Managing diabetes

For a healthier life

ASANTE®

Contents

Diabetes basics

How things normally work 1
Insulin resistance due to excess weight 2
Checking your blood glucose 2
Control your A1C to prevent complications. 2
Keeping your blood glucose within target ranges 3

Healthy eating

The plate method 4
How to read a Nutrition Facts label . . . 5
How does a meal affect your blood glucose? 5

Every step counts

Increasing your physical activity 6
Here's how to start 6

Know the difference

Low blood glucose 7
High blood glucose 7

Sick days

What constitutes a sick day? 8
When to call the doctor. 8
Stress and diabetes 8

Staying well

Things you can do to feel better. 9
Foot care 9

Medications

Diabetes pills 10

Insulin

Getting started with insulin 11
Traveling with insulin 11
Taking insulin 11
Relative insulin action times 12
Other hormone replacement medications 12
Insulin programs 13
Single-dose insulin. 14
Insulin pen 15
Mixed-dose insulin 16
Injection sites. 17

Complications

Diabetes complications 18
Guidelines for diabetes care 18

Notes 19

1

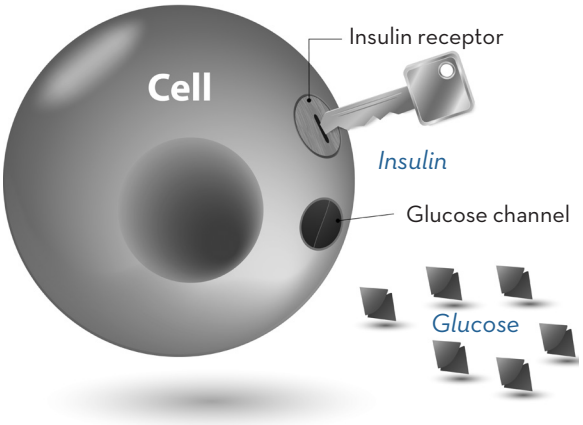
Diabetes basics

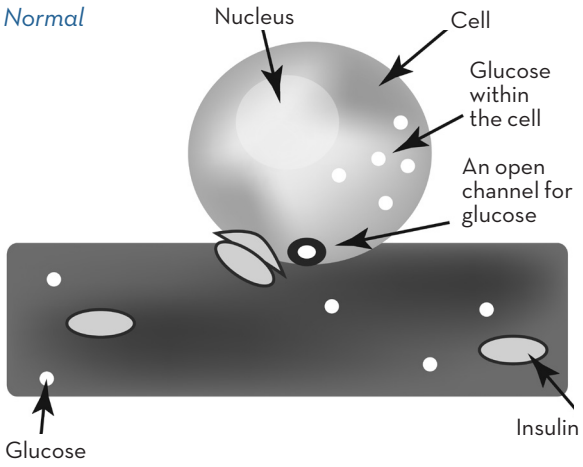
How things normally work

Diabetes affects your ability to turn food into energy.

From food to fuel

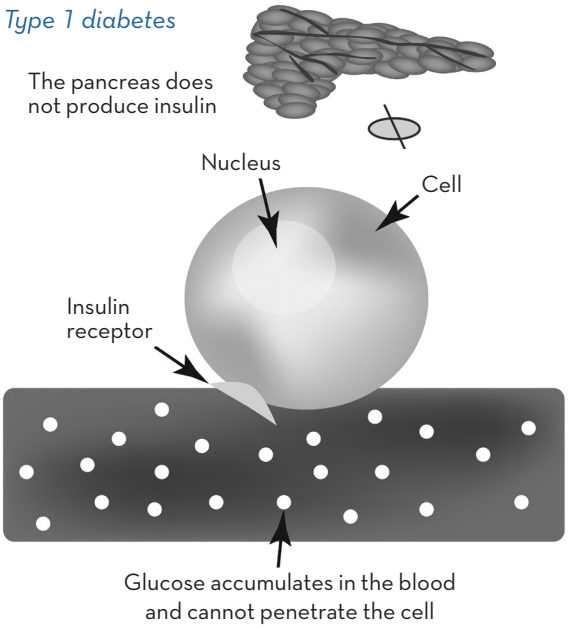
- When you eat, your body breaks down food into glucose. **Glucose** is a type of sugar that is your body's main source of energy.
- Glucose from food is absorbed into the bloodstream and causes blood glucose to rise.
- As blood glucose rises, the pancreas releases a hormone called **insulin.**
- Insulin acts as a key to unlock the cell so that glucose can pass from the bloodstream into the cell to be used as energy.
- Some glucose is stored by the liver for later use.





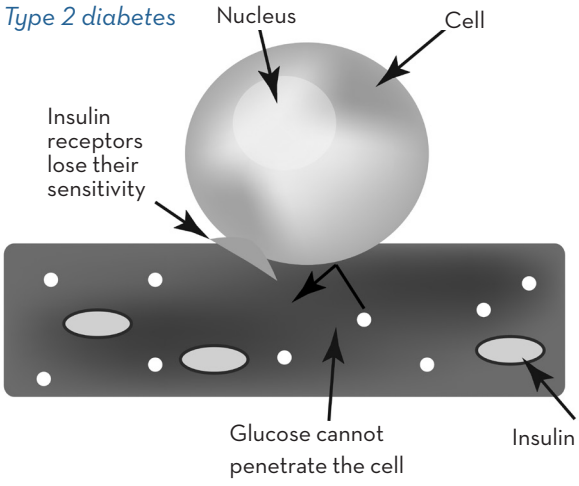
Type 1 diabetes

- Before you had diabetes, your body made plenty of insulin.
- With **Type 1 diabetes,** your body has stopped making its own insulin.



Type 2 diabetes

- Before you had diabetes, your body's insulin production worked well.
- With **Type 2 diabetes,** your body's insulin production doesn't work like it should.



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Diabetes basics

Insulin resistance due to excess weight

Type 1 diabetes

With Type 1 diabetes, your body changes food into glucose, which enters the bloodstream, but your body is not making insulin anymore. The cells "starve" for glucose to burn. They can't make energy.

Type 2 diabetes

With Type 2 diabetes, your body changes food into glucose, which enters the bloodstream, but your insulin is not working properly. The cells get some glucose but not enough.

Both types of diabetes make the blood glucose too high. High blood glucose can make you tired, thirsty and hungry all the time.

Checking your blood glucose

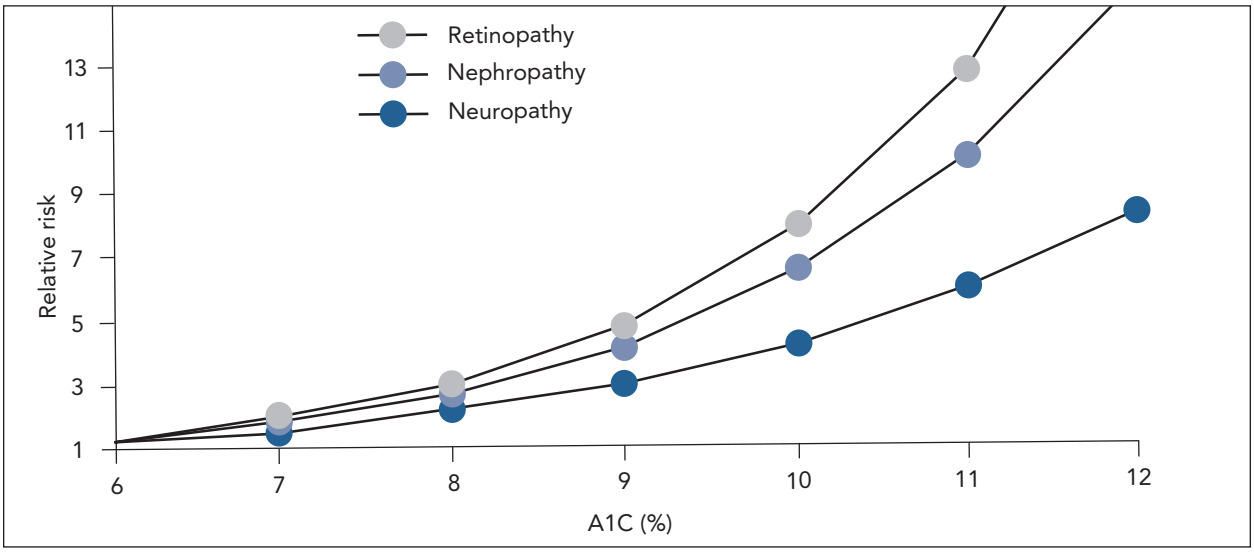
- Check your blood glucose exactly as you were taught.
- Know when to check: days and time.
- Write down the results and bring them to your next appointment with your health care provider.

Control your A1C to prevent complications

The A1C test is a blood test that provides information about your average levels of blood glucose over the past three months.

Hemoglobin A1C measurements

A1C (%)	Average plasma blood glucose (mg/dL)
4	68
5	97
6	126
7	154
8	183
9	212
10	240
11	269
12	298
13	326
14	355
15	384



Skyler JS. Diabetic complications. The importance of glucose control. Endocrinology and Metabolism Clinics of North America, 1996;25(2):242-54. Reprinted with permission.

Diabetes basics

Keeping your blood glucose within target ranges

When you have diabetes, you should keep your blood glucose within the target ranges established by the American Diabetes Association to minimize the risk of diabetic complications.

Type 1 and Type 2 diabetes target ranges

All values are plasma milligrams per deciliter (mg/dL)	People *without* diabetes	People *with* diabetes IDEAL	People *with* diabetes ACTION SUGGESTED
Before meals	Less than 100 mg/dL	80 to 130 mg/dL	Less than 70 or greater than 150 mg/dL
After meals — 1 to 2 hours after first bite of food		Less than 180 mg/dL	
Before bedtime snack	70 to 120 mg/dL	100 to 140 mg/dL	Less than 100 or greater than 180 mg/dL
A1C	Less than 5.7%	Less than 7% Provider may suggest less than 6.5%	Greater than 8%

Type 1 diabetes ADA pediatric standards

Age	Daytime glucose	Bedtime/overnight glucose	Hemoglobin A1C(%)
Infant, toddler and up to age 5	100 to 180 mg/dL	100 or _____	ADA 7.5% or less
School age: 6–12 years	80 to 180 mg/dL	100 or _____	ADA 7.5% or less
Teens: 13–19 years	70 to 150 mg/dL	100 or _____	ADA 7.5% or less

Recommendation from Doernbecher Children's Hospital, Oregon Health & Science University

Pregnancy complicated by diabetes targets

ADA guidelines with pregnancy for 2018	
Fasting	less than 95
1 hour after eating	less than 140
2 hours after eating	less than 120
A1C goal	6 to 6.5%
Prediabetes	
The term "abnormal glucose metabolism" includes impaired fasting glucose and impaired glucose tolerance.	
Fasting lab blood glucose	100 to 125 mg/dL
2-hour post-glucose challenge	140 to 199 mg/dL
A1C	5.7 to 6.4%

Healthy eating

The plate method

Protein

Choose lean cuts (95 to 98 percent). Chicken, turkey, beef, pork, nuts, fish and seafood, tofu, cheese, cottage cheese and eggs (two eggs per day OK)

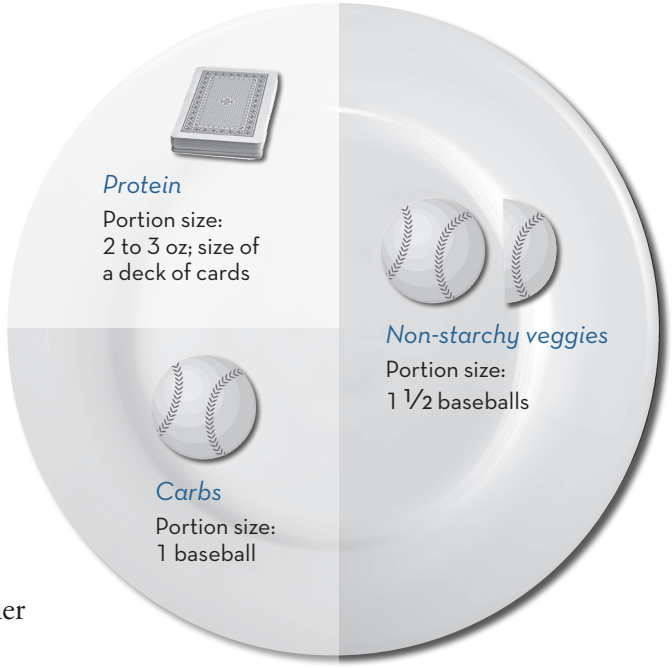
Carb foods

Carb foods affect blood glucose, so portion control is important.

Non-starchy vegetables: Fresh, frozen or canned (rinsed)

Carrots, salad/lettuce/greens, broccoli, green beans, cabbage, asparagus, cucumbers, celery, cauliflower, peppers, zucchini, tomatoes, summer squash, sugar snap peas and many more!

Most people need one to four choices (15 to 60 grams) total carbs per meal. **Each portion is 1 carbohydrate choice (15 g of carbohydrates).**



Grains, breads and cereals	Milk and yogurt	Fruits	Beans and starchy vegetables	Sweets and snack foods
■ 1 ounce bread product (1 slice bread, ¼ large bagel or one 6" tortilla) ■ ⅓ cup cooked pasta or rice ■ 1 cup soup ¾ ounce cold cereal* ■ ½ cup cooked cereal ■ 3 cups popped popcorn ■ 1 pancake or waffle (4")	■ 1 cup milk ■ ¾ to 1 cup (6 to 8 ounces) plain yogurt, yogurt made with low-calorie sweetener or fruit-flavored Greek yogurt	■ 1 small piece of fresh fruit ■ ½ cup canned fruit in its own juice ■ 1 cup melon ■ ½ cup fruit juice ■ 2 tablespoons dried fruit ■ 1 cup berries ■ ½ cup grapes (17 small) ■ ½ or small banana	■ ½ cup cooked beans or legumes (garbanzo, kidney or black beans) ■ ½ cup potato, peas or corn	■ ¾ ounce snack food (pretzels, chips or 4 to 6 crackers) ■ 1 ounce sweet snack (2 small sandwich cookies or 5 vanilla wafers) ■ 1 tablespoon sugar or honey ■ ½ cup ice cream

* Serving sizes vary from ½ cup to 1 ½ cups. Check the product's Nutrition Facts label.

* The Nutrition Facts label is the best source to find the total carbohydrates in a serving of food (see page 5 for how to read a label). Without a Nutrition Facts label, the table above can help you estimate the amount of carbohydrates in your snack or meal.

Healthy eating

How to read a Nutrition Facts label

1. Find the **serving size.**
2. Find the **total carbohydrate** in one serving. Sugars are included in this number, so you do not need to count them separately. It is not recommended to subtract the fiber.
3. **Compare the serving size to your portion.**
4. Calculate the amount of carbs in your portion.
5. Compare the amount you are eating to your meal goal (usually 1 to 4 carb servings or 15 to 60 grams total carbs per meal) and change your portion if needed.

Measure or weigh foods to learn what proper portion sizes look like. When you can't, use your hand to estimate portions.

Nutrition Facts

8 servings per container

Serving size **2/3 cup (55g)**

Amount per serving

Calories **230**

	% Daily Value*
Total Fat 8g	**10%**
Saturated Fat 1g	**5%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 160mg	**7%**
Total Carbohydrate 37g	**13%**
Dietary Fiber 4g	**14%**
Total Sugars 12g	
Includes 10g Added Sugars	**20%**
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 240mg	6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

How does a meal affect your blood glucose?

The best way to find out is to use a meter to check your blood glucose before a meal and then two hours after your first bite. Is the after-meal blood glucose between 80 to 180?

That's the usual goal. If not, try a smaller portion of carb foods the next time.

Every step counts

Increasing your physical activity

Exercise is good for you.

- Exercise lowers blood glucose.
- It helps you lose weight and keep it down.
- It helps keep your bones strong and your heart healthy.
- It helps you deal with stress and have more energy.

Tips

- Check with your doctor before starting an exercise program.
- Wear well-fitting shoes and socks.
- Carry identification.
- Exercise on a regular schedule.
- Check your blood glucose before and after exercise and during prolonged exercise. People with Type 1 diabetes should check it more often.
- Carry a snack or ask your doctor about decreasing your diabetes medicine.
- Drink plenty of water.
- Start slowly to warm up.
- After exercising, cool down for five to 10 minutes.

Here's how to start

If you are inactive, begin at the base of the pyramid. Do as many of the activities as possible every day. As you keep busy with activities in the lower part of the pyramid, you will have less time for the nonphysical activities at the top.

If you are a sporadic exerciser, become consistent by doing more of the activities in the middle of the pyramid.

If you are a consistent exerciser, keep up the good work! Explore new activities so that you don't get bored or injured.

Note: Take measures to prevent hypoglycemia (low blood glucose). See page 7.

Cut down on	2 to 3 times per week	3 to 5 times per week	Daily
■ Television ■ Computer games ■ Sitting for more than 30 minutes at a time	**Moderate exercise** ■ Yard work ■ Golf ■ Bowling ■ Badminton ■ Softball **Flexibility and strength** ■ Weight lifting ■ Stretching and yoga ■ Push-ups ■ Curl-ups	**Aerobic exercise (30+ minutes)** ■ Brisk walking ■ Treadmill ■ Bicycling ■ Swimming ■ Soccer ■ Hiking ■ Basketball ■ Tennis ■ Martial arts ■ Dancing ■ Chair aerobic	■ Take longer routes ■ Take the stairs instead of the elevator ■ Walk the dog ■ Walk to the store or mailbox ■ Work in the garden ■ Park your car farther away ■ Make extra steps in your day

7

Know the difference

▼ Low blood glucose ▲ High blood glucose

	Symptoms noticed within minutes to hours	Symptoms noticed within hours to several days
Watch for	■ Cold sweats; faintness; dizziness ■ Headache ■ Pounding of heart; trembling; nervousness ■ Blurred vision ■ Hunger ■ Inability to awaken ■ Grouchiness ■ Personality change	■ Increased thirst and urination ■ Large amounts of glucose in the blood ■ Ketones in urine ■ Weakness; pains in stomach; aching all over ■ Heavy, labored breathing ■ Loss of appetite; nausea and vomiting ■ Fatigue
What to do	■ Check blood glucose ■ Take liquids or food containing sugar (orange juice, regular soda) ■ Do not take insulin ■ Do not give anything by mouth if unconscious ■ If unconscious, give Glucagon according to package directions ■ Call doctor	■ Call doctor immediately ■ Take fluids **without sugar** if able to swallow ■ Test blood glucose frequently ■ Test urine for ketones
Causes	■ Eating too little or too late ■ Taking extra diabetes medicine ■ Unplanned or extra exercise	■ Eating too much ■ Taking too little diabetes medicine ■ Being sick or hurt ■ Not enough activity or exercise ■ Steroid injection

▼ Hypoglycemia: Blood sugar of less than 70 mg/dL — What you can do

- **If your blood glucose test is between 50 and 69 mg/dL,** the amount of food or drink to take is 15 g of carbohydrates (1 carbohydrate serving).

  Examples:

  - Any juice (½ cup)
  - Nondiet soft drink (½ cup)
  - Honey or corn syrup (1 tablespoon)
  - Sugar packets (3)
  - Life Savers® candy (5 pieces)
  - Glucose tablets (3 to 4 tablets)

- **If your blood glucose test is less than 50 mg/dL,** the amount of food or drink to take is 30 g of carbohydrates (2 carbohydrate servings). Double the servings listed.

You should feel better in 15 minutes after you treat yourself. If your blood glucose is still less than 70 mg/dL 15 minutes after treatment, take 1 more carbohydrate serving. Continue testing your blood glucose every 15 minutes until it is above 70 mg/dL.

Sick days

What constitutes a sick day?

A sick day is any day that you have an illness, infection, injury or surgery. A sick day can cause high blood glucose and lead to serious problems. Continue to check blood glucose as taught.

Know what to do with the results.

- Use the results to determine how your medications and meal plan are working.
- For those with Type 1 diabetes, check your urine for ketones when you are sick or your blood glucose is higher than 240 mg/dL.
- If the results are high or low for three days in a row with no explanation, call your health care provider.

When to call the doctor

Always call your doctor if you experience any of these problems:

- Your blood glucose is higher than 250 mg/dL for more than one day.
- Your blood glucose is less than 70 mg/dL and does not go up when you eat or drink.
- You feel shaky, dizzy or sweaty; your heart beats fast; you feel confused; and these symptoms do not improve when you eat or drink.
- You have the flu or a fever of 101.5 F or more for more than 24 hours.
- You are sick to your stomach, vomiting and cannot keep down any food or fluids for more than six hours.
- Your urine shows moderate to high ketones (if Type 1 or pregnant).
- Your feet (painful or not) exhibit any of the following symptoms:
  - Blisters
  - Redness or swelling
  - Bleeding or oozing fluid
  - Black-and-blue areas
- You hurt your feet (painful or not):
  - Burn
  - Splinter
  - Object falls on your foot
  - Stubbed toe

If you can't call or reach your provider, go to the Emergency Department.

Stress and diabetes

Everyone feels stress at times. Pressure and stress are facts of life, and sometimes life's pressures can seem too big to handle. Stress can lead to feeling sad, tense, negative, blue, tearful or tired, and this can affect your efforts of diabetes control.

Managing diabetes is harder when you are under stress. You may forget to take care of yourself or feel that controlling diabetes isn't a priority, but your blood glucose may change when you are stressed. You could slip into self-destructive behaviors like overeating, drinking or taking drugs.

How to avoid or manage stress:

- Monitor your blood glucose more closely and respond as necessary.
- Get enough sleep and liquids (water is best).
- Watch your diet more carefully.
- Keep up with your exercise program.
- When your body feels better, it is easier to manage stress.
- Be positive.
- Focus on what you can do well. Expand on that and repeat it.
- Avoid situations or people who increase your stress.
- Laugh and love.

Staying well

Things you can do to feel better

Diversions

- **Getaways.** See a movie, daydream or spend time alone.
- **Hobbies.** Write, remodel, paint or create.
- **Learning.** Take a class, join a club or read a good book.
- **Music.** Sing, listen to music or play an instrument.
- **Play.** Join a team or go out with friends.
- **Work.** Keep busy, volunteer or tackle a project.

Family

- **Balancing.** Balance time at work and home; accept the good with the bad.
- **Conflict resolution.** Look for win/win solutions; forgive readily.
- **Esteem building.** Build good family feelings; focus on personal strengths.
- **Flexibility.** Take on new family roles; stay open to change.
- **Networking.** Develop friendships with other families.
- **Togetherness.** Take time to be together; build family traditions and express affection.

Interpersonal

- **Affirmation.** Believe in yourself, trust others and give compliments.
- **Assertiveness.** State your needs and wants and say no respectfully.
- **Contact.** Make new friends, touch and really listen to others.
- **Spirituality.** Meditate, pray or seek support from your spiritual community.

If you continue to feel stressed and want to talk with someone about it, tell your primary care provider. Counseling may be available to you.

Foot care

Take care of your feet.

- Wash your feet daily with soap and lukewarm water.
- Dry your feet well, especially between the toes.
- Keep the skin supple with a moisturizing lotion, but do not apply it between the toes.
- Check your feet for blisters, cuts or sores. Tell the doctor if you find something wrong.
- Use an emery board to shape toenails.
- Change daily into clean, soft, well-fitting socks or stockings, not too big or too small.
- Keep your feet warm and dry. Preferably wear padded socks and always wear shoes that fit well.
- Never walk barefoot indoors or outdoors.
- Examine your shoes every day for cracks, pebbles, nails or anything that could hurt your feet.

Taking good care of your feet means using them. A brisk walk every day stimulates the circulation.

Medications

Diabetes pills

The doctor may prescribe some pills (also called oral agents or medications) to help control your blood glucose levels. One group of these is known as sulfonylureas or secretagogues. These pills stimulate the pancreas to make more insulin. Other groups work on cell sensitivity.

Diabetes pills are not "oral insulin" or "insulin pills." Insulin is destroyed by the digestive system and therefore is not effective if taken by mouth.

Diabetes pills help control diabetes in a variety of ways. Some help the pancreas produce more insulin. Others help the cells use insulin more effectively. Some of these medications also slow down the production of glucose by the liver, thus lowering blood glucose.

- The pills help lower blood glucose.
- Take your pills at the same time every day.
- Eat three healthy meals at about the same time every day.
- Check your blood glucose regularly.
- Avoid alcohol.
- Call the doctor if you get a rash, feel dizzy a lot, have stomach upset or have diarrhea that does not resolve in a few days.
- Never take more or fewer pills than the doctor prescribed.

Treatment plan

It is important that you take these medications exactly as prescribed. Do not take more or fewer pills without consulting your doctor.

Diabetes pills are a supplement to, not a substitute for, your diabetes regimen. It is very important that you follow your diet carefully and check your blood glucose regularly to make sure your diabetes remains under control. The diabetes educator can help you plan a schedule of blood glucose testing.

Side effects

Some side effects may occur when you start taking the medication; they should go away after a few weeks. Other side effects may mean that your dosage should be adjusted or the medication should be discontinued.

If any of the following symptoms occur, call your doctor:

- Acne
- Bloating
- Diarrhea
- Dizziness
- Hives
- Nausea
- Persistent gas
- Skin rash
- Vomiting

It is also important to watch for symptoms of low blood glucose, such as feeling weak, shaky, sweaty or irritable. Low blood glucose (less than 70 mg/dL) can last many hours with diabetes pills; treat with food or sugar and notify the doctor if these symptoms occur repeatedly.

Insulin

Getting started with insulin

Check the expiration date. For guaranteed effectiveness, the insulin must be used before the expiration date.

Always keep an extra bottle on hand for each type of insulin being used. Store the extra bottle in the refrigerator but do not freeze. Never inject cold insulin. It can irritate the skin and slow absorption, possibly causing blood glucose irregularities. Allow insulin to come to room temperature prior to injecting — it is more evenly absorbed and will not cause as much discomfort.

Once opened, it is OK to keep insulin, bottle or pen, at room temperature. See package insert for further instructions regarding expiration dates.

Avoid exposing insulin to direct sunlight or temperatures higher than 86 F.

Traveling with insulin

When traveling, keep your insulin where you know it will not become too hot or too cold. If traveling by car, do **not** leave insulin in the trunk or glove compartment. If traveling by bus, train or plane, keep the insulin with you. Never put insulin in baggage or storage compartments. Always keep it protected in your carry-on luggage.

Stricter security measures at the nation's airports in recent years may affect airline passengers with diabetes. The American Diabetes Association recognizes the added inconvenience this may pose for individuals with diabetes.

You can contact the American Diabetes Association at **(800) 342-2383** for updates on airline protocols and security measures. You can also visit diabetes.org and enter "air travel and diabetes" in the Search box for more information. The Transportation Security Administration (TSA Cares) may be reached at **(855) 787-2227.**

Taking insulin

Gently roll cloudy insulins and mix before drawing up. Do not shake. This can cause bubbles that can interfere with the accuracy of the dose.

When purchasing syringes, be sure to select the size that best suits your need:

- 30 unit = 1/3 cubic centimeter
- 50 unit = 1/2 cc
- 100 unit = 1 cc

Keep insulin administration equipment in a safe place — away from children.

Do not touch the parts of the syringe (plunger shaft or needle) that touch the insulin or enter the skin. Do not clean the needle with alcohol between uses; alcohol removes the silicon coating that makes it slide easily into the skin.

Needles and syringes must be properly disposed of to prevent reuse or injury. Place in an approved sharps container and dispose of according to state and local laws.

Insulin

Relative insulin action times

	Starts (in minutes)	Peaks (in hours)	Ends (in hours)
Very rapid-acting			
Lispro (Humalog) U-100/U-200 in pen only	15	1-2	3-5
Aspart (Novolog) U-100	10-20	1-3	3-5
Aspart (Fiasp) U-100	2	1-3	3-5
Glulisine (Apidra) U-100	5-15	1-3	3-5
Rapid, short-acting			
Regular (R) U-100	30-60	2-4	6-8
Intermediate-acting			
NPH (N) U-100	120-240	4-12	18-24
Humulin (R) U-500	30-60	2 ½-5	up to 24
Long-acting Do not mix with any other insulin.			
Detemir (Levemir) U-100	60	None noticeable	= 24
Degludec (Tresiba) U-100 and U-200 in pen only	60	None noticeable	= 42
Glargine (Lantus) U-100	60	None noticeable	= 24
Glargine (Basaglar) U-100	60	None noticeable	= 24
Glargine (Toujeo) U-300 in pen only	gradual onset up to 6 hours		= 36
Premixed			
70/30 (Novolin 70/30) = N + R U-100	30	2-4	18
NovoLog Mix 70/30 = N (like) + aspart U-100	15	1-6 ½	8-12
75/25 = NPI + lispro U-100	15	1-6 ½	8-12
50/50 = NPI + R U-100	30	1-6	14
NovoLog Mix 50/50 = N (like) + aspart U-100	15	1-6 ½	8-12

Other hormone replacement medications

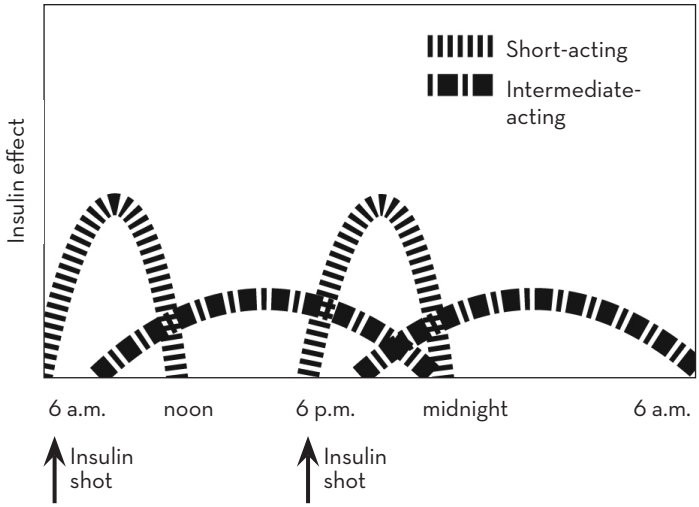
Pramlintide (Symlin) mimics the effect of the pancreatic hormone amylin, which is deficient in people with diabetes. It slows gastric emptying and helps reduce blood glucose spikes after meals. It is injected with one's three main meals.

Exenatide (Byetta and Bydureon), **liraglutide** (Victoza), **albiglutide** (Tanzeum), **dulaglutide** (Trulicity) and **lixisenatide** (Adlyxin) mimic or replace the gut hormone that is deficient in people with Type 2 diabetes. This improves insulin secretion from the pancreas only when food is present, slows gastric emptying and helps reduce blood glucose spikes after meals.

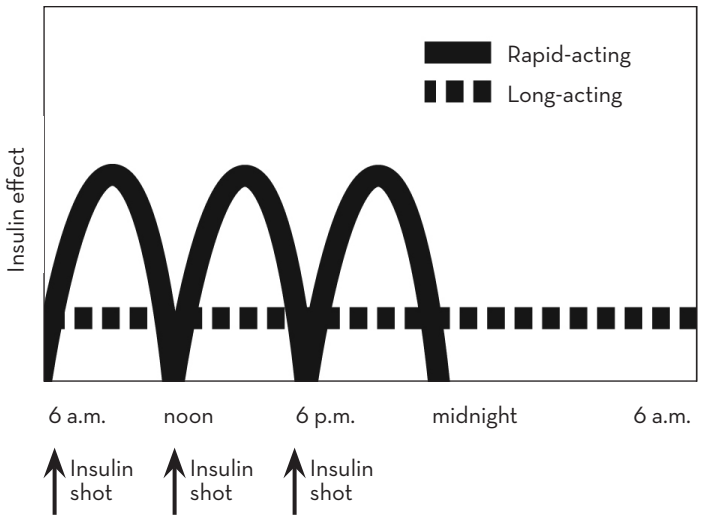
Insulin

Insulin programs

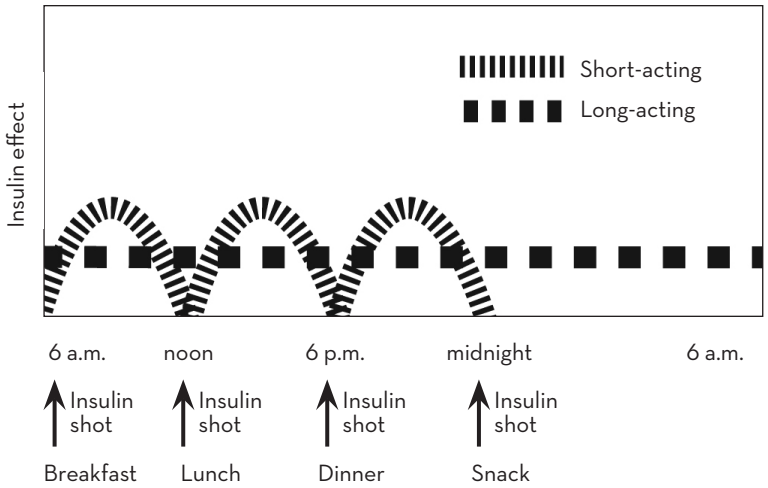
Short- and intermediate-acting



Rapid- and long-acting



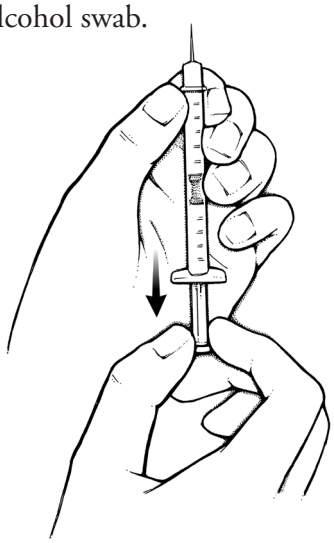
Short- and long-acting



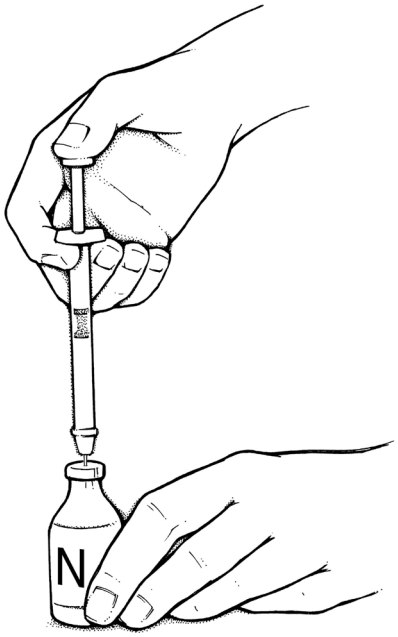
Insulin

Single-dose insulin

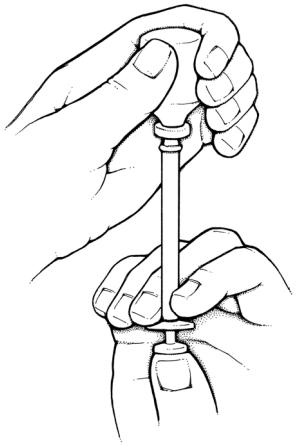
1. Gather supplies.
2. Wash hands.
3. Roll cloudy bottle.
4. Wipe top of bottle with alcohol swab.



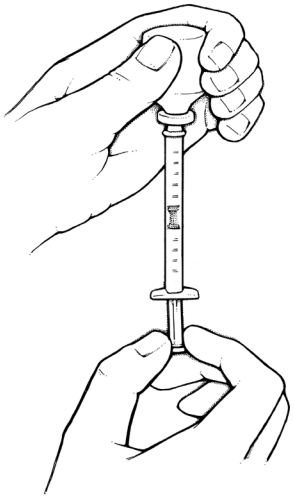
5. Take cap off. Pull plunger down to _____ units.
6. With bottle on table, put needle into bottle.
7. Push plunger down.



8. Turn bottle upside down.



9. Pull plunger halfway down to draw insulin into the syringe.
10. Push insulin back into bottle.
11. Pull plunger to _____ units. Check for air bubbles. If seen, push insulin back into syringe and repeat steps 9 and 10.



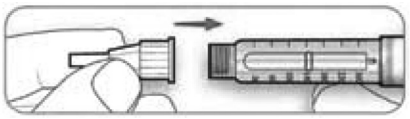
12. Pull needle from bottle. You are ready to inject.

Prefilled insulin pen devices are available for all types of insulin. For more information talk with your doctor or diabetes educator.

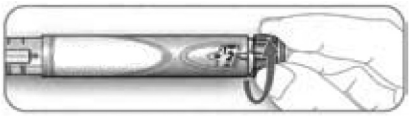
Insulin pen

These instructions are a guide only. **Read the full instruction leaflet before you use a pen for the first time.** If you have any questions, talk with your doctor or diabetes educator or call the 24-hour support line.

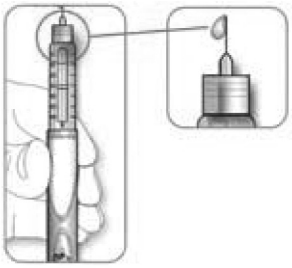
1. **Attach a new needle**
   Keep the needle straight as you attach it.



2. **Prime the pen (safety test)**
   This removes air bubbles and ensures that the pen and needle are working properly. Select a dose according to the package insert. **Always prime before each injection.**

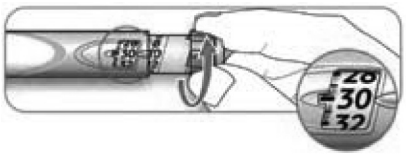


   Take off the outer needle cap. **Remove the second cap to expose the needle.** Hold the pen with the needle pointing upward and press the injection button all the way in. Check if insulin comes out of the needle.

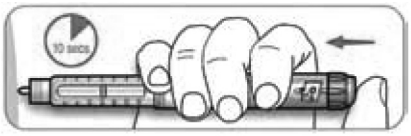


   If insulin does not come out, repeat the test until it does. If no insulin comes out after the third time, change the needle and repeat the priming process.

3. **Select the dose**
   Be sure the dose window shows "0" following the safety test. Select your required dose. (This example shows 30 units.)



4. **Inject the dose**
   Using the method your health care provider showed you, insert the needle into the skin. Press the injection button in all the way. Hold the button in that position, **slowly count to 10 and then withdraw the needle.**

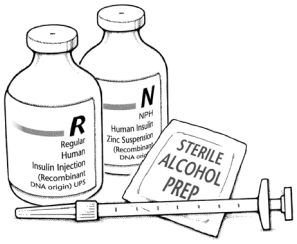


5. **Remove the needle**
   Put the outer needle cap back on the needle and use it to unscrew the needle from the pen. Dispose of the needle properly in a sharps container, as instructed by your health care provider. Put the cap on the pen.

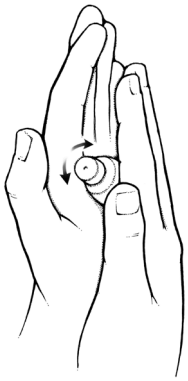
   If you cannot dial to the dose you want, check that there is enough insulin in the reservoir.

Insulin

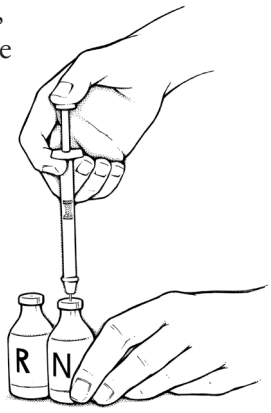
Mixed-dose insulin



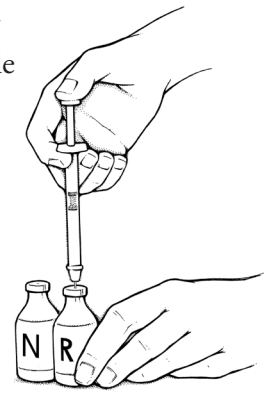
1. Gather supplies.
2. Wash hands.



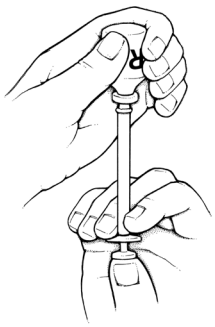
3. Roll cloudy bottle.
4. Wipe top of bottle with alcohol swab.
5. Take cap off. Pull plunger down to _____ units equal to **cloudy** insulin dose.
6. With bottle on table, put needle into bottle of cloudy insulin and push air into bottle.



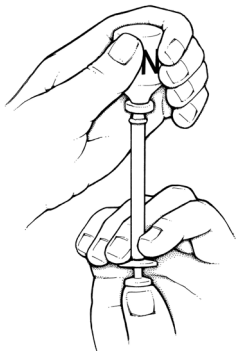
7. Take needle out.
8. Pull plunger down to _____ units equal to **clear** insulin dose.
9. Put needle into bottle of clear insulin. Push air in bottle and leave in.



10. Turn bottle upside down. Pull halfway down the syringe.
11. Push insulin back into bottle.
12. Pull plunger down to correct dose.
13. Get rid of air bubbles, then take needle out.



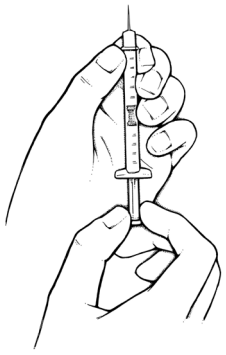
14. Put needle into cloudy bottle and turn bottle upside down.



15. Slowly pull plunger down to the total dose

    = clear _____

    + cloudy _____.



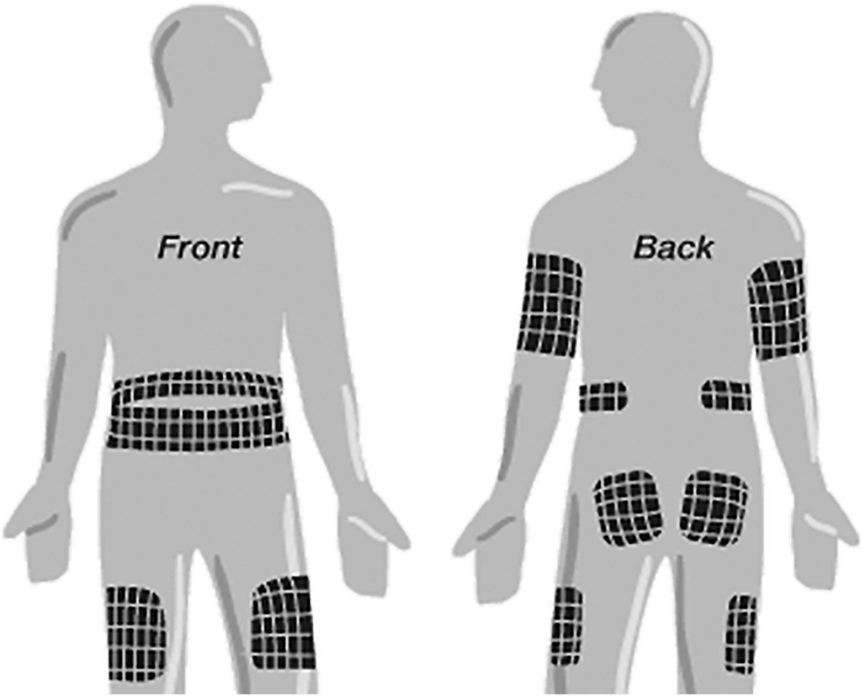
16. If you draw out too much, throw it away and start over.

Injection sites

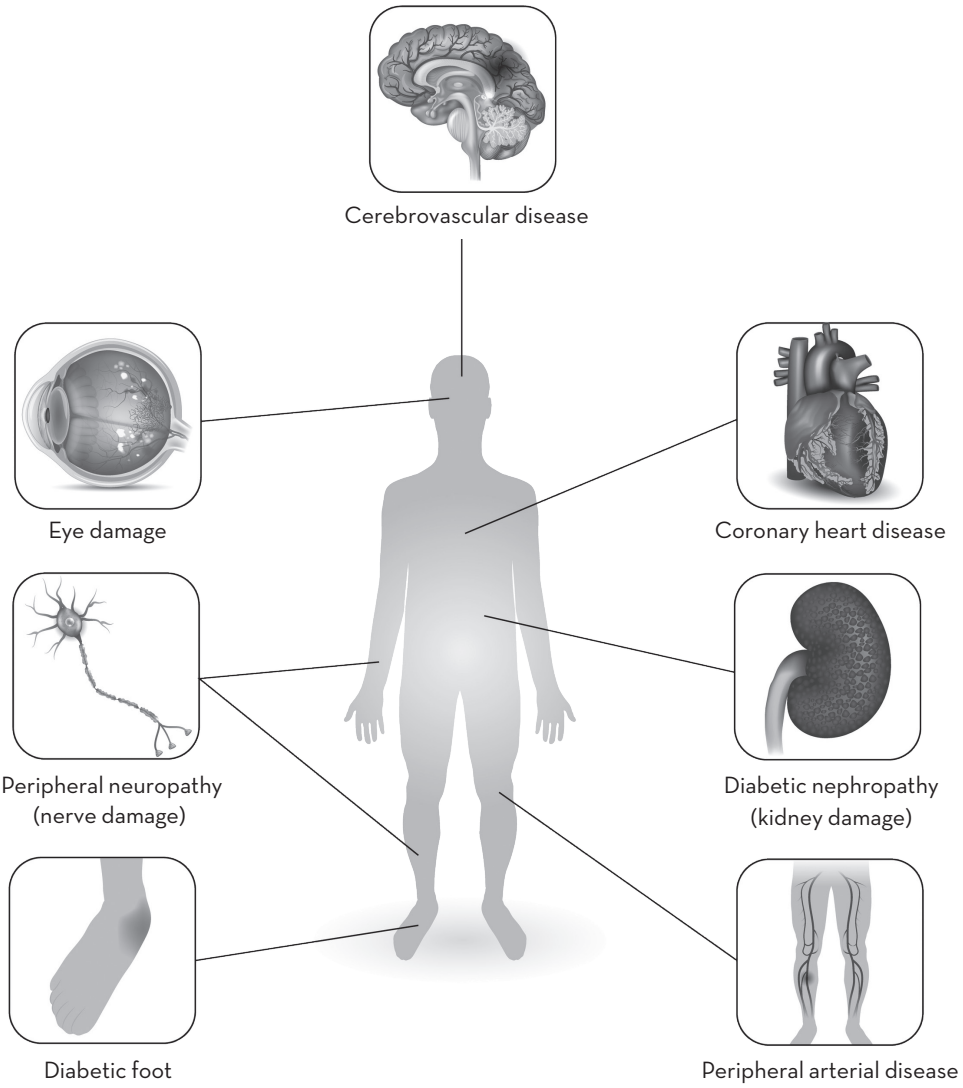
For the most desirable results, rotate injection sites within the same region. Use the same region at the same time of day.

The abdomen should be the first choice. It is the most predictable region for a rapid onset of effects.

The last choice should be the thighs, arms and hips, as these are the least predictable regions with the slowest onset of effects.



Diabetes complications



Diabetes complications

If blood glucose stays high for a long time, it can cause serious health problems:

- Blurred vision
- Wounds that won't heal
- Numbness in feet, hands and legs
- Kidney problems
- Clogged blood vessels and heart problems
- Changes in weight

Guidelines for diabetes care

- Review blood glucose values daily (see page 3 for ranges)
- Keep blood pressure below 140/90
- If overweight, lose 5 percent to 10 percent of body weight
- Check feet daily; have routine foot exam with provider
- Dilated eye exam yearly
- Flu shot yearly
- Labs: A1C every three to six months; kidney and urine test yearly (if normal); cholesterol yearly; triglycerides every two years

Notes

Notes

Asante Diabetes Education
Medford and Grants Pass
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