual, move your feet by drawing circles in the air while sitting. If you can, stretch your legs by taking a short walk every hour when you can.

One last thing... Enjoy your trip! This is the payoff for all that planning. The more you are ready, the better you can manage your diabetes. This will make you feel your best, so you can have a good time.

Problem: Diabetic Ketoacidosis (DKA)

If you have type 1 diabetes, high blood glucose can cause a dangerous condition known as diabetic ketoacidosis (DKA). This occurs in people with type 1 diabetes because of a lack of insulin (an injection was skipped) or not enough insulin (due to illness or stress). When there is too little insulin, the body breaks down fat for energy, causing ketones to build up in the blood. Ketones can cause the blood to be acidic, and this can make you very sick (diabetic ketoacidosis). **If ketones are present, it is important to act quickly.**

How to prevent DKA when blood glucose levels are high:

- Follow guidelines for sick days.

- Don't stop taking your insulin.
- Test your blood glucose every two to four hours.
- If your blood glucose is more than 240 mg/dl, check for ketones in your blood or urine.
- Drink more fluids such as water, sugar-free, caffeine-free soda, broth or tea.
- Once your blood glucose is in control, examine your daily activities to help you understand why you became ill. If you changed your diet, medications or activity level, it may have contributed to severe hyperglycemia.

Early Symptoms of DKA Late Symptoms of DKA

Thirst A fruity odor to breath
 Need to urinate more often Nausea and vomiting
 Dry mouth Confusion
 High blood glucose levels Fatigue
 Ketones in urine or blood Abdominal pain

WHEN TO CALL YOUR HEALTH CARE TEAM

- If you do not have a plan to adjust insulin during hyperglycemic events
- If your blood glucose remains more than 240 mg/dl for two tests in a row
- If urine or blood ketones are present
- If you have vomiting or diarrhea lasting for more than four hours or are unable to eat or drink

Unless treated early, DKA will require treatment in a hospital with insulin and fluids. Your health care provider will also identify and treat the cause of DKA.

Problem: Hyperosmolar Hyperglycemic Nonketotic Syndrome (HHNS)

High blood glucose (often more than 600 mg/dl) can lead to a life threatening problem known as hyperosmolar hyperglycemic nonketotic syndrome (HHNS). It occurs more often in people with type 2 diabetes. HHNS can be caused by an illness, infection, dehydration or missed diabetes medication and often develops slowly.

Symptoms of HHNS include:

- Dehydration
- Feeling sluggish
- Mental confusion

WHEN TO CALL YOUR HEALTH CARE TEAM

Call your health care team any time you have symptoms of HHNS.

How to prevent HHNS when your blood glucose is high:

- Continue to take your diabetes medication.
- Test your blood glucose more frequently.
- Drink more fluids such as water, broth and sugar-free, caffeine-free soda and tea.
- Call your doctor if your blood glucose is more than 240 mg/dl for 24 hours.
- Assess your treatment plan or events that may have caused severe hyperglycemia.

HHNS requires treatment in a hospital with intravenous fluids and insulin until your blood glucose levels are under control. Your health care provider will also identify and treat the cause.

Problem: How do I get support from family and friends?

How do you get the kind of support you need? First, you have to decide what, when and how you want support. Then you need to tell the people who are involved with your care what you need. Usually, family members and friends are willing to help. If they have embarrassed or irritated you in the past it might be that they don't understand diabetes, or they are not sure how to help. They simply did what they thought was helpful.

Therefore, you need to:

- Educate your family and friends about your diabetes.
- Define how you want family and friends to help.
- Ask them directly for help and teach them how to give it.

Second, family members and friends need to understand diabetes, listen to what you think and feel, and support or join you in making some healthy changes. For example, if you are trying to lose weight, it simply will be easier if your family also eats the same lower fat foods. Your family and friends will also have concerns and worries (for example, guilt, fear, anger, etc.) about your diabetes that need to be talked about so that realistic expectations can be set, misconceptions corrected, and feelings understood.

Perhaps the two most important guidelines for family members are to have realistic expectations about blood glucose levels and to avoid blame. Family members need your help and the help of your healthcare team in order to understand that you cannot always control blood sugar levels even if you follow your diabetes care plan. Blaming the person with diabetes for high or low blood sugar levels never helps and frequently causes hurt feelings, arguments or serious conflict. The key to genuine support is to avoid blame and focus on problem solving.

With that said, there are times when there may be no clue as to what has caused the problem or how to correct it. At moments like these what may be needed is a hug, a sympathetic word or a dozen roses. Family and friends need to understand that this kind of support can be very helpful during frustrating times.

Problem: Will diabetes prevent me from working?

Your diabetes should not prevent you from working. Having diabetes or other health problems may make it unwise to choose certain jobs.

Employers are required to make "reasonable accommodation" if requested by an employee with a disability, unless the accommodation would cause an "undue hardship" on the employer because of significant difficulty or expense. The accommodations that people with diabetes need are usually easy and inexpensive. For example, a person with diabetes might require accommodations such as:

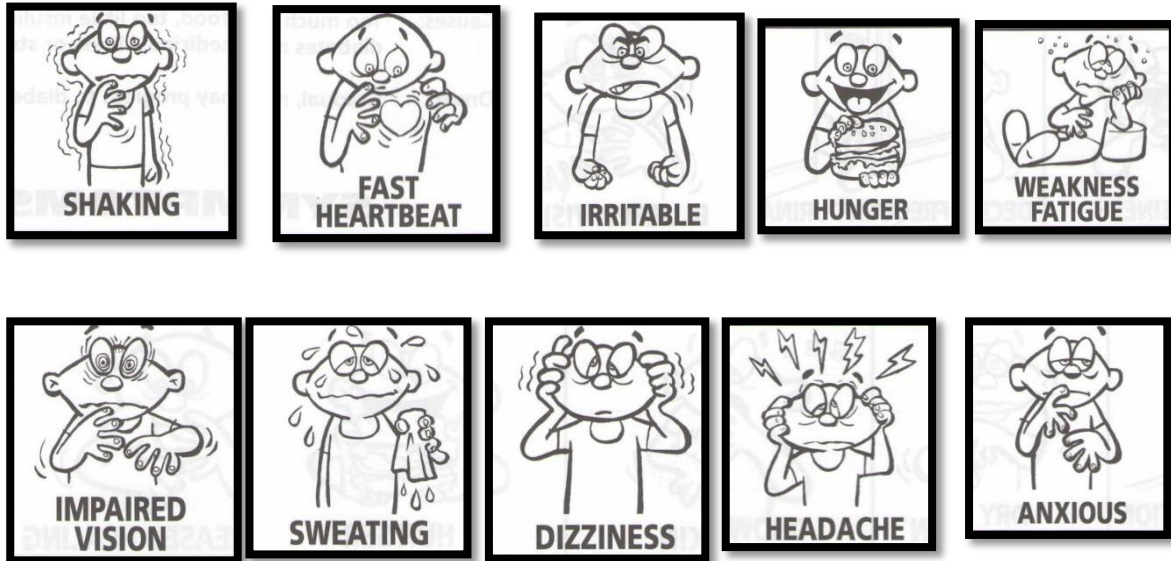
- Breaks to check blood glucose levels, eat a snack, or go to the bathroom.
- Special permission to eat on the job.
- The ability to keep diabetes supplies and food nearby.
- The opportunity to work a modified schedule or to work a standard shift as opposed to a swing shift.

If you take Precose (acarbose) or Glyset™ (miglitol), treatment of low blood glucose should be with glucose tablets, not candy or juice.

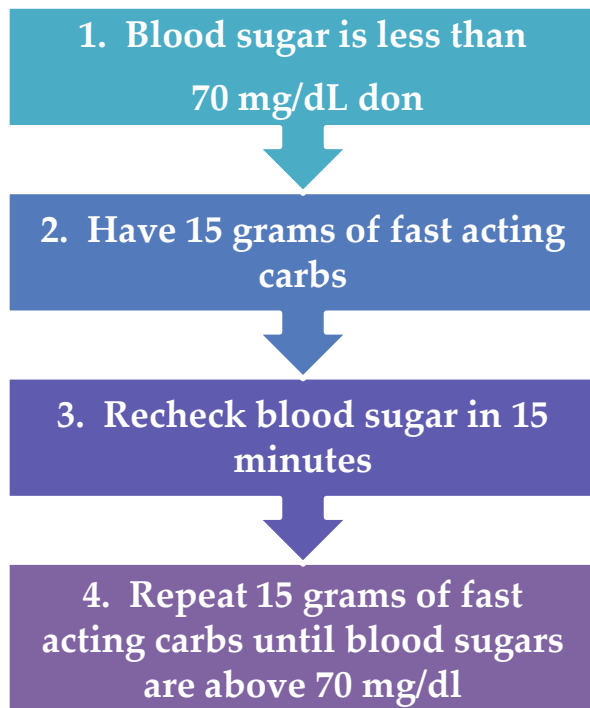
Problem: Low blood sugar Low Blood Sugars

Hypoglycemia is the term meaning low blood sugars. When your blood sugar falls too low (below 70 mg/dL) you may feel uncomfortable symptoms that come on fast.

Symptoms of Low Blood Sugar



The Rule of 15



When you start to feel symptoms of low blood sugar, check your blood sugar levels BUT if you don't have your meter go ahead and treat.

If your blood sugar level is too low it needs to be treated right away with 15 grams of carbs.

15 gram carbs

- 3 glucose tabs
- ½ cup of fruit juice/soda
- 6/7 hard candies (not sugar free)
- 1 tbs of honey or sugar.

If your blood sugar levels are still low after 15 minutes take 15 more grams of carbs.

If your sugar levels are still low after another 15 minutes, call your doctor.

Severe low blood sugar occurs when your blood glucose is so low that you are not alert and need someone to help treat your low blood glucose. If you have severe low blood glucose:

- You may pass out or not be able to swallow.
- You may need to receive glucagon, which is an injectable medicine used to treat low blood glucose when you cannot or will not swallow.

How to Give Glucagon

Glucagon is a hormone made by your body. It is not glucose. Glucagon causes glucose stored in the liver to be released, which raises blood glucose. Glucagon is administered by an injection when you cannot or will not swallow during a severe low-blood-glucose episode. It is available only by prescription and is sold as a single-dose kit. Check your glucagon kit regularly to make sure it has not passed its expiration date. Someone close to you needs to know when and how to use glucagon. Here are instructions for giving glucagon:

1. If you find someone who is unresponsive or unconscious, call 911 immediately.
2. Prepare the kit as directed. Glucagon must be mixed with the special solution provided in the kit.
3. Glucagon should be given immediately after mixing.
4. Position the person on his or her side. Vomiting may occur as the person is waking up, and this position will help keep fluid from going into the lungs.
5. Glucagon is given by injection, like insulin. It can be injected at a 90-degree angle straight into the upper arm, the outer part of the thigh or buttocks or anywhere insulin is given.
6. The full dose is given to adults. A smaller amount (20 micrograms) is given to infants or children under 44 pounds (20 kg).

What to Do After Giving Glucagon

After receiving glucagon, the person should have a snack (for example, juice with crackers and cheese) when he or she wakes up and can swallow. The person will usually wake up within 15 minutes. Call the doctor to report what happened. Be sure to replace the glucagon kit.

If the person does not wake up within 15 minutes, give another dose of glucagon and call 911 or get the person to the nearest emergency room immediately.

Do any of these problems interfere with your diabetes management?

- ☐ sick days
- ☐ low blood sugar
- ☐ high blood sugars
- ☐ emergencies such as power outage
- ☐ Other

MY GOALS FOR PROBLEM SOLVING

- ☐ make a sick day kit
- ☐ make a disaster kit
- ☐ be prepared to treat hypoglycemia
- ☐ Wear a medical alert tag identify you as having diabetes (important for those prone to hypoglycemia)
- ☐ Other

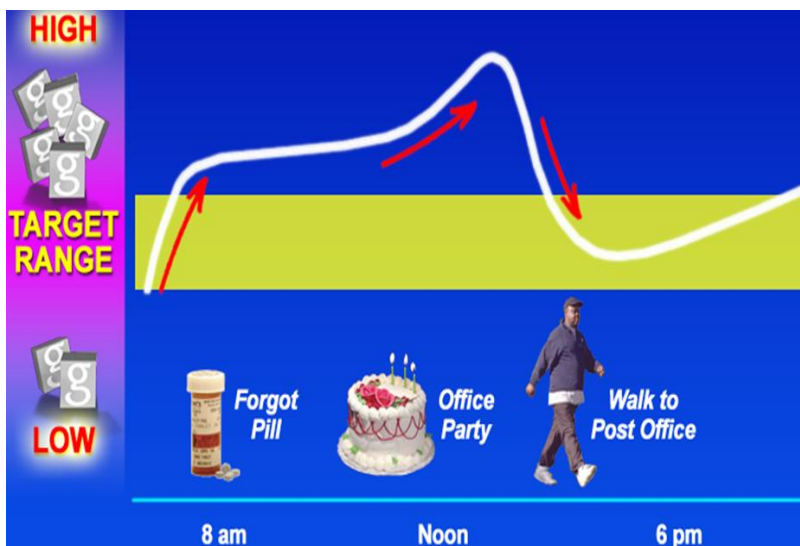
MONITORING



WHY Do I Need to Check My Blood Glucose?

Managing your diabetes by setting blood glucose goals

Your doctor will help you set goals, sometimes called **targets**, for your blood glucose levels. These are the ranges of numbers that your blood glucose should fall within most of the time. *Research has shown that keeping your blood glucose as close to your targets as possible can prevent or slow the complications of diabetes.* Although diabetes is a condition that does not go away, it can be managed by healthy eating, being active and, if needed, taking medication.



How self-monitoring helps you

Checking your own blood glucose gives you the information you need to answer these important questions:

- Is your blood glucose in its target ranges most of the time?
- What is your blood glucose level — too high, too low, or right on target?
- How can I correct an out-of-target blood glucose level?
- Do you need to take action to correct blood glucose that is too high or low?

• What changes can you make in the way you eat, take your medication or increase your activity that may improve your blood glucose readings?

Note: If your blood glucose was within target range before your favorite snack and out of range a few hours later, you may decide to eat less, exercise more or give more insulin next time.

What is causing out-of-target blood glucose? Did you eat too much or skip exercise? Are you sick? Is your medication working properly? Has anything changed in your routine?

ADA Recommended Targets			
	Normal	Target	When to take Action
Before eating	Less than 100	70 to 130	If less than 70 or greater than 130
2 Hours after eating	Less than 130	Less than 180	If less than 70 or greater than 200
A1c	Less than 6	Less than 7	If greater than 7

Your tool for better management



Source: DIABETease

When you self-monitor your blood glucose you are checking to see if you are staying within your targets or blood glucose goals. If you are outside your targets, you may need to take action. Think of your results as within your target range, “high or low” rather than “good or bad.” *Blood Glucose Monitoring (BGM) is a useful tool that lets you know if you need to take action or not. It puts you in charge of the things that affect blood glucose control.* Your doctor or diabetes educator will work with you to decide the blood glucose goals that are right for you. The following table provides recommended target blood glucose ranges and shows when you should take action to get your blood glucose back on track.

WHEN Should I Check My Blood Glucose?

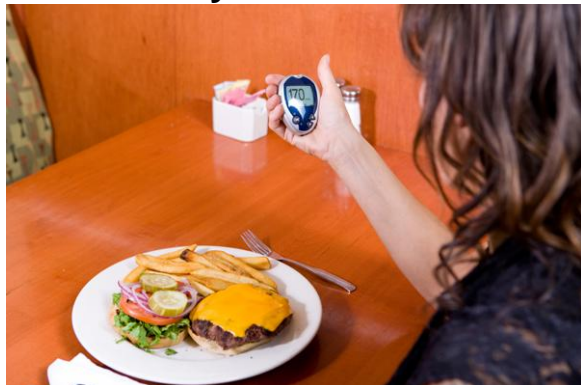
Deciding on your treatment plan



feel stressed. When you begin to monitor your blood glucose or if your blood glucose is not well managed, you may be asked to check your blood glucose more often than usual. This will give you and your doctor the information necessary to make changes to your treatment plan. Once you have reached your blood glucose goals, you may be able to reduce the number of blood glucose checks you do each day.

You and your doctor or diabetes educator will decide when you need to check your blood glucose and how often it should be done. This will depend on your treatment plan and how often you are willing to check your blood glucose. People who manage their diabetes with healthy eating and exercise, have a regular daily routine, and meet their blood glucose goals may only need to test once a day or a few times a week. People who take insulin may need to check four times a day or more. You may need to check more often as your treatment plan changes or you are sick or

A commonly recommended BGM plan



Check blood glucose:

- **Before meals and before taking insulin or medication**
- **Two hours after meals**
- **Before bedtime**

Note: For people who may have low blood glucose reactions during the night, a 3:00 AM blood glucose check may also be needed.

If you are taking insulin

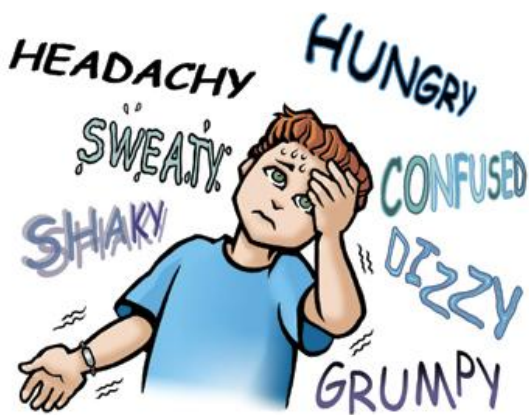
Self-monitoring your blood glucose will let you know if:

- **Your food, activity and insulin are matched**
- **An extra dose of insulin is needed to bring**

your blood glucose to your goal

- **It is safe for you to drive a car or go to sleep because your blood glucose is too low**

Change-of-routine alert!



No matter what BGM plan you have developed with your health care team, it is recommended that you check your blood glucose WHENEVER you have a change in your daily routine.

Examples:

1. **A change in your usual meal plan** (if you eat too much; eat out at a restaurant; attend a special occasion; or are sick and not eating as usual).
2. **Possible low blood glucose reaction** (you are shaky, tired, sweaty, hungry, confused or have a headache).
3. **You are sick.** It is especially important to check your blood glucose when you do not feel well. Blood glucose usually increases when you are sick. It is a good idea to check your blood glucose at least every

4 to 6 hours when you are sick. Calling your doctor

or health care provider with your symptoms and blood glucose results can help the doctor decide on the proper treatment for your illness and prevent problems with your diabetes..

4. **Possible high blood glucose reaction** (you are thirsty, hungry, urinating more often, have blurred vision, headache or feel tired).
5. **Before, during and/or after exercise.**
6. **You are not feeling well.**

Caution: some medication for diabetes, missing meals or more physical active than planned may cause low blood sugar. The good news is that low blood sugar is easy to treat see page 38 for the rule of 15 for mild low blood sugar and page 39 for sever low blood sugar. If you are having low blood sugar frequently (more than once a month) please contact your primary care provider.



General instructions for using a blood glucose meter:

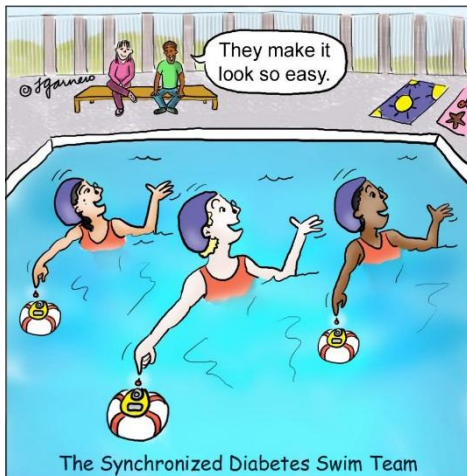
1. Wash your hands or clean your finger or other site with alcohol. If you are using alcohol, let it dry before you prick your finger.
2. Prick the site with a lancing device.
3. Put a little drop of blood on a test strip.
4. Follow the instructions that come with your meter for inserting the test strip and using the blood glucose meter.
5. In seconds, the blood glucose meter reads your blood glucose level.

Supplies you will use:

1. **Blood glucose meter** — reads blood glucose.
2. **Test strip** — collects blood sample.
3. **Lancet or small needle** — fits into lancing device, pricks finger, and provides small drop of blood for glucose strip.
4. **Lancing device** — pricks finger when button is pressed. Most devices have dials to select how deep the needle goes into the skin. Start with middle depth. If you get more blood than needed, dial the number down so the lancet does not go as deep. If you get less blood, dial the number up so lancet goes deeper.
5. **Alcohol wipes or soap and water** — to clean fingers or other testing site.
6. **Control solution** — checks test strip for accuracy. The amount of glucose in the control solution is already known. When placed on a test strip, value should match control solution value on bottle, package of strips or package insert that came with your strips. If the result does not fall into the printed range, this may mean the strip or control solution is expired, damaged, has not been properly stored or has not been correctly calibrated (measured). You should call the company who makes the meter for instructions if this happens.
7. **User manual** — provides information about your meter. After reading, place in safe place so that you can find it when you have a question about your meter.
8. **Warranty card or papers** — complete, make file copy and send in immediately.

Tips for Proper Use

Read instructions carefully. Glucose meters and test strips come with instructions for use. Your user manual should also include a phone number that you can use to contact manufacturer.



Source: DIABETease

Use the test strips that are recommended for your glucose meter. It is important to use only the test strips that are specified for your glucose meter. Otherwise, the device may fail to give results or may give inaccurate results.

Know the factors that affect meter accuracy.

These may include:

- The amount of red blood cells (hematocrit) in the blood
- Other substances present in the blood such as uric acid, glutathione, and vitamin C
- Altitude, temperature, and humidity

Perform quality-control checks. Use control solutions to ensure that the test strips and meter are working together properly. Some meters

may also provide electronic test strips that induce a signal to indicate if the meter and only the meter) is working correctly. Perform a quality control test each time you begin a new bottle of test strips or when you question the accuracy of the results.

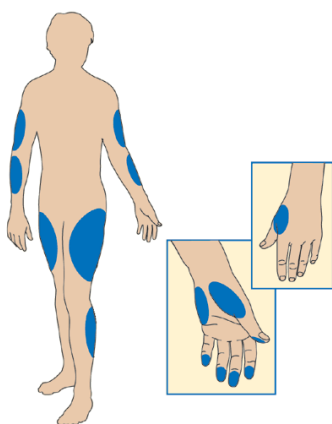
Ask your health care provider to watch you test yourself.

He or she can tell you if you are using the meter correctly.

Know when and how to clean your meter. Some meters need regular cleaning. Others don't need regular cleaning, but contain electronic alerts indicating when you should clean them. You should follow the directions given in the manual on how to clean the meter.

Understand what the meter display means. The range of glucose values can be different among meters. Be sure you know how high and low glucose values are displayed on your meter. Sometimes they are displayed as "LO" or "HI" when the glucose level is beyond the range that the meter can measure.

Alternative site testing



Some blood glucose meters allow you to use blood from "alternative sites" to check your blood glucose. These sites are the upper arm, forearm, base of thumb and thigh. You should be aware that blood glucose values from these sites may be different than the results you will receive from a finger. The body uses the glucose in your blood at different rates so you can test your fingertip and your arm at the same time and get different results. This usually happens when blood glucose is changing quickly, after a meal, after a dose of insulin or during or after exercise.

You should check the blood from your fingers in the following situations:³

1. If it has been less than 2 hours after a meal, insulin dose or exercise.
2. If you think your blood glucose is low or you have a condition

called **Hypoglycemia Unawareness**. This happens because you do not have signs of low blood glucose until your blood glucose is very low.

3. If the results you receive from the alternative site do not agree with the way you feel.

Use blood samples from sites other than your fingers only for testing before a meal or more than two hours after a meal.

Troubleshooting tips 1.

Can't get blood out of your finger?— Place hands under warm water and rub together

— Hang hand down below waist

— Grasp finger near area to be

pricked and squeeze gently for three seconds — Place finger on table or firm surface to avoid moving while pricking

— If lancing device has dial-a-depth, increase setting by 1 level

— Use a new lancet every time you check blood glucose

2. Hurts too much?

— If lancing device has dial-a-depth, decrease setting by 1 level

— Use a new lancet every time you check blood glucose

— Try a thinner lancet or a different lancing device

— Use sides of fingertips instead of fingertip pad

- Try alternative test sites such as arm or thigh
- Ask diabetes educator for suggestions

3. Error message?

- Review user manual (error codes and problems are identified in manual)
- Make sure right amount of blood is on strip
- Make sure blood is on correct part of strip
- Call manufacturer's phone number (listed on back of meter or in user manual)
- Ask diabetes educator for suggestions

WHAT Should I Do With My Results?

Write your blood glucose results in a logbook and review with your health care team, or download

or print your results from your diabetes management software

Blood Glucose Weekly Log

my target range 90-145 mg/dL week starting 5/13

medication INSULIN NPH (N) & REGULAR (R)

Daily Log		breakfast		lunch		dinner		bed	comments
		before	after	before	after	before	after		
NOM	blood glucose	95			137		152	138	45 MINUTE BRISK WALK AFTER LUNCH STRESSFUL DAY AT WORK!
	medication	N10	R3			R5		N6	
	carbohydrate	64g		67g		71g		21g	

Also record:

- **Date and time of test**
- **Insulin dose or diabetes medicine**
- **Whether you ate more or less than usual**
- **If you did any exercise**
- **Add comments such as “had a headache, didn’t feel well, or felt great, etc.”**

Keeping these records and going over them with your doctor or diabetes educator will help you notice pattern that may occur and will lead to a better understanding of how food, exercise, stress, medications, and other events in your life may affect your blood glucose. When you look at the record of your blood glucose results over a period of days, you and your doctor may be able to identify what may have caused the readings you see. You should not be worried about one blood glucose that is out of range, but if there are a number of them that do not fall into range, then you need to look for a pattern.

You want to see if the blood glucoses seem to be high or low at the same time of day for a number of days. If you detect such a pattern, you need to think about the activities that may have affected that blood glucose result. You will then be able to make an informed decision about what you can do to improve your blood glucose.

There are computer products available to help maintain records and analyze trends related to blood sugar. Some diabetes management software is free to download or can be used on-line. Your meter manufacture probably has free software that you can download to your computer but you may need to purchase a special cable to make the connection to your computer. Call the toll free number on the back of your meter for more information.

Try using a food diary to check before and after meals also called Testing in Pairs

DATE:	Before Breakfast	After Breakfast	Before Lunch	After Lunch	Before Dinner	After Dinner
BLOOD SUGAR						
What did you eat?						
Grams of carbs						
Calories						

Total Number of Carbs for the day: _____

Total number of calories for the Day: _____

Now make changes in meals and repeat

DATE:	Before Breakfast	After Breakfast	Before Lunch	After Lunch	Before Dinner	After Dinner
BLOOD SUGAR						
What did you eat?						
Grams of carbs						
Calories						

Total Number of Carbs for the day: _____

Total number of calories for the Day: _____

Graph your results (Write in blood sugar result Mark x in appropriate box and connect the Xs)

DATE:	Before Breakfast	After Breakfast	Before Lunch	After Lunch	Before Dinner	After Dinner
BLOOD SUGAR						
500						
451						
450						
401						
400						
351						
350						
301						
300						
251						
250						
201						
200						
151						
150						
101						
100						
71						
Less than 50						

My most recent A1c was _____ I have been told that my target A1c should be (check)

☐ < 7.1 ☐ < 6.5

☐ I don't check my blood sugar ☐ For now I rather not check my blood sugar

☐ I don't have a blood sugar meter and would like one or upgrade to a newer meter

☐ I have a blood sugar monitor name: _____

My most recent blood sugar results are: _____

My blood sugar target is (leave blank if you don't know)

Before Meals ☐ 70 to 110 or ☐ 70 to 130

After Meals ☐ 70 to 140 or ☐ 70 to 180

If pregnant: ☐ Fasting less than 105, one hour after a meal less than 130, two hours after a meal less than 120

MY GOALS FOR MONITORING

☐ Use results to improve control this may mean checking blood sugar before and 1 to 2 hours after a meal (keeping a glucose and food diary) checking blood sugar before and after exercise to see what exercises works best to control blood sugar checking blood sugar before meals to adjust insulin dose

☐ check fasting and 1 to 2 hours after a meal (suggested for Gestational Diabetes)

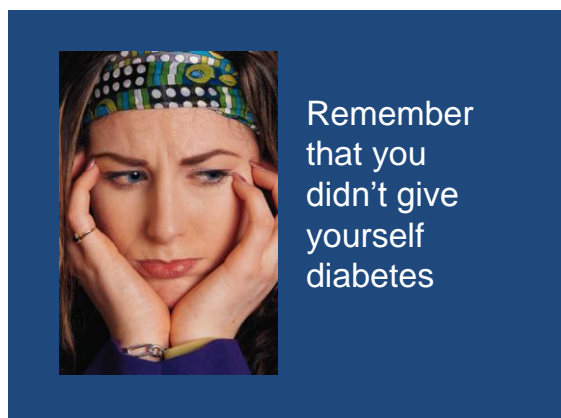
Healthy Coping

Source: behavioraldiabetesinstitute.org

Diabetes can affect you physically and emotionally. Living with it every day can make you feel discouraged, stressed or even depressed. It is natural to have mixed feelings about your diabetes management and experience highs and lows. The important thing is to recognize these emotions as normal. Take steps to reduce the negative impact they could have on your self-care. The way you deal with your emotional lows is called “coping.” There are lots of ways to cope with the upsets in your life—and not all of them are good for your health (smoking, overeating, not finding time for activity, or avoiding people and social situations). However, there are healthy coping methods that you can use to get you through tough times (faith-based activities, exercise, meditation, enjoyable hobbies, joining a support group).

Having a support network is key to healthy coping. Be sure to develop and nurture partnerships in your personal life with your spouse, loved ones and friends. Go to group educational sessions where you can meet and relate to other people going through the same experiences. Build healthy relationships—and remember that you’re not alone.

With good care and attention to your diabetes, odds are good you can live a long, healthy life. Many people think they are doomed to suffer terrible complications, but this is not true! Yes, diabetes is a serious disease and many people do develop severe long-term complications, but most of these problems are preventable if you have good medical care and take good care of yourself.



Feeling a little frightened by diabetes is not necessarily a bad thing, BUT when your fears get so big that you feel helpless and hopeless, it's time to take action. You need to harness fear to help you manage diabetes.

Remember that you didn't give yourself diabetes. As people around the world grow heavier and heavier, it almost seems like everyone is trying hard to develop type 2 diabetes. Yet most “fail” to do so. Obesity and a sedentary lifestyle are contributors to type 2 diabetes, but if you don't have the genes for it, you can't develop it. For type 1 diabetes, your own actions played no role at all. It wasn't all those sweets you ate as a child, or

anything else you did.

Take Control of your Environment

Your environment, whether you notice it or not, influences your ability to manage diabetes. Having willpower isn't enough. You need to harness the power of your environment to support, rather than hinder, your diabetes care. Think about it: how well you eat is affected by the number of tempting foods in your house and the size of the portions on your plate. How faithfully you take your medications is influenced by how many you have and whether you keep them in a convenient, easy-to-remember spot each day.

When you take back control of your environment, it no longer controls you. Diabetes becomes easier to handle.

- **Keep it ready.** If you have home exercise equipment, make sure it is always set up and ready to go. The more effort required to set it up when you need it, the less likely you will use it.
- **Put it away.** Make sure that tempting, unhealthy snacks are out of the house or put away in cabinets out of sight.



Depression

Depression is a serious problem, and it can be even more serious when you have diabetes. People with diabetes are more likely to develop depression than many other people. With depression, diabetes can become harder to handle and blood sugars are likely to rise. When diabetes is out of control, this can make it even harder to escape depression. It becomes a vicious cycle. The good news is that there are effective treatments to help you to break free from depression. In turn, this can free up the energy to become more active in your diabetes care.

Watch for the warning signs. If you are feeling down or hopeless about life, have lost your “get up and go”, or have less interest or pleasure from the things you used to enjoy, then talk to your doctor as soon as possible.



Take action to avoid depression. Exercise regularly, schedule a “fun” activity every week, and spend time with people you like. Include activities in your daily life that are personally rewarding and meaningful, like taking an interesting class or volunteering. Push through what you can, as you can. All of these can be powerful antidepressants.

Have hope and take action. Depression is treatable. There are good antidepressant medications and different forms of counseling that have been proven to help people recover from depression. Don't suffer needlessly; speak with your doctor about getting the help you need.



Giving up Denial

Denial can sometimes be a valuable tool. It can be a good way to cope with negative feelings about diabetes, especially when you are first diagnosed or when the disease is feeling out of control.

But denial becomes a problem when it is your only way of coping. Instead of a temporary tool, it becomes a permanent way of life. The response to all diabetes aggravations becomes “I will not think about diabetes anymore.” This means trouble.

Many people believe that if they ignore diabetes, then it can't hurt them. If only this were true! When you turn your back on diabetes, your long-term health will be endangered.



Diabetes Etiquette For People Who Don't Have Diabetes

Your loved ones are probably acting out of concern and worry, but it can leave you feeling angry, hurt, frustrated, and alone. When loved ones are bugging you about what to eat or what to do, you may tend to do the opposite of what has been suggested. "Don't think I should eat that piece of cake? OK, then I'll have two pieces!"

Though they mean well, they have become the Diabetes Police, and you've become a Diabetes Criminal.

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Though they mean well, they have become the Diabetes Police, and you've become a Diabetes Criminal.

1. **DON'T offer unsolicited advice about my eating or other aspects of diabetes.** You may mean well, but giving advice about someone's personal habits, especially when it is not requested, isn't very nice. Besides, many of the popularly held beliefs about diabetes ("you should just stop eating sugar") are out of date or just plain wrong.
2. **Realize and appreciate that diabetes is hard work.** Diabetes management is a full-time job that I didn't apply for, didn't want and can't quit. It involves thinking about what, when, and how much I eat, while also factoring in exercise, medication, stress, blood sugar monitoring, and so much more – each and every day.
3. **DON'T tell me horror stories about your grandmother or other people with diabetes you have heard about.** Diabetes is scary enough, and stories like these are not reassuring! Besides, we now know that with good management, odds are good you can live a long, healthy, and happy life with diabetes.
4. **DO offer to join me in making healthy lifestyle changes.** Not having to be alone with efforts to change, like starting an exercise program, is one of the most powerful ways that you can be helpful. After all, healthy lifestyle changes can benefit everyone!
5. **DON'T look so horrified when I check my blood sugars or give myself an injection.** It is not a lot of fun for me either. Checking blood sugars and taking medications are things I must do to manage diabetes well. If I have to hide while I do so, it makes it much harder for me.

6. **DO ask how you might be helpful.** If you want to be supportive, there may be lots of little things I would probably appreciate your help with. However, what I really need may be very different than what you think I need, so please ask first.
7. **DON'T offer thoughtless reassurances.** When you first learn about my diabetes, you may want to reassure me by saying things like, "Hey it could be worse; you could have cancer!" This won't make me feel better. And the implicit message seems to be that diabetes is no big deal. However, diabetes (like cancer) IS a big deal.
8. **DO be supportive of my efforts for self-care.** Help me set up an environment for success by supporting healthy food choices. Please honor my decision to decline a particular food, even when you really want me to try it. You are most helpful when you are not being a source of unnecessary temptation.

Diabetes can be a lot of work, and it demands your attention every day. It is worth the effort, but it is a tough job. All that effort can wear you down, especially if you never get a break. And you can never take a break from diabetes... or can you?

Meditation

Source: www.metta.org.uk/meditate/sitting.asp



When first sitting it is advisable to be in a quiet place which is free from overt disturbance such as people coming and going, phones ringing etc. Background noise such as traffic or machinery may have to be accepted and indeed can form part of meditation but when first practicing it is advisable to be in a quiet and undisturbed place

This is by no means a rule, as sitting in the garden or park can be a wonderful environment in which to meditate once meditation has become part of everyday life.

Many people create a small special space in their home perhaps with an image of Buddha, one of the deities or an image of someone special in their life.

Burning incense nearby can also help to create a relaxing and consistent atmosphere in which to meditate. Equally essential oils can be beneficial but as with incense maintain a consistency of

smell. (Or no smell at all!)

If possible one can sit with the knees below the hips, i.e. cross legged on a cushion or special meditation stool. This said one can sit on a chair or stool if sitting cross legged is too uncomfortable.

As with the special meditation stools, special round cushions have been created to make sitting more comfortable and are known as Zafu's.

Whichever method is adopted it can be changed, so if you are new to meditation try sitting cross legged on a cushion first, and then, if after some perseverance this is not possible try a stool or chair.

It is important to keep your back straight, not ridged but upright and defiantly not slouching - this may cause serious physical problems and make you fall asleep! If you suffer more than a little initial discomfort consult your medical practitioner or seek other professional advice about posture.

The head is tilted forward very slightly and resting comfortably on the spine, (no chins resting on chests!) Some people meditate with the eyes open and others with eyes closed, If you choose to keep your eyes open then your gaze should not shift around or be focused on any particular object. In effect if the eyes are open they should be almost out of focus - a soft gaze at a point around 5 feet away can be helpful. Some people light a candle and have this as a point of focus (even if this is not really focused on). Equally if the eyes are closed they are softly closed rather than clamped shut! - the eyes behind the lids can remain relaxed and looking slightly downwards. (Even though the lids are closed!)

As above so below, whilst starting out on the path of meditation it is perhaps important to start of on the right footing! There is nothing ridged about most forms of meditation but the points above tend to be universal.

The basics of sitting are to be sitting upright with the knees below the hips, so if you find one cushion still leaves your knees above the line of your hips find an extra cushion to raise you up a little. Get as comfortable as you can, meditation is not about suffering.

I can recall my first start as being very uncomfortable and my dogged determination to sit rigidly almost forcing myself in to a near lotus position, with my back rigidly straight and my eyes clamped tightly shut - Good practice for getting the body attuned to sitting but of little use in meditation. So be kind to yourself, build some comfort into your practice and the actual process might provide early benefits.

People often say that they have trouble staying awake, conversely others talk of going to wonderful places and seeing wonderful insights, meeting people etc etc.

Whilst we need sleep, dreams, and visions, and even euphoric states which are very powerful, they are not really meditation.

So what is meditation I hear some of you ask? Well it is an opportunity to be as you are for half an hour or more once or twice a day, it is an opportunity to let go of the pressure of daily life, let go of thoughts all together, not to switch off the mind but equally not to get caught up in thoughts.

Nor is meditation an opportunity to rest in the sense of sleeping or sitting on the sofa gazing into space, although this is probably closer to the meditation process that we generally realise in the west.

Most of us struggle to let go of thoughts - what will I do about... Oh I know, I could, or maybe someone else can. Then I could... life would be great if they could understand... Perhaps I'll try...

This is how the mind works, it has the unceasing capacity to think - good thing too otherwise there would not be any works here to read!

So while first sitting it is sometimes useful to find something to occupy the mind repetitively, many people focus on the breath - noticing inhale / exhale. Some also try counting breaths from 0 - 10 and then start again (otherwise we get caught up in was that 27 or 28 etc), personally I prefer simply noticing the breath. It's amazing how the mind will try and stop you doing this, if this happens to you don't worry, don't even think about what you were thinking or for how long you were thinking, just return to noticing inhale-exhale. In doing this the mind will not switch off but will have the chance to rest with the thoughts, troubles and whatever else it has in mind without taking over every part of you.

The other major distraction to meditation is the process of sitting - am I doing it right, the itch on the end of my nose etc. Dealing with this is a balance between real discomfort and distracting yourself. If you are really uncomfortable then consider what is required to rectify it before moving - move with the purpose of dealing with the discomfort and return to sitting - return to the breath.

If the mind wanders return to sitting, return to the present moment. DO NOT judge the quality of your sitting, leave this for another time.

When first trying meditation, try sitting without even attempting to meditate, create your space, find a cushion or pillow that meets your needs, get to know how it feels to sit still, get a sense of your backside resting, get a feel for your back being straight (not ridged!), your head tilted forward and your eyes resting, mouth either slightly open or closed. Remember you are not meditating yet, just getting to know how it is to sit quietly with meditation in mind... rest in your body, get a sense of the support beneath you.

If you are new to meditation try starting of with 5 - 10 minutes every day or less, if you can, try to extend this to 15 - 20 or even 30 - 45 minutes over time. If you slip up or do not feel any benefit, persevere, meditation does work and it is one of the most wonderful ways of finding inner quiet and a sense of peace within mind and body...and it's free!

If you simply cannot get to grips with meditation it can be really helpful to attend a retreat centre for an evening, a weekend, or a longer period with others in shared meditation. Sitting with others is a real help and support for all sorts of reasons. There is probably a group who meditate regularly in your area.

Try contacting one of the many retreat centres listed here at Metta to attend a meditation evening or retreat, many have contact details for local open groups that meet once or twice a week which newcomers are welcome to try. If all this seems too much you might like to try pausing a few times a day, the benefits of pausing can be substantial and often help to get people started in meditation.

Read more: www.DiabetesAnswers.org/node/604

MY GOALS FOR HEALTHY COPING

☐ Identify healthy ways you can reduce stress or anxiety by getting: support from medical team and family/friends

☐ other

BEING ACTIVE

WHAT YOU NEED TO KNOW BEFORE STARTING AN EXERCISE ROUTINE

Source: www.dlife.com/diabetes-food-and-fitness/diabetes_and_exercise

1. **Start with your doctor's recommendation.** Get a physical exam and guidance on the kind of exercise that may be safest for you.
2. **Be prepared for the impact of exercise on your blood glucose (sugar).** Exercise uses the sugar from your blood stream, so it can lower your blood sugar level, especially in people using insulin or certain diabetes pills. Carry some form of carbohydrate with you in case you swing too low.
3. **Check your blood sugar before you exercise.** In general, if your blood sugar is less than 100, take a small snack that includes carbohydrate before you start to exercise. If your blood sugar is 300 before exercise, wait to exercise until your blood sugar is close to the normal range. If your fasting blood sugar is above 250 and/or you have urine ketones, do not exercise
4. **Wear identification.** That indicates you have diabetes, such as an identification bracelet or shoe tag.
5. **Drink plenty of fluids.** When you exercise, your body uses more fluid to keep you cool. Drink fluid before, during and after exercise.
6. **Avoid exercise at the time of the peak of your insulin's action.** Exercise at that time could cause an unplanned dip in your blood sugar levels.
7. **Pay attention to your feet.** Wear comfortable and well-fitting shoes and socks. Check your feet before and after activities involving feet, such as walking, for any potential damage such as cuts or blisters.



Hand Grip

Exercise Instructions:

This simple exercise should help if you have trouble picking things up or holding on to them. It also will help you open things like that pickle jar more easily. You can even do this exercise while reading or watching TV.

- Hold a tennis ball or other small rubber or foam ball in one hand.
- Slowly squeeze the ball as hard as you can and hold it for 3-5 seconds.
- Relax the squeeze slowly
- Repeat 10-15 times.
- Repeat 10-15 times with other hand.
- Repeat 10-15 times more with each hand.



Overhead Arm Raise

Exercise Instructions:

This exercise will strengthen your shoulders and arms. It should make swimming and other activities such as lifting and carrying grandchildren easier.

== You can do this exercise while standing or sitting in a sturdy, armless chair. ==Keep your feet flat on the floor, shoulder-width apart.

==Hold weights at your sides at shoulder height with palms facing forward. Breathe in slowly.

==Slowly breathe out as you raise both arms up over your head keeping your elbows slightly bent.

== Hold the position for 1 second.

== Breathe in as you slowly lower your arms.

== Repeat 10-15 times.

== Rest; then repeat 10-15 more times.



Stand on One Foot

Exercise Instructions:

You can do this exercise while waiting for the bus or standing in line at the grocery. For an added challenge, you can modify the exercise to improve your balance.

== Stand on one foot behind a sturdy chair, holding on for balance.

==Hold position for up to 10 seconds.

==Repeat 10-15 times.

==Repeat 10-15 times with other leg.

==Repeat 10-15 more times with each leg.

Caution: more physical active than planned may cause low blood sugar. The good news is that low blood sugar is easy to treat see page 38 for the rule of 15 for mild low blood sugar and page 39 for sever low blood sugar. If you are having low blood sugar frequently (more than once a month) please contact your primary care provider.



Shoulder and Upper Arm

Exercise Instructions: This exercise to increase flexibility in your shoulders and upper arms will help make it easier to reach for your seatbelt. If you have shoulder problems, talk with your doctor before trying this stretch.

==Stand with feet shoulder-width apart.

==Hold one end of a towel in your right hand.

==Raise and bend your right arm to drape the towel down your back. Keep your right arm in this position and continue holding on to the towel.

==Reach behind your lower back and grasp the towel with your left hand.

==To stretch your right shoulder, pull the towel down with your left hand. Stop when you feel a stretch or slight discomfort in your right shoulder.

==Repeat at least 3-5 times.

== Reverse positions, and repeat at least 3-5 times



Ankle

Exercise Instructions:

This exercise stretches your ankle muscles. You can stretch both ankles at once or one at a time.

==Sit securely toward the edge of a sturdy, armless chair.

==Stretch your legs out in front of you.

==With your heels on the floor, bend your ankles to point toes toward you.

==Hold the position for 10-30 seconds.

==Bend ankles to point toes away from you and hold for 10-30 seconds. ==Repeat at least 3-5 times.



Back

Exercise Instructions:

==This exercise is for your back muscles. If you've had hip or back surgery, talk with your doctor before trying this stretch.

==Sit securely toward the front of a sturdy, armless chair with your feet flat on the floor, shoulder-width apart.

==Slowly bend forward from your hips. Keep your back and neck straight. == Slightly relax your neck and lower your chin. Slowly bend farther forward and slide your hands down your legs toward your shins. Stop when you feel a stretch or slight discomfort.

==Hold for 10-30 seconds.

==Straighten up slowly all the way to the starting position.

==Repeat at least 3-5 times.

REDUCING RISKS



FOOT CARE

Do:

Do wash feet daily.

Do inspect feet and toes daily.

Do wear thick, soft socks. Do cut toenails straight across.

Do exercise Do see your podiatric physician

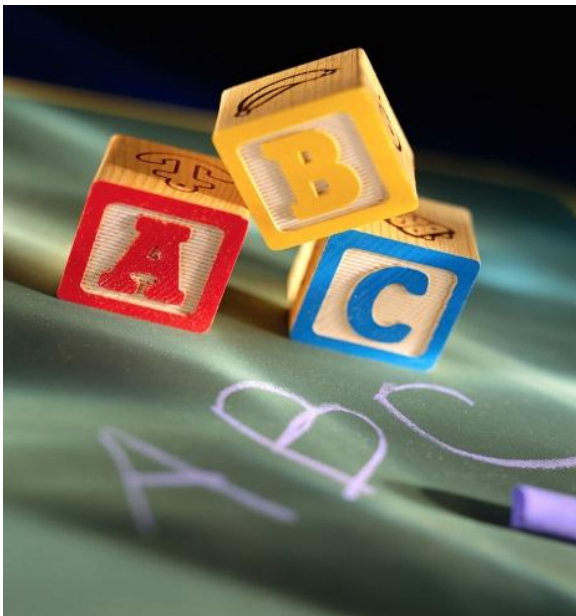
Do get properly measured and fitted every time you buy new shoes. Do wear proper shoes.

Don't

Don't go barefoot. Not even in your own home. Don't wear high heels, sandals, and shoes with pointed toes.

Don't drink in excess. Alcohol can contribute to neuropathy (nerve damage) which is one of the consequences of diabetes.

Don't wear anything that is too tight around the legs. Don't try to remove calluses



Know Your ABCs

A is for A1C. Your A1C check, which also may be reported as estimated average glucose (eAG) tells you your average blood glucose for the past 2 to 3 months.

B is for blood pressure. High blood pressure makes your heart work harder than it should.

C is for cholesterol. Your cholesterol numbers tell you about the amount of fat in your blood. Some kinds, like HDL cholesterol, help protect your heart. Others, like LDL cholesterol, can clog your arteries. High triglycerides raise your risk for a heart attack or a stroke.



Oral Care

There are more bacteria in your mouth right now than there are people on Earth. If those germs settle into your gums, you've got gum disease. Unfortunately, if you have diabetes, you are at higher risk for gum problems. Poor blood glucose control makes gum problems more likely.

To help prevent damage to your teeth and gums, take diabetes and dental care seriously:

- **Make a commitment to managing your diabetes.** Monitor your blood sugar level, and follow your doctor's instructions for keeping your blood sugar level within your target range. The better you control your blood sugar level, the less likely you are to develop gingivitis and other dental problems.
- **Brush your teeth at least twice a day.** Brush in the morning, at night and, ideally, after meals and snacks. Use a soft-bristled toothbrush and toothpaste that contains fluoride. Avoid vigorous or harsh scrubbing, which can irritate your gums. Consider using an electric toothbrush, especially if you have arthritis or other problems that make it difficult to brush well.
- **Floss your teeth at least once a day.** Flossing helps remove plaque between your teeth and under your gumline. If you have trouble getting floss through your teeth, use the waxed variety. If it's hard to manipulate the floss, use a floss holder.
- **Schedule regular dental cleanings.** Visit your dentist at least twice a year for professional cleanings. Remind your dentist that you have diabetes. To prevent low blood sugar during dental work, you might want to eat before your dental visits.
- **Take special precautions with dental surgery.** If you're having dental surgery, make sure that your dentist consults with your doctor ahead of time. You may need to adjust your diabetes medications or take an antibiotic to prevent infection.
- **Look for early signs of gum disease.** Report any signs of gum disease — including redness, swelling and bleeding gums — to your dentist. Also mention any other signs and symptoms such as dry mouth, loose teeth or mouth pain.
- **Don't smoke.** Smoking increases the risk of serious diabetes complications, including gum disease. If you smoke, ask your doctor about options to help you quit.



Kidneys Care

Kidneys are remarkable organs. Inside them are millions of tiny blood vessels that act as filters. Their job is to remove waste products from the blood.

Sometimes this filtering system breaks down. Diabetes can damage the kidneys and cause them to fail. Failing kidneys lose their ability to filter out waste products, resulting in kidney disease.

What Can You Do to Lower Your Risk?

Being involved in your treatment plan is essential! Checking your blood glucose levels at home and making sure that your hemoglobin A1C (a blood test that tells how well your blood glucose has been controlled over the last few months) is less than seven percent is first and foremost. Keeping in good glucose control is the best way to lower your risk of both kidney and heart disease. Follow-up with your primary care doctor or endocrinologist (a doctor specializing in diabetes) to make sure that you have your urine tested at least once a year to find any early changes in kidney function. You should also have your blood checked regularly for calcium, phosphorus and parathyroid hormone (bone hormone) to be sure that your bones are healthy. Other tests should include your total blood count (so that anemia can be treated early), as well as blood cholesterol type and level. Make sure you have your blood pressure checked often, and remember to take blood pressure medication if prescribed. Follow your diet for weight and blood glucose control, and get plenty of regular exercise. Avoid alcohol and cigarettes. If you have any of the symptoms identified above, you should see your doctor immediately.

Read More: <http://DiabetesAnswers.org/node/602>



Sexual Dysfunction (Source: *H.A. Feldman, I. Goldstein, D.G. Hatzichristou, R.J. Krane, J.B. McKinley. Impotence and its medical and psychological correlates: Results of the Massachusetts Male Aging Study. J Urol 151: 54-61, 199)

Sexual problems (sexual dysfunction) are common among people with diabetes, particularly in older men who have had diabetes for years. In addition, many medical experts believe that women with diabetes experience sexual difficulties as a result of complications from the disease.

People who experience sexual difficulties can lead more enjoyable, fulfilling sexual lives by learning about common causes and symptoms of sexual difficulties, treatment options, and how to talk it over with a doctor or mate. If you wonder if some of the problems you are experiencing may be symptoms of sexual dysfunction.

At any given time an estimated 30 million American men experience impotence (erectile dysfunction), defined as the inability to achieve or maintain an erection sufficient for intercourse more frequent than

one out of four times. **Sexual difficulties in people with diabetes are not always related to their disease.**

- Impotence can occur in men of any age, but it most often affects older men. A recent study* of 1,300 males found some degree of erection difficulty in 52 percent of participants ages 40 to 70.
- Over 50 percent of the estimated 10 million men with diagnosed type 2 diabetes experience impotence.
- In men whose diabetes is well controlled, the rate of impotence is about 30 percent.
- Approximately 35 percent of women with diabetes may experience some form of sexual dysfunction related to their disease.
- Of people with complications from diabetes, 50 to 70 percent of men and 40 to 50 percent of women may have sexual difficulties because of nerve damage.



Eye Care

High blood sugar can damage the small vessels of the eye.
This puts people at risk for eye disease
Reduce risk by
Scheduling an eye exam at least yearly
Keep your blood sugar before meals 70 to 130 and two hours
after meals less than 180

Several factors influence whether you get retinopathy: blood sugar control, blood pressure levels, how long you have had diabetes and genes. The longer you've had diabetes, the more likely you are to have retinopathy. Almost everyone with type 1 diabetes will eventually have nonproliferative retinopathy. And most people with type 2 diabetes will also get it. But the retinopathy that destroys vision, proliferative retinopathy, is far less common. People who keep their blood sugar levels closer to normal are less likely to have retinopathy or to have milder forms.



HEALTHY EYE



UNHEALTHY EYE

Health services that have been done (please leave blank any that are due):

- ☐ Dilated eye exam yearly
- ☐ Comprehensive foot exam by doctor or nurse yearly
- ☐ Urine protein test yearly
- ☐ Cholesterol levels yearly
- ☐ Flu vaccine yearly
- ☐ Pneumonia vaccine usually once or twice in your lifetime
- ☐ Teeth cleaned and examined every 6 months
- ☐ Primary Care Provider (PCP) visit every 3 to 6 months
- ☐ I get a good night's sleep and/or have sleep apnea that is treated successfully
- ☐ I do not smoke or I am smoker who is in tobacco cessation program
- ☐ Daily self-foot exam
- ☐ Blood pressure other than doctor visits

Optional to be done by diabetes educator if time permits:



comprehensive foot Exam

Abnormal findings

☐ None ☐ infection ☐ redness or swelling ☐ open sore ☐ callus ☐ dryness


Blood Pressure check ____/ ____

Goals for Reducing Risks

☐ Reduce risk of complications by obtaining health services that are due

☐ _____

Diabetes Answers



Washington Association of Diabetes Educators

PUBLIC
Links & Education

PROFESSIONAL
Resources & Support

DIABETES
What is it?

HEALTHY EATING
What can I eat?

BEING ACTIVE
Why and how should I be active?

MONITORING
Why do I need a monitor and how do I use the results?

TAKING MEDICATIONS
What are my options for medication?

PROBLEM SOLVING
How do I deal with problems that may occur such as illness, travel, or hypoglycemia?

REDUCING RISKS
What should I do to prevent complications?

HEALTHY COPING
How do I cope with diabetes?

Providence St Mary Medical Center Diabetes Education Program


Diabetes Education

Providence St Mary Medical Center

401 West Poplar

Walla Walla WA 99362

Recognition/credited by: American Diabetes Association



[2013 Workshop & Support Group Meeting Schedule](#)

[Clases para aprender todo acerca de la diabetes 2013](#)

[Referral Form](#) / [Your Goals and Action Plan for Managing Diabetes](#)

EDUCATORS

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Services

One-On-One Counseling Individual diabetes counseling is very helpful for specific areas in your diabetes routine that you may find challenging.

Diabetes Workshops Our Diabetes Education Workshops are for newly diagnosed diabetic or those who need a review of diabetes self-management.

Diabetes Prevention Program Held at the Walla Walla YMCA For Pre diabetes or those who are at risk for diabetes

Support Group Meetings discussions on a variety of topics related to diabetes prevention and control

Informational Links

- <http://mydiabetespartner.org/index.php> The American Association of Diabetes Educators has created *Side by Side: A Partner Approach to Diabetes Self-Management*. Many people with diabetes feel overwhelmed as they work to eat healthy foods, exercise, monitor their blood glucose, take medications and schedule regular check-ups. This website will help you be in control.
- www.diabetes.org This is the American diabetes association web site. You can't go wrong with the information provided here. All kinds of information on all types of diabetes are provided. The information on diet is especially useful. Phone number: 1-800-DIABETES (800-342-2383).
- www.dlife.com This is the web site for the TV show, dLife, Diabetes for Life, that currently shows on Sundays on CNBC at 4PM PST. This web site has some advertisement but the information provided is very informative. It includes recipes, videos, pod casts and much information on all types of diabetes.
- www.mypyramid.gov on this government site you get to customize a meal Plan can help specifically for you. You get to choose the foods and amounts that are right for you. Just enter your age, sex, and activity level in the MyPyramid Plan box.
- www.ndep.nih.gov This government site is completely free of advertisement. The site has information on preventing and controlling diabetes.
- www.cdc.gov/diabetes Center for Disease Control and Prevention 1-877-232-3422
- www.eatright.org American Dietetic Association, excellent site information on healthy eating although much of the site is for health care professionals. Phone number 1-800-366-1655 (in English and Spanish)
- www.medicare.gov/health/diabetes.asp Centers for Medicare & Medicaid Services 1-800-MEDICARE or (800-633-4227)
- www.healthypeople.gov Healthy People 2010 provides a framework for prevention for the Nation. It is a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats.
- www.mayoclinic.com This is an excellent site for information on chronic diseases including diabetes.
- www.webMD.com Another excellent site that covers many medical problems as well as diabetes.
- www.ready.gov Emergency reference material such as a first aid book.