



LOMA LINDA UNIVERSITY
HEALTH

Diabetes Treatment Center

(909)558-3022

What is diabetes?

Diabetes is a condition in which the body doesn't make or use insulin correctly. The image below shows, in a simple way, what happens normally when you eat.

Checking your blood sugar

You and your diabetes care team will decide when and how often you will check your blood sugar.

The most common types of diabetes are type 1 and type 2

Type 1

In **type 1 diabetes**, the body makes little or no insulin, due to an overactive autoimmune system. So people with type 1 diabetes must take insulin every day. Type 1 diabetes usually occurs in children and young adults, but it can also appear in older adults. (An autoimmune disease means that the body attacks its own cells by mistake.)

Type 2

In **type 2 diabetes**, your body prevents the insulin it does make from working right. Or it may not make enough insulin. Most people with diabetes have type 2. Some risk factors for this kind of diabetes include older age, being overweight or obese, family history, and having certain ethnic backgrounds.

Before meals

80 to 130 mg/dL

2 hours after the start of a meal

Less than 180 mg/dL

A1C

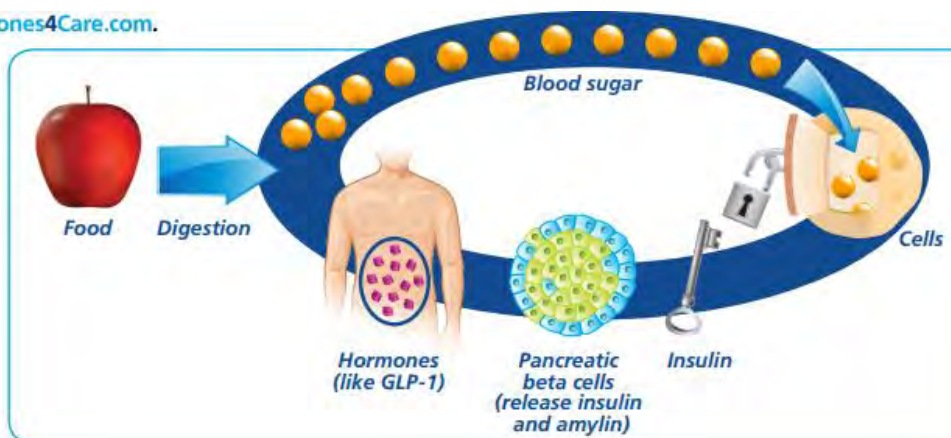
Less than 7%

American Diabetes Association. Standards of medical care in diabetes—2016. *Diabetes Care*. 2016;39(suppl 1):S1-S112.

Knowing your A1C: _____%

The A1C test measures your estimated average blood sugar level over the past 2 to 3 months. It's like a "memory" of your blood sugar levels. It shows how well you're controlling your blood sugar levels over time. Your A1C and your blood sugar levels go up and down together.

Lowering your A1C to below 7% reduces your risk of problems from diabetes. Therefore, the A1C goal for most people is less than 7%.



A1C levels	Average blood sugar
6%	126 mg/dL
7%	154 mg/dL
8%	183 mg/dL
9%	212 mg/dL
10%	240 mg/dL
11%	269 mg/dL
12%	298 mg/dL

Adapted from the American Diabetes Association. Standards of medical care in diabetes—2019. *Diabetes Care*. 2019;42(suppl 1):S1-S193

Low blood sugar

(Hypoglycemia)

Less than 70 mg/dl

Causes

You might get low blood sugar (also called hypoglycemia) if you:

- Take certain medicines and eat too few carbohydrates
- Skip or delay meals
- Take too much insulin or diabetes pills (ask your diabetes care team if this applies to you)
- Are more active than usual

Signs and Symptoms

Shaky



Sweaty



Dizzy



Headache



Hungry



Weak or tired



Nervous or upset



Confusion and difficulty speaking



If low blood sugar is not treated, it can become severe and cause you to pass out. If low blood sugar is a problem for you, talk to your doctor or diabetes care team.

What to do if you think you have low blood sugar

Check your blood sugar right away if you have any symptoms of low blood sugar. If you think your blood sugar is low but cannot check it at that time, treat anyway.

Treat by eating or drinking 15 grams of something high in sugar, such as:

- 4 ounces (1/2 cup) of regular fruit juice (like orange, apple, or grape juice)
- 4 ounces (1/2 cup) of regular soda pop (not diet)
- 3 or 4 glucose tablets
- 1 tablespoon of honey
- 5 to 6 candies that you can chew quickly

Wait 15 minutes and then check your blood sugar again. If it is still low, eat or drink something high in sugar again. Once your blood sugar returns to normal, eat a meal or snack. This can help keep low blood sugar from coming back.



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Hyperglycemia*

Step 1. Recognize the Signs and Symptoms of hyperglycemia (high blood glucose).



EXTREME THIRST DRY SKIN HUNGER BLURRED VISION DROWSINESS FREQUENT URINATION HEADACHE
OTHER SIGNS AND SYMPTOMS MAY INCLUDE: CUT OR SORE THAT WON'T HEAL.

Step 2. Measure Your Blood Glucose (BG) to verify the severity of your hyperglycemia.

- ❖ **Mild fasting hyperglycemia:** fasting BG levels 100 - 150 mg/dL, regardless of symptoms.
- ❖ **Level 1 hyperglycemia:** BG levels 181 - 250 mg/dL, regardless of symptoms.
- ❖ **Level 2 hyperglycemia:** BG levels > 250 mg/dL, regardless of symptoms.

Step 3. Hyperglycemia Treatment Options

- ❖ You can often lower your blood glucose level by exercising. However, if your blood glucose is above 240 mg/dl, check your blood or urine for ketones (kits sold over the counter). If you have ketones, do not exercise as it may make your BG go even higher.
- ❖ Drink extra water.

Step 4. Hyperglycemic Life-threatening Crisis

- ❖ **Diabetes Ketoacidosis (DKA):** BG ≥ 200 mg/dL or prior history of diabetes + high ketone levels (b-Hydroxybutyrate blood test concentration ≥ 3.0 mmol/L or urine ketone test strips $\geq 2+$). Typically presents with symptoms described on step 1 + fruity-smelling breath and rapid breathing + and unintentional weight loss.
- ❖ **Hyperglycemic Hyperosmolar State (HHS):** BG ≥ 600 mg/dL without high ketone levels. Typically presents with a change of cognitive state and severe fatigue.

Symptoms in common for both conditions:
abdominal pain, nausea, vomiting, and confusion

If you think you are experiencing DKA or HHS, contact your health care provider IMMEDIATELY or go to the nearest emergency room.

Step 5. Investigate the Cause to Prevent Recurrence! Keep track of Hyperglycemia episodes.

Causes of hyperglycemia include but are not limited to excessive consumption of calories, excessive consumption of refined carbohydrates, excessive consumption of saturated fats, alcohol and/or substance use, a sedentary lifestyle, being overweight or obesity, missing insulin or diabetes medications, certain oral medications to treat other conditions, sleep deficiency, and stress. Stressful events (e.g., illness, trauma, and surgery) increase the risk for both hyperglycemia and hypoglycemia among individuals with diabetes. Discuss these and other possibilities with your diabetes care team.

***The guidelines discussed in this handout apply to nonpregnant adults with diabetes.**



THE PLATE METHOD

Asparagus

Brussels sprouts

Cauliflower

Dark leafy greens

Mushrooms

Pea pods

Radishes

Tomatoes

Broccoli

Cabbage (cole slaw)

Cucumbers

Eggplant

Okra

Peppers

Salad greens

Zucchini

Portion Guide

Nonstarchy Vegetables

Carbohydrate Foods
Protein Foods

Plan Your Portions

Water or no-calorie drinks

Corn

Fruit

Whole grains

Bean, lentils and peas

Chicken

Fish: salmon, tuna, etc.

Shrimp

Corn tortilla

Berries

Winter squash

Milk and yogurt

Eggs and cheese

Lean beef

Tofu

Use a smaller plate. This is a 9-inch plate to help guide you.

9 inches

Managing diabetes safely during sick days

You can stay safe when you are sick

Illness can make it harder to manage your diabetes. You and your diabetes care team can work together to develop a sick day plan. Your team can also let you know when to contact them.

Keep track of your blood sugar

Even if your blood sugar is usually under good control, it can vary when you're sick. So it's important to check your blood sugar often. For example, check it every 6 hours for a mild illness and every 3 to 4 hours for a severe illness.



Check with your diabetes care team or pharmacist before taking any over-the-counter medicines, like aspirin, cough syrup, or decongestants, to see if they might raise or lower your blood sugar. Choose sugar-free medicines if they are available.



Eating when you are sick

Eating well is important when you are sick, so try to follow your usual meal plan as best you can.

If you are unable to stick to your meal plan but are able to eat some food, choose items from the list below. Each item counts as 1 carbohydrate choice or 15 grams of carbs. Try to eat or drink at least 45 grams of carbs every 3 to 4 hours.

- ½ cup fruit juice (like orange or apple)
- ½ cup regular (not sugar free) soda pop
- ½ cup regular gelatin dessert
- 1 double ice pop
- 1 cup soup
- 1 cup sports drink
- 1 slice toast
- 6 soda crackers

Drink up

If you feel too sick to eat solid foods, be sure to drink 6 to 8 ounces of liquids every hour.

Continue to take your diabetes medicines

- Be sure to take your diabetes medicines when you are sick unless your diabetes care team tells you not to. t
- If you use insulin, your diabetes care team may tell you to take extra injections of insulin if your blood sugar is 250 mg/dL or higher. Even if you are vomiting (throwing up) or are unable to eat, continue taking your long-acting (basal) insulin.
- If you take diabetes pills, take your usual dose. If you vomit up the pills or are not eating, call your diabetes care team.

When to call your diabetes care team

Call your provider if you have these symptoms

- Your blood sugar level is less than 70 mg/dL
 - Your blood sugar levels are over 250 mg/dL for more than 2 checks
 - You are vomiting or are unable to keep fluids down
 - You have a fever (101.5° F) or an illness that lasts more than 24 hours
 - You have severe pain in your stomach, have chest pain, or have a hard time breathing
 - You have been vomiting or having diarrhea for more than 6 hours
 - You have moderate to large amounts of ketones in your urine for more than 6 hours
- Call 911 if any of these occur:**
- Chest pain or shortness of breath, dizziness or fainting, weakness of an arm, trouble speaking or seeing, confusion or loss of consciousness or vomiting and unable to keep fluids down

Foot care for people with diabetes

People with diabetes have to take special care of their feet. You should have a comprehensive foot exam by your doctor every year. Have your feet examined during every visit if you have problems with your feet, like loss of feeling, changes in the shape of your feet, or foot ulcers.

Wash your feet in warm water every day. Test the water with your elbow to make sure that it is not too hot.



Dry your feet well, especially between the toes.

Keep the skin soft with a moisturizing lotion, but do not apply it between the toes.



Inspect your feet every day for cuts, sores, blisters, redness, calluses, or other problems. If you cannot see well, ask someone else to check your feet for you. Report any changes in your feet to your diabetes care team right away.



Ask your diabetes care team or your podiatrist (foot specialist) how you should care for your toenails. If you want to have a pedicure, talk with your team about whether it is safe for you.

To avoid blisters, always wear clean, soft socks that fit you. Do not wear socks or knee-high stockings that are too tight below your knee.



Always wear shoes that fit well. Break them in slowly.

To avoid injuring your feet, never walk barefoot indoors or outdoors.

Before putting your shoes on, feel the insides for sharp edges, cracks, pebbles, nails, or anything that could hurt your feet. Let your diabetes care team know right away if you injure your foot.



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Diabetes and stress

The stress of everyday life affects all of us. But diabetes can add an additional source of stress. And severe stress can have an effect on your blood sugar control.

Learning to relax

If you're under severe stress, you may want to talk with your diabetes care team about what you're going through and see what might help. For everyday stress, there are several things you can do to relax and lower your stress levels.

Physical activity

Moving your body through a wide range of motion can help you relax. Three movements to try are stretching, circling, and shaking parts of your body.

Breathing exercises

Sit or lie down. Breathe in deeply. Then push out as much air as you can. Breathe in and out again, this time focusing on relaxing your muscles. Continue for 5 to 20 minutes at a time.

Progressive relaxation

In this method, you tense and then relax the muscles of your body. Start with your toes and move up, one muscle group at a time, to your head.

Replacing negative thoughts with positive ones

Each time you find yourself having a bad thought (like, "I'm never going to get my blood sugar into my target range"), replace it with a positive one (like, "My blood sugar may not always be in my target range, but my last two readings were really close!").

Diabetes and depression

If you have diabetes and you have had symptoms of depression, you are not alone. Most people with diabetes do not have depression. But people with diabetes are at greater risk for it. So it's important to recognize the signs.

Recognizing signs of depression

Recognizing that you may have depression is the first step to getting help and feeling better. But how do you know if you are depressed? Depression is more than just feeling blue from time to time. If you have been feeling sad or down in the dumps for several days, ask yourself if you're also feeling any of these symptoms:

- Loss of pleasure in doing things you used to enjoy
- Difficulty sleeping, or sleeping more than usual
- Eating more or less than you used to, resulting in weight gain or loss
- Trouble paying attention
- Lack of energy
- Nervousness
- Feeling guilty and like you are a burden to others
- Feeling worse in the morning than you do later in the day
- Feeling like you want to die or take your own life

Getting help

Depression is a disease. And there are resources to help. Treatment for depression is available.

Depression can be treated with medicine for depression (which is different from your medicine for diabetes), counseling, or both. The first step is to talk with your diabetes care team.



What are Diabetes Complications?

Diabetes complications are health problems that can occur when blood glucose remains high over a long period of time.



Eye disease
(diabetic retinopathy): decreased vision and in some cases, blindness

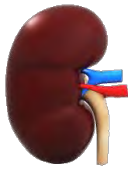
Mouth problems, such as gum disease or problems with teeth



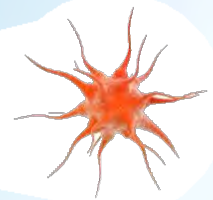
Heart and blood vessel diseases
(cardiovascular diseases), such as heart attack, stroke, and *peripheral artery disease* (poor blood flow in the feet and legs)

Two out of three people with diabetes die from heart disease or stroke

Kidney disease
(diabetic nephropathy): the kidneys may not work as well or may stop working



Foot problems, such as infections and sores, and in some cases, amputation



Nerve damage *(diabetic neuropathy)*: numbness, tingling, or pain in the arms, hands, legs, and feet

Following your diabetes management plan and taking an active role in your treatment are two important ways that you can help to prevent or delay diabetes complications.

Talk with your healthcare provider for more information.



REFERENCES: ADA. Heart disease.

Available at: <http://www.diabetes.org/living-with-diabetes/complications/heart-disease/>. ADA. Kidney disease (nephropathy). Available at: <http://www.diabetes.org/living-with-diabetes/complications/kidney-disease-nephropathy.html>. National Diabetes Information Clearinghouse. Prevent diabetes problems: keep your diabetes under control. Available at: http://diabetes.niddk.nih.gov/dm/pubs/complications_control/. May 2014

Exercise and Blood sugar

Exercise helps insulin do its job better.

- Overall blood sugar control is better when you exercise regularly.
- Your blood sugar will generally be lower after exercise than it was when you started.

The American Diabetes Association recommends:

- **Aerobic exercise** of moderate-intensity over at least three or more days totaling **2.5 hours for the week**.
- **Moderate resistance training** (free weights, weight machines, bands or tubing) using light weights.
- This form of exercise is best when done three times per week, every other day.
- Resistance training should not be done if you have retinopathy without approval of your doctor.

Because exercise can lower blood sugar, it is possible that it could drop too low during or after exercise. In rare cases, blood sugar may rise during strenuous exercise, which is a form of stress on the body.



Always consult your doctor before starting an exercise plan.

Always check your blood sugar before you begin your exercise session. If your blood sugar is:

- **Below 100**: It is best that you have a snack that contains 10-15 grams of carbs. Unless you are doing strenuous exercise, a light snack will not interfere with your ability to exercise.
- **Between 100 to 150**: This is a good time to exercise.
- **Higher than 300**: You should not exercise until your blood sugar is under better control.

Additional information:

- In the rare case of extreme low blood sugar with loss of consciousness there are Glucagon emergency kits per prescription.



- To assist emergency personnel identify diabetes as a medical condition there are emergency identifications.



WHY ARE SHARPS (NEEDLES) DANGEROUS?

Sharps (needles) can injure people, can spread germs (hepatitis and HIV/AIDS), damage recycling equipment, and require people to be tested for years for HIV and hepatitis if they are stuck. You have the power to prevent a situation like this simply by safely disposing of your used sharps. Do not place others at risk when safe alternatives are currently available.

To avoid needle sticks at home and protect garbage and recycling workers, **DON'T** do the following:

- DON'T** throw used sharps (needles), syringes, or lancets in the garbage/trash, whether at home or away from home.
- DON'T** put sharps (needles) in recycling containers.
- DON'T** flush sharps (needles) down the toilet.
- DON'T** put sharps (needles) into used plastic milk jugs, coffee cans, plastic bags, bleach or soda bottles.
- DON'T** handle someone else's sharps (needle).
- DON'T** overfill sharps containers (¾ full is full).
- DON'T** place non-sharps items in your sharps containers (pills, wound dressings, surgical instruments and other large metal parts, hard, heavy plastics, glass, fabric, thermometers).



To properly and legally dispose of sharps (needles), **DO** the following:



Approved sharps container

- DO** use only an approved sharps container for sharps disposal.
- DO** obtain an approved container (biohazard) and transfer sharps before transport and disposal.
- DO** place a secure lid on the sharps container.
- DO** check with your HHW Program to verify Home-Generated Sharps Collection sites.
- DO** ask your local HHW Program for clarification on sharps (needles) management and disposal, if necessary.

Containers can be purchased at your local:

- ✦ Walgreens
- ✦ Wal-Mart
- ✦ Rite Aid
- ✦ Target with pharmacy

OPTIONS FOR PROPER SHARPS (NEEDLES) DISPOSAL

The following Household Hazardous Waste (HHW) Collection Facilities accept home-generated sharps/needles in approved containers from San Bernardino County residents.

- SAN BERNARDINO, CA 92408**
San Bernardino International Airport
2824 East 'W' Street
Monday – Friday, 9AM to 4PM
- RIALTO, CA 92376**
City Maintenance Yard, 246 Willow Avenue
2nd & 4th Friday & Saturday, 8AM to 12PM
- ONTARIO, CA 91761**
1430 South Cucamonga Avenue
Friday & Saturday, 9AM to 2PM
- UPLAND, CA 91786**
Upland City Yard, 1370 North Benson
Saturday, 9AM to 2PM
- BIG BEAR LAKE, CA 92315**
Public Service Yard, 42040 Garstin Drive
Saturday, 9AM to 2PM
- HESPERIA, CA 92345**
Hesperia Fire Station, 17443 Lemon Street
Tuesday & Thursday, 9AM to 1PM
Saturday, 9AM to 3PM
- JOSHUA TREE, CA 92252**
West of Transportation/Flood Control Bldg.
62499 Twentynine Palms Highway
3rd Saturday, 9AM to 1PM
- APPLE VALLEY, CA 92308**
13450 Nomwaket Road
Saturday, 10AM to 2PM
- BARSTOW, CA 92311**
City of Barstow Corporation Yard
900 South Avenue 'H'
Saturday, 9AM to 2PM
- TRONA, CA 93562**
County Fire Station 127
83732 Trona Road
2nd Saturday, 8AM to 12PM
- VICTORVILLE, CA 92392**
San Bernardino County Fairgrounds
East of Desert Knoll Drive on Loves Lane
Wednesday & Sunday, 9AM to 4PM

The following facility accepts home-generated sharps/needles in approved containers from **all San Bernardino County residents**.

San Bernardino County Public Health Lab (909) 458-9430
150 East Holt Blvd., Ontario, Monday – Friday, 8AM to 5PM

Also available are disposal options for residents within the following City limits:
City of Fontana..... (909) 350-6789 City of Redlands..... (909) 798-7600
City of Rancho Cucamonga.... (909) 919-2635

For residents within the following Counties, contact:
Riverside County (800) 304-2226 Los Angeles County (800) 988-6942
Orange County (714) 834-4000

Protect Yourself...Protect Your Family

Protect Animals...Protect Others

1-800-OILY CAT (645-9228)

Sharps & Medication Disposal

Sharps Disposal

Follow these simple steps to safely dispose of your lancets, needles and syringes with needles

1 Place Sharps in a Sharps Container

If you don't have a sharps container, you can make one! Homemade sharps containers must be of rigid plastic with a secure lid such as a laundry soap or bleach bottle. Container must be one gallon capacity or less.



Print free labels using this link:
rcwaste.org/Waste-Guide/sharps
Preprinted labels are available at HHW collection facilities or by calling (951) 486-3200



Do not use containers such as milk jugs, water bottles, soda cans or glass jars for sharps disposal



2

Bring Sharps to a Collection Site

Household sharps containers can be brought to any of the facilities listed on the HHW collection page of this flyer or one of the following sharps kiosk locations. Sharps generated by businesses, including professional home health care services, are prohibited by law at these locations. For more info visit rcwaste.org/Waste-Guide/sharps

Beaumont - Hemet Area

Lamb Canyon Landfill

16411 Lamb Canyon Road, Beaumont, 92223

Open: Monday - Saturday, 6:00 AM - 4:30 PM

Riverside - Moreno Valley Area

Badlands Landfill

31125 Ironwood Avenue, Moreno Valley, 92555

Open: Monday - Saturday, 6:00 AM - 4:30 PM



Additional Sharps Disposal Services

Mail-back programs (check with your city or purchase at a pharmacy)
Additional sharps and medication services may be provided by your local city (contact your city for details)

Medication Disposal

Use one of the options below to safely dispose of your medications

1 The California Product Stewardship Council provides free drop-off locations for medications

Visit the CPSC website at www.takebackdrugs.org for instructions and to find a drop-off location near you!



How does it work? Follow these 3 easy steps:

1. At home, remove pills and other solid medications from their containers and consolidate in a clear plastic zipper bag. Keep liquid and cream medication tightly sealed in their original containers.

Easy as 1-2-3! Follow These Steps:

1



Obscure personal info from containers & recycle them.

2



Place pills in clear zipper bag. Keep liquids & creams in packaging.

3



Place zipper pill bag & liquids and creams in their original containers into the bin.

2. Remove, mark out or otherwise obscure personal information from solid and liquid/cream medication containers to protect your personal information. Recycle containers for solid medications in your household recycling.

3. Bring zipper bag and any liquids/creams to a Don't Rush to Flush location and place in the bin - it's that easy!

What goes in the Don't Rush to Flush Bins?

- Prescription medications (see website for restrictions)
- Over-the-counter medications
- Medicated ointments and lotions (leave tightly sealed in original containers)
- Pet medications

2

Bring your medications to any of the facilities listed on the HHW collection page

Containers must have all information removed from them. Pills must be removed from their original container and placed in a sealed bag that is one quart size or smaller (**controlled substances are not accepted**).

Maximum limit: 1 gallon or 8 pounds per trip



Acceptable Medications:

- Nutritional supplements
- Prescription medications
- Over-the-counter medications
- Pet medications

Unacceptable Medications:

- Controlled substances
- Chemotherapy medications
- Business or health care generated pharmaceutical waste
- Medication containers with personal information on them



3

Unused or expired controlled substances may also be turned in for safe disposal to the Drug Enforcement Agency

Visit takebackday.dea.gov for a collection site near you



Prescription mail back envelopes may be available for purchase at your local pharmacy



Follow us on:      YouTube

Call us at: (800) 304-2226 or (951) 486-3200

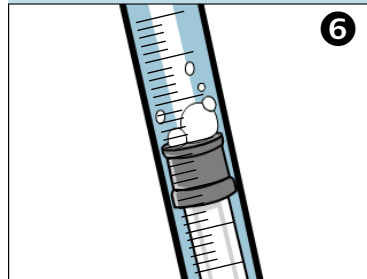
"Managing Waste for a Better Tomorrow"

Visit us at: rcwaste.org

How to inject insulin with a syringe



- 1** Wash your hands.
Check the insulin for lumps, crystals or discoloring.
Gently roll cloudy insulin between your hands until it is uniformly cloudy.
Never shake insulin.



- 6** Look for air bubbles in the syringe. If there are air bubbles, push the insulin back into the bottle and start again from step 5.
When you have the right insulin units with no air bubbles, pull the syringe out of the bottle.



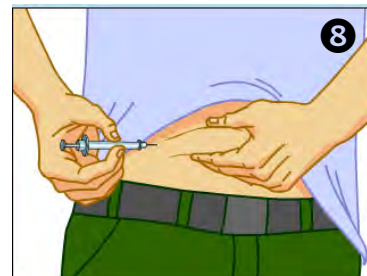
- 2** Wipe the top of the insulin bottle with an alcohol swab.



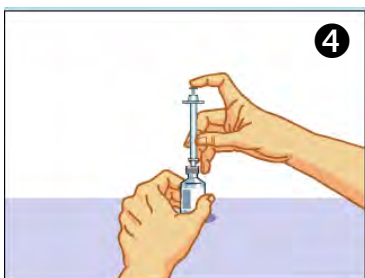
- 7** Clean a small area of skin with an alcohol swab, using a circular motion.
Let the alcohol dry completely before you inject.



- 3** Pull the plunger down to let __ units of air into the syringe.
The units of air should equal the units of insulin that you plan to inject.



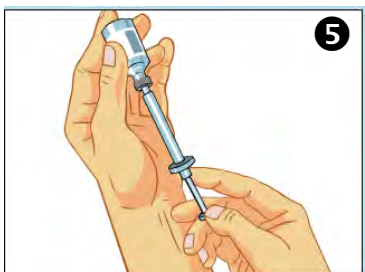
- 8** Pinch up the area of skin that you wiped with alcohol.
Hold the syringe like a pencil. Be sure the needle does not touch anything.



- 4** Push the air into the insulin bottle.
Leave the needle in the bottle.



- 9** Push the needle into the pinched skin at a 90 degree angle. Push the plunger to inject the insulin.
Release the pinch, then pull the syringe needle out of your skin.
If you notice a drop of blood, press a finger on the injection spot for a few seconds.



- 5** Turn the insulin bottle and syringe upside down.
Be sure the needle is in the insulin, not in the air space inside the bottle.
Pull the plunger down to get __ units of insulin into the syringe.



- 10** Place the used syringe into a sharps container.
Do not reuse the syringe.

My Syringe Injection Profile

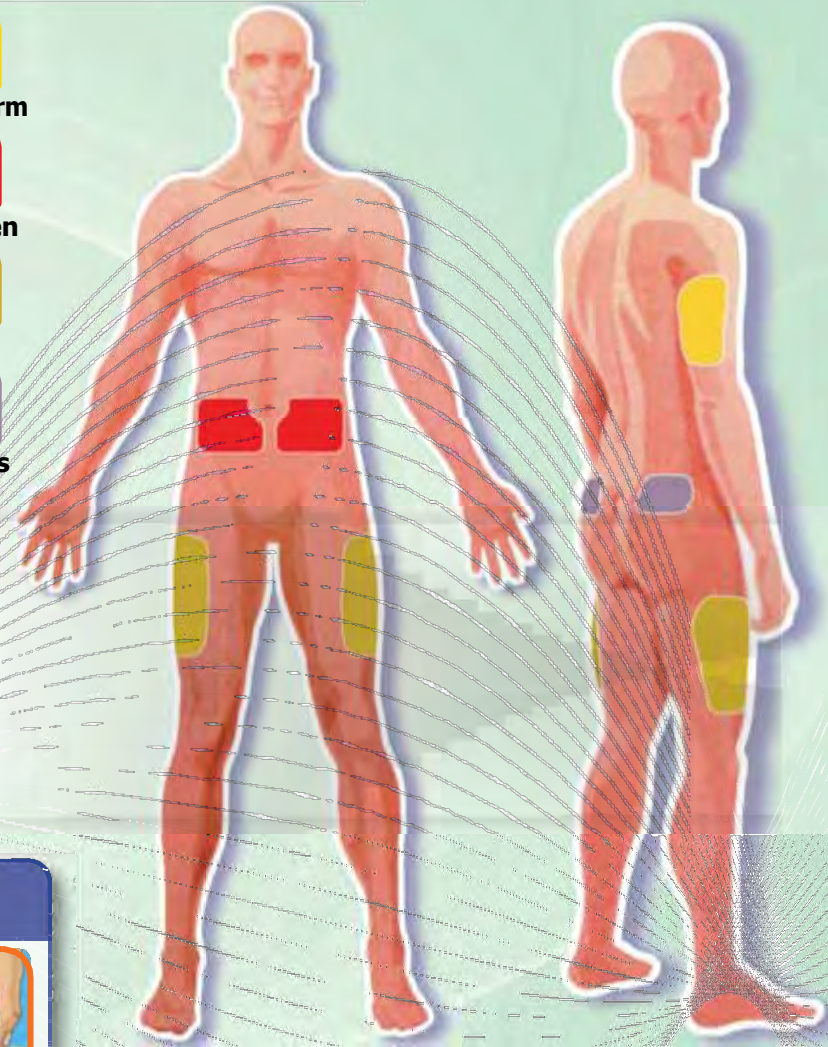
When to Take	Hour	Dose	Site
Morning			
Lunch			
Dinner			
Evening			

Upper Arm

Abdomen

Thigh

Buttocks



1

Suggestion For Syringe Selection

Find the number of units you inject on color spectrum below

10 U

20 U

40 U

60 U

100 U

2

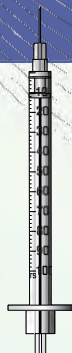
Match color of the units you are taking with syringe capacity below for the appropriate syringe size for your dose



3/10
mL/cc
30 Units



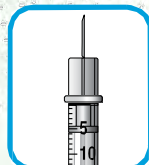
1/2
mL/cc
50 Units



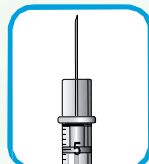
1
mL/cc
100 Units

3

Circle needle lengths. Both require Pinch Up



8 mm



12.7 mm

4

Pinch-Up Technique



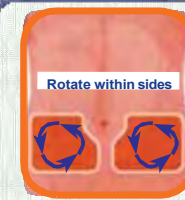
Correct Technique



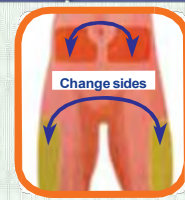
Incorrect Technique

5

Site Selection



Rotate within sides



Change sides

Rotate Within Sites

Move the place of the injection by about a finger's width from last injection point

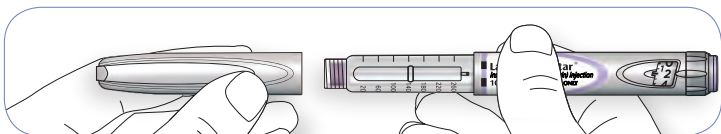


HOW TO USE YOUR LANTUS® (INSULIN GLARGINE INJECTION) 100 UNITS/ML SOLOSTAR® PEN IN 6 STEPS

These instructions are supplied as a guide only. Read the full instruction leaflet included in this kit before you use Lantus® SoloSTAR® for the first time. To help ensure an accurate dose each time, follow all steps in the leaflet.

STEP 1. GET READY

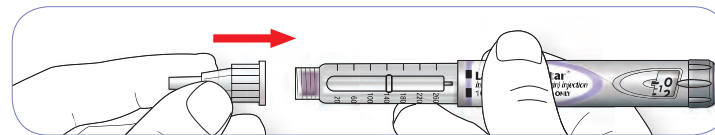
- Remove the pen cap with clean hands.
- Check the reservoir to make sure the insulin is clear and colorless and has no particles—if not, use another pen.



- Always store UNOPENED Lantus® SoloSTAR® pens in the refrigerator.
- Always wash your hands with soap and water before an injection.
- Always check the expiration date of the pen.
- Never inject cold insulin. Wait until pen warms up to room temperature.
- Always use a new needle.
- Never refrigerate the pen after opening it.
- Never play with the dial before using it; this may prevent jamming.

STEP 2. ATTACH THE NEEDLE

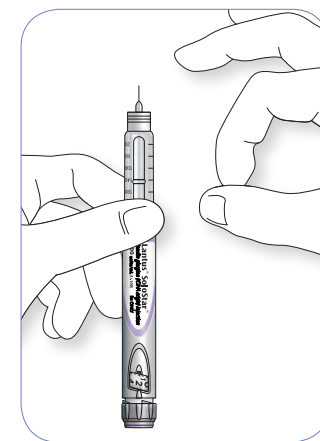
- Wipe the pen tip (rubber seal) with an alcohol swab.
- Remove the protective seal from the new needle, line the needle up straight with the pen, and screw the needle on.
- Do not make the needle too tight. If you have a push-on needle, keep it straight as you push it on.



- After you have attached the needle, take off the outer needle cap and save it (you will need it to remove the needle after your injection).
- Remove the inner needle cap and throw it away.
- **Insulin pens, needles, or syringes must never be shared between patients. Do NOT reuse needles.**

STEP 3. PERFORM A SAFETY TEST

- Dial a test dose of 2 units.
- Hold pen with the needle pointing up and lightly tap the insulin reservoir so the air bubbles rise to the top of the needle. This will help you get the most accurate dose.
- Press the injection button all the way in and check to see that insulin comes out of the needle. The dial will automatically go back to zero after you perform the test.
- If no insulin comes out, repeat the test 2 more times. If there is still no insulin coming out, use a new needle and do the safety test again.



Please [click here](#) for full Important Safety Information and [here](#) for full Prescribing Information for Lantus®.

**LANTUS®**
insulin glargine injection 100 Units/mL
SoloSTAR®



- Always perform the safety test before each injection.
- Never use the pen if no insulin comes out after using a second needle.

STEP 4. SELECT THE DOSE

- Make sure the window shows “0” and then select the dose. Otherwise you will inject more insulin than you need and that can affect your blood sugar level.
- Dial back up or down if you dialed the wrong amount.
- Check if you have enough insulin in the reservoir. If you cannot dial the dose you want it may be because you don’t have enough insulin left.
- You cannot dial more than 80 units because the pen has a safety stop. If your dose is more than 80 units, you will need to redial the rest of your dose. If you don’t have enough insulin for the rest of your dose you will need to use a new pen.



- Never force the dose selector when dialing your dose.
- Never set the dose selector to half units or the pen may jam.

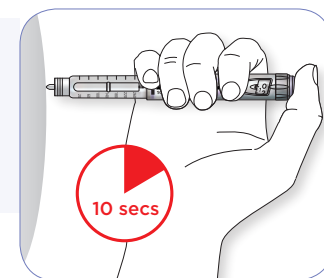
STEP 5. INJECT YOUR DOSE

- Clean site with an alcohol swab. Please see injection site options on page 6.
- Keep the pen straight, insert the needle into your skin.
- Using your thumb, press the injection button all the way down and slowly count to 10 before removing. (Counting to 10 will make sure you get your full insulin dose.)
- Release the button and remove the needle from your skin.

Please [click here](#) for full Important Safety Information and [here](#) for full Prescribing Information for Lantus®.

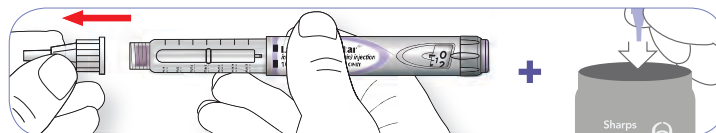


- Choose a new injection spot each time.
- Take the needle from your skin if you dial another dose.



STEP 6. REMOVE THE NEEDLE

- **Insulin pens, needles, or syringes must never be shared between patients. Do NOT reuse needles.**
- After injecting, always remove the needle to prevent contamination and leaking.
- Put the outer needle cap back on the needle and unscrew (or pull) the needle from the pen.
- Throw needle away in a sharps container. For more information on disposing needles please see page 8.
- Put the pen cap back on the pen and store in a safe place at room temperature.



Never share your needle or pen with another person.



Lantus Insulin, Basaglar

- Lantus is a long acting insulin, it lasts for 24 hours
- Give at the same time everyday
- Starts working in 2-4 hours
- Do NOT mix any other kind of insulin in same syringe with Lantus

Apidra, Humalog, Novolog (Rapid Acting Insulin)

- These insulins are very rapid acting. Give immediately before a meal
- Check your blood sugar every time before administering insulin
- Starts to work in 5-10 minutes after injected.
- Apidra, Humalog, or Novolog lasts 3-5 hours.
- Do not give at bedtime. Can cause dangerous low blood sugar during night.
- **Storage:**
 - opened vials/pens-are good for only 28 days
 - keep opened vials/pens in a cool place, under 86 degrees Fahrenheit
 - un-opened vials/pens - keep refrigerated
- **Rotate injection sites:**
 - on back of upper arms or stomach
 - keeps hard knots under skin from forming

INSULIN SLIDING SCALE

- Sliding scales are only used with rapid-acting insulin such as: Humalog, Novolog, Admelog, Apidra
- In order to normalize your blood sugar levels, your doctor may order all or part of your insulin on a sliding scale, basing your insulin dose on your blood sugar number
- For example, at meal times, your prescription for rapid acting insulin could look something like this:

Insulin Amount	Blood Sugar Range
0 insulin dose	70-150
__units for a blood sugar of:	151-200
__units for a blood sugar of:	201-250
__units for a blood sugar of:	251-300
__units for a blood sugar of:	301-350
__units for a blood sugar of: (***then call your provider)	higher than 350

(+)

Your Doctor may order a set amount of rapid acting insulin before meals in addition to the sliding scale.

Example: _____ units



Diabetes Self-management Education and Support

Series of Four classes. Available days and times:

- Tuesdays (classes offered in-person, from 1:00 – 3:30pm)
- Wednesdays (classes offered in-person, from 9:00 – 11:30am)
- Wednesdays (classes offered via Teams, from 5:00 – 7:30pm)

You are allowed to bring one support person (optional).

Class 1: On the Road to Better Management of Your Diabetes

- Diabetes Basics
- Some myths and facts about diabetes
- Defining and reaching your personal health goals
- Blood sugar measurement guidelines
- Managing blood glucose and diabetes with a healthy diet, physical activity, and medications (if needed).

1. *We will measure your weight and A1C*
2. *What to bring on this visit:*
 - Your list of medications.
3. *You will get a healthy recipe!*

Class 2: Diabetes and Healthy Eating

- Feelings about food
- Essential nutrients for health
- How what you eat, how much you eat, and when you eat can impact your blood sugar
- Meal planning strategies
- Challenges you may face and how to overcome them

4. *Receive your individualized meal plan and a healthy recipe!*

Class 3: Blood glucose measurement

- Desired glucose and A1C levels
- What raises or lowers blood sugar
- Signs of high and low blood glucose and how to treat high or low blood sugar
- Emergency preparedness and sick days guidelines
- The newest technology for diabetes management
- How to read the nutrition labels
- Sleep and stress management

5. *Get a healthy recipe!*

Class 4: Continuing Your Journey with Diabetes

- The Natural Course of Diabetes
- How to prevent diabetes complications.
- Physical and laboratorial exams you should ensure to get done
- A review of the five basic lifestyle components
- Diabetes medications and insulins
- Permanent lifestyle changes and resources for ongoing support.

6. *Measuring your weight and A1C*
7. *Receive your prize for completing the class series!*



0822

ADULT DIABETES EDUCATION REFERRAL FORM

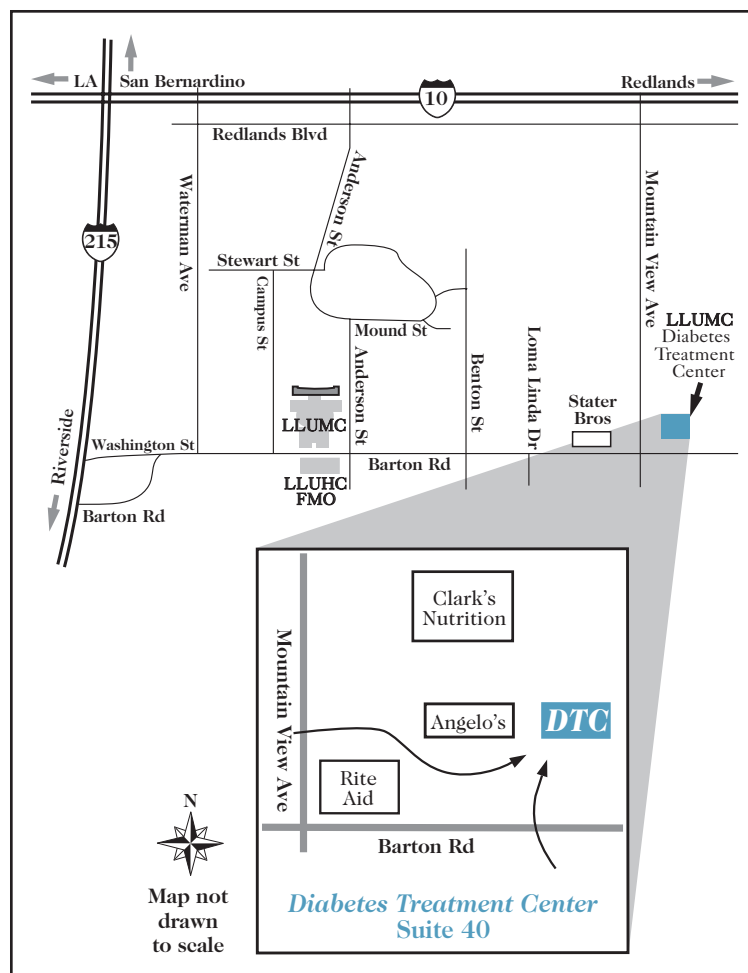
→ = REQUIRED INFORMATION BY MOST INSURERS

Patient Name		DOB
First Name	Last Name	Phone#
Please FAX this form to Diabetes Treatment Center (DTC) at (909) 558-3023 DTC Telephone # (909) 558-3022 Address and directions to DTC on back of this form		
DTC accepts most insurances including Medicare, Medi-Cal, Managed Care and PPO's.		
→ DIAGNOSIS - Check (✓) all that apply: (Pre-diabetes education not covered by health insurance - offered fee-for-service) ☐ Type 2 diabetes, uncontrolled ☐ Secondary diabetes ☐ Type 1 diabetes, uncontrolled ICD code required for secondary diabetes _____ ☐ Pre-diabetes (If using ICD E08, must also list the ICD associated with the underlying condition.)		
→ REASON(S) FOR REFERRAL - Check (✓) all that apply: ☐ Recurrent elevated blood glucose ☐ Recurrent hypoglycemia ☐ Retinopathy ☐ Cardiovascular disease ☐ Change in diabetes treatment regimen ☐ Neuropathy ☐ Chronic kidney disease ☐ Hypertension ☐ Nephropathy ☐ Dyslipidemia ☐ Non-healing wound ☐ Other: _____		
→ LANGUAGE PREFERENCE ☐ English ☐ Spanish ☐ Other: _____		
Group education required by most insurers unless patient has barriers to group education. For individualized education, see 1:1 Education below. Group and individual classes can be offered in person or virtually.		
DIABETES GROUP EDUCATION	☐ COMPREHENSIVE EDUCATION (CE) classes (Four classes, total of 10 hours) POINT OF CARE TESTING Diabetes Self-Management Education and Support (DSMES) can be ordered by an MD, DO or mid-level provider managing the patient's diabetes. HgbA1c will be performed at start and completion of the program, depending on insurance coverage. MEDICARE COVERAGE 10 hours initial DSMES in 12-month period from the first date of visit. Eligible for 2 hours annual follow-up training with a new order.	
	☐ REFRESHER CLASS - 2 hour class <u>MUST HAVE CE PREVIOUSLY</u> Intended as annual refresher and education update.	
DIABETES 1:1 EDUCATION	☐ SELECT 1:1 DSMES EDUCATION SESSION TYPE(S) one to four 2.5 hour sessions. Check (✓) all that apply: ☐ Comprehensive education ☐ Refresher education - up to 2 hours only ☐ REASON(S) for 1:1 EDUCATION (convenience not recognized by insurers). Check (✓) all that apply: ☐ Impaired vision ☐ Impaired hearing ☐ Language other than Spanish/English, Other specify: _____ ☐ Eating disorder ☐ Impaired mental status/cognition ☐ Learning disability (please specify): _____	
	☐ MEDICAL NUTRITION THERAPY (MNT) - MUST BE ORDERED BY MD OR DO ONLY. Individualized nutrition assessment and counseling provided by a registered dietitian specialized in diabetes education. Includes assisting patients to understand the disease process, the role of food choices and physical activity in the management of diabetes; establishing goals and priorities; and individualizing action plans that emphasize responsibility for self-care. MEDICARE COVERAGE - 3 hours of MNT the first year service is provided. 2 hours of MNT for subsequent years with a new order.	
NUTRITION THERAPY	☐ CONTINUOUS GLUCOSE MONITORING (CGM) - PROFESSIONAL TRIAL Sensor placement for glucose reading every 5 minutes for a minimum of 72 hours, to detect nocturnal hypoglycemia, postprandial hyperglycemia, and erratic blood glucose excursions. Additional appointment needed for downloading and interpretation.	
	☐ PERSONAL CONTINUOUS GLUCOSE MONITORING (CGM) Training on the glucose sensor system which patient owns.	
	☐ INSULIN PUMP MANAGEMENT Insulin pump training with follow-up until independent safe use	
	Please fax most recent HgbA1c to the DTC with the referral.	
Physician/Practitioner Name (print): _____ Date: _____ Time: _____ AM/PM Physician/Practitioner Signature: _____ State Provider's Office Number: _____ State Provider's Fax Number: _____		



Loma Linda University Medical Center
**ADULT DIABETES EDUCATION
 REFERRAL FORM**
 DIABETES TREATMENT CENTER - OUTPATIENT

PATIENT IDENTIFICATION



Diabetes Treatment Center
 11285 Mountain View Avenue, Suite 40
 Loma Linda, CA 92354
 Telephone: 909-558-3022
 FAX: 909-558-3023