

LOMA LINDA UNIVERSITY  
HEALTH

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*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

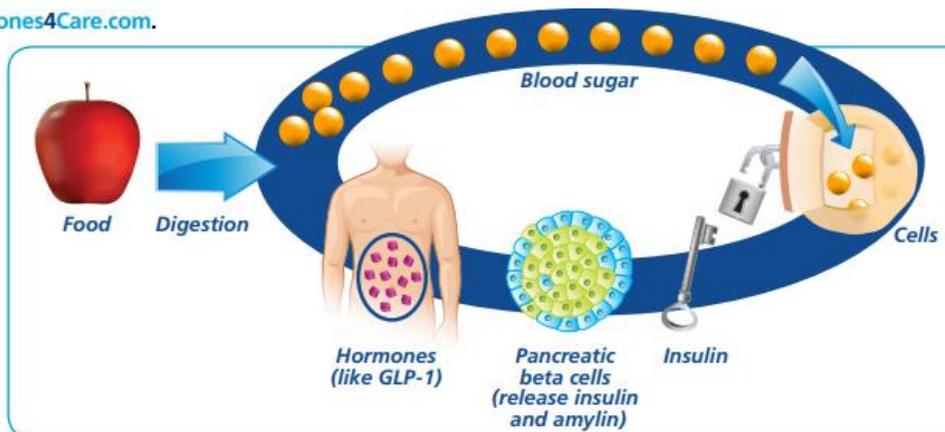
**Less than 7%**

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 (½ cup) of regular fruit juice (like orange, apple, or grape juice)
- 4 ounces (½ 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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# High blood sugar

(Hyperglycemia)

## Causes

High blood sugar (also called hyperglycemia) is when there is too much sugar in your blood. Over time, it can cause serious health problems. High blood sugar can happen if you:

- Skip a dose of insulin or diabetes pills
- Eat more than usual
- Are less active than usual
- Are under stress or sick

## Signs and Symptoms:

Very thirsty

Needing to pass urine more than usual

Very hungry

Sleepy

Blurry vision

Infections or injuries heal more slowly than usual

## What to do about high blood sugar

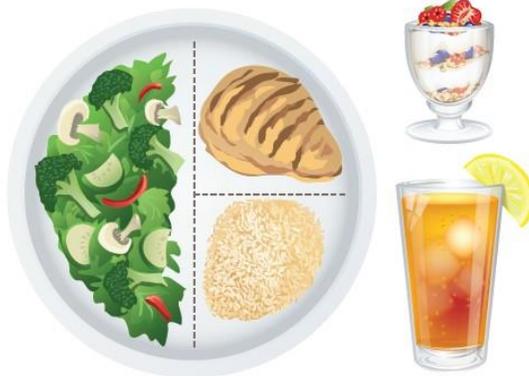
The best way to avoid high blood sugar is to follow your diabetes care plan. Call your diabetes care team if your blood sugar has been higher than your goal for 3 days and you don't know why.

Of course, the best way to know if you have high blood sugar is to check your blood sugar regularly, as directed by your doctor.

# Building a balanced meal

## A great way to build a healthy meal!

Sometimes it's hard to know where to start when you're trying to plan healthy meals. The American Diabetes Association's Create Your Plate guide makes it easy to create a balanced meal.



### ■ Divide your plate

Draw an imaginary line down the middle of your plate. Then divide 1 of the sections in half. You should now have 3 sections on your plate—1 large and 2 small.

### ■ Start with vegetables

Fill the largest section with vegetables that are not starchy.

### ■ Next, it's starches and grains

In 1 of the small sections, add some grains and starchy foods.

### ■ Then, put in the protein

In the other small section, add your protein.

### ■ Fruit and dairy

Add a serving of fruit or a serving of dairy, or both, as your meal plan allows.

### ■ Fats may be fine

If you're not sure whether fats are okay on your meal plan, talk with your dietitian or diabetes care team.

# 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.
- 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

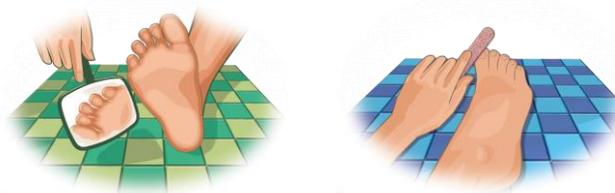
People with diabetes have to take special care of their feet. You should have a comprehensive foot exam by your doctor every year. Have your feet examined during every visit if you have problems with your feet, like loss of feeling, changes in the shape of your feet, or foot ulcers.

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

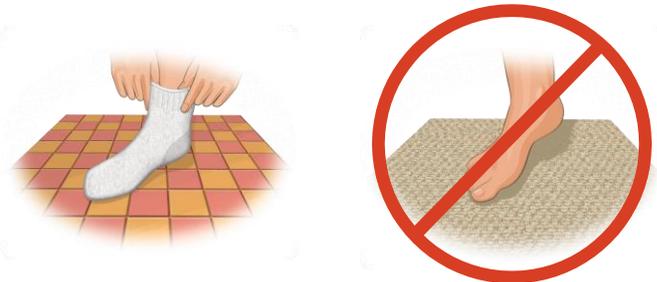


**Dry your feet well**, especially between the toes.

**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.



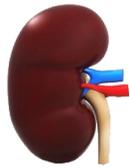
**Eye disease**  
(*diabetic retinopathy*): decreased vision and in some cases, blindness

**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)

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



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

**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/](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

**Protect Yourself...Protect Your Family**

**Protect Animals...Protect Others**

**1-800-OILY CAT (645-9228)**

## 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

# 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](http://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](http://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)

## Permanent HHW Collection Facilities

For holiday schedule or additional details see [www.rcwaste.org](http://www.rcwaste.org) or call (951) 486-3200. It is illegal to transport more than 15 gallons or 125 pounds of HHW per trip. All sites will accommodate multiple trips if storage capacity and facility staffing allows.

#### Agua Mansa PHHWCF

1780 Agua Mansa Road, Jurupa Valley, 92509 Non-Holiday weekend Saturdays only  
9:00 AM to 2:00 PM

#### Lake Elsinore PHHWCF

512 North Langstaff Street, Lake Elsinore, 92530 **October - May:**  
9:00 AM to 2:00 PM

**June - September: 7:00 AM to 12:00 PM** **Operating Dates:**

02/05/22, 03/05/22, 04/02/22, 05/07/22  
06/04/22, 07/09/22, 08/06/22, 09/10/22  
10/01/22, 11/05/22, 12/03/22

#### Palm Springs PHHWCF

1100 Vella Road, Palm Springs, 92264 Non-Holiday weekend Saturdays  
only October - May: 9:00 AM to 2:00 PM  
June - September: 7:00 AM to 12:00 PM

#### Lamb Canyon PHHWCF

16411 Lamb Canyon Road, Beaumont, 92223 9:00 AM to 2:00 PM

#### Operating Dates:

01/15/22, 02/19/22, 03/19/22, 04/16/22  
05/21/22, 06/18/22, 07/16/22, 08/20/22  
09/17/22, 10/22/22, 11/19/22, 12/17/22

## Temporary HHW Collection Facilities

#### Anza

05/21/22 08/20/22  
Anza Transfer Station  
40329 Terwilliger Road, Anza, 92539

#### Blythe

02/12/22 10/22/22  
Blythe Landfill  
1000 Midland Road, Blythe, 92225

#### Cathedral City

02/19/22 05/14/22 09/17/22 12/17/22  
Edom Hill Transfer Station  
70-100 Edom Hill Road, Cathedral City,  
92235

#### Coachella

03/19/22 11/12/22  
Bagdouma Park Swim Center Parking Lot  
84625 Bagdad Avenue, Coachella, 92236

#### Corona

03/26/22 03/27/22 10/15/22 10/16/22  
Corona City Hall Parking Lot  
400 South Vincentia Avenue, Corona, 92882

#### Desert Center

02/03/22  
Desert Center Landfill  
17-991 Kaiser Road, Desert Center, 92239

#### Indio (New Location!)

04/30/22 12/10/22  
Indio City Yard  
83101 Avenue 45, Indio, 92201

#### Idyllwild

04/16/22 09/24/22  
County Road Yard  
25780 Johnson Road, Idyllwild, 92549

#### La Quinta

02/26/22 11/19/22  
South City Hall Parking Lot  
78495 Calle Tampico, La Quinta, 92253

#### Mead Valley

05/14/22 09/24/22  
Mead Valley Community Center 21091  
Rider Street, Perris, 92570

#### Mecca/Thermal/Oasis Area

04/09/22 12/10/22  
Oasis Landfill  
84-505 84th Avenue, Oasis, 92274

#### Moreno Valley

04/23/22 10/08/22  
City Maintenance Yard  
15670 Perris Blvd., Moreno Valley, 92551

#### Murrieta

04/30/22 08/27/22  
Murrieta City Hall Parking Lot  
1 Town Square, Murrieta, 92561

#### Pinyon Communities

04/09/22 11/12/22  
Pinyon Flats Transfer Station  
S. Pinyon Flats Road, Pinyon Pines, 92561



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

Visit us at: [rcwaste.org](http://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.



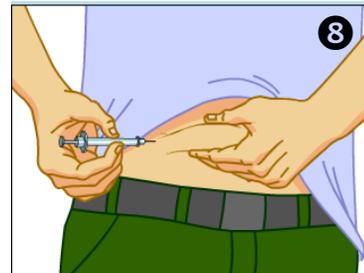
- 2** Wipe the top of the insulin bottle with an alcohol swab.



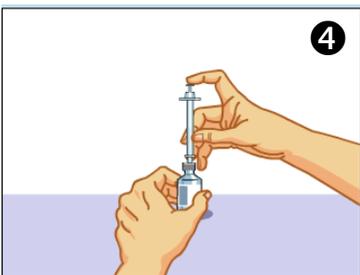
- 7** Clean a small area of skin with an alcohol swab, using a circular motion.  
Let the alcohol dry completely before you inject.



- 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.



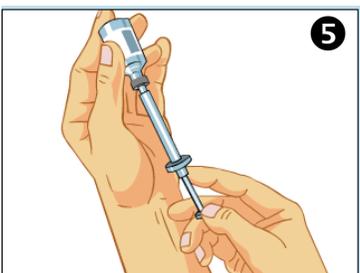
- 8** Pinch up the area of skin that you wiped with alcohol.  
Hold the syringe like a pencil. Be sure the needle does not touch anything.



- 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.

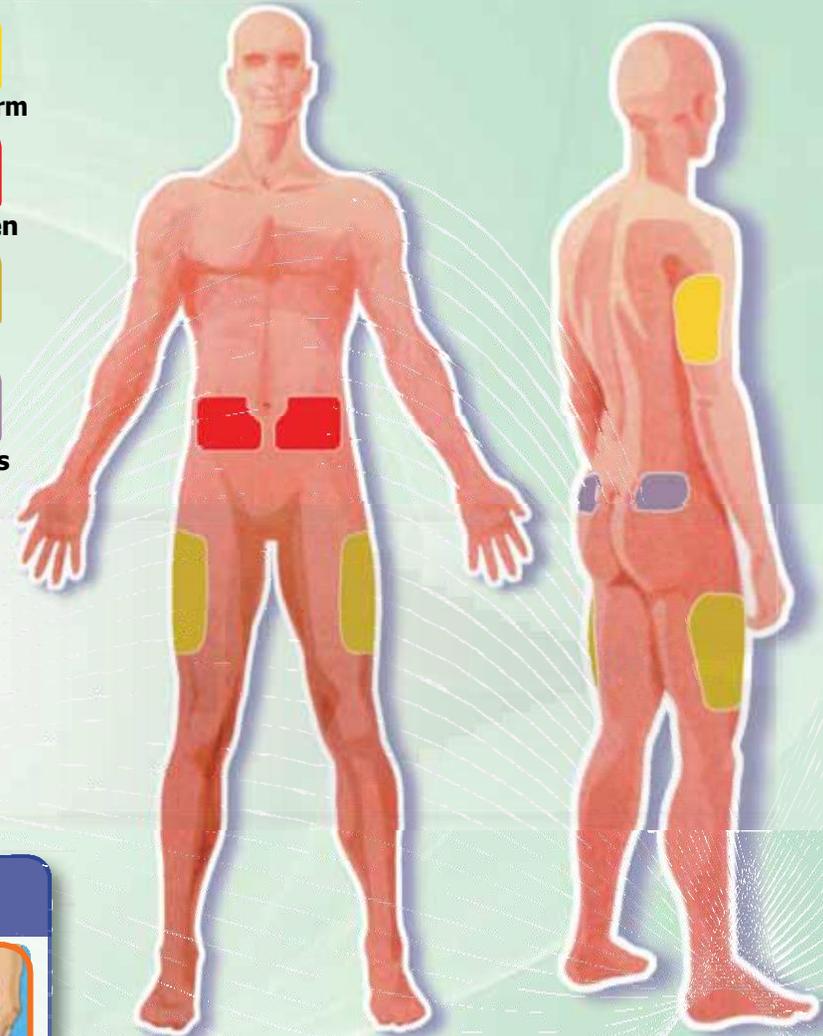


- 10** Place the used syringe into a sharps container.  
Do not reuse the syringe.

# My Syringe Injection Profile

When to Take	Hour	Dose	Site
Morning			
Lunch			
Dinner			
Evening			

-  Upper Arm
-  Abdomen
-  Thigh
-  Buttocks



**1** **Suggestion For Syringe Selection**

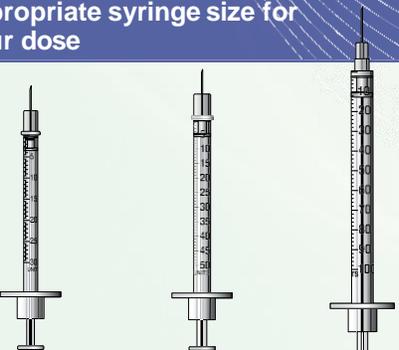
Find the number of units you inject on color spectrum below



10 U    20 U    40 U    60 U    100 U

Injected volume: scale 1/3

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

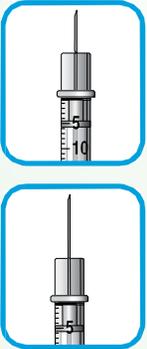


**3/10** mL/cc  
30 Units

**1/2** mL/cc  
50 Units

**1** mL/cc  
100 Units

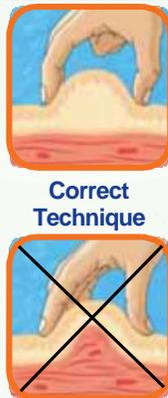
**3** Circle needle lengths. Both require Pinch Up



8 mm

12.7 mm

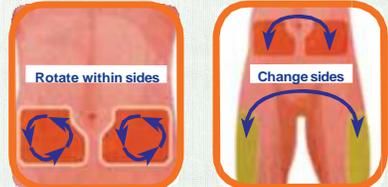
**4** Pinch-Up Technique



Correct Technique

Incorrect Technique

**5** Site Selection



Rotate within sites

Change sides

Rotate Within Sites

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

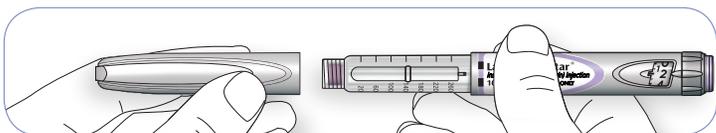


## HOW TO USE YOUR LANTUS® (INSULIN GLARGINE INJECTION) 100 UNITS/ML SOLOSTAR® PEN IN 6 STEPS

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

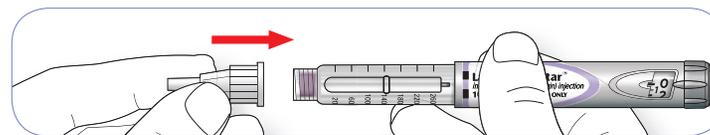
- Remove the pen cap with clean hands.
- Check the reservoir to make sure the insulin is clear and colorless and has no particles—if not, use another pen.



- 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

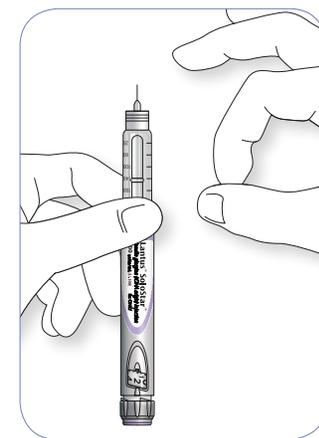
- Wipe the pen tip (rubber seal) with an alcohol swab.
- Remove the protective seal from the new needle, line the needle up straight with the pen, and screw the needle on.
- Do not make the needle too tight. If you have a push-on needle, keep it straight as you push it on.



- 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®.



- 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.

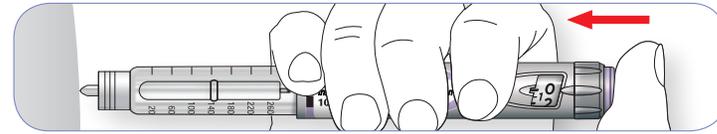


- Never force the dose selector when dialing your dose.
- Never set the dose selector to half units or the pen may jam.

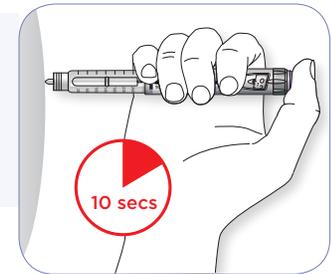
## STEP 5. INJECT YOUR DOSE

- 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®.

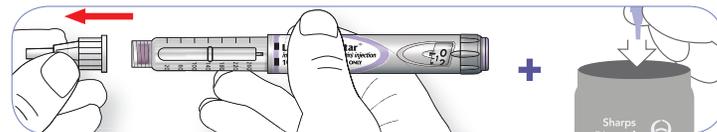


- Choose a new injection spot each time.
- Take the needle from your skin if you dial another dose.



## 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



LOMA LINDA UNIVERSITY  
HEALTH

*Diabetes Treatment Center*

# Diabetes Conversation Map Classes

*An interactive nutrition education experience*

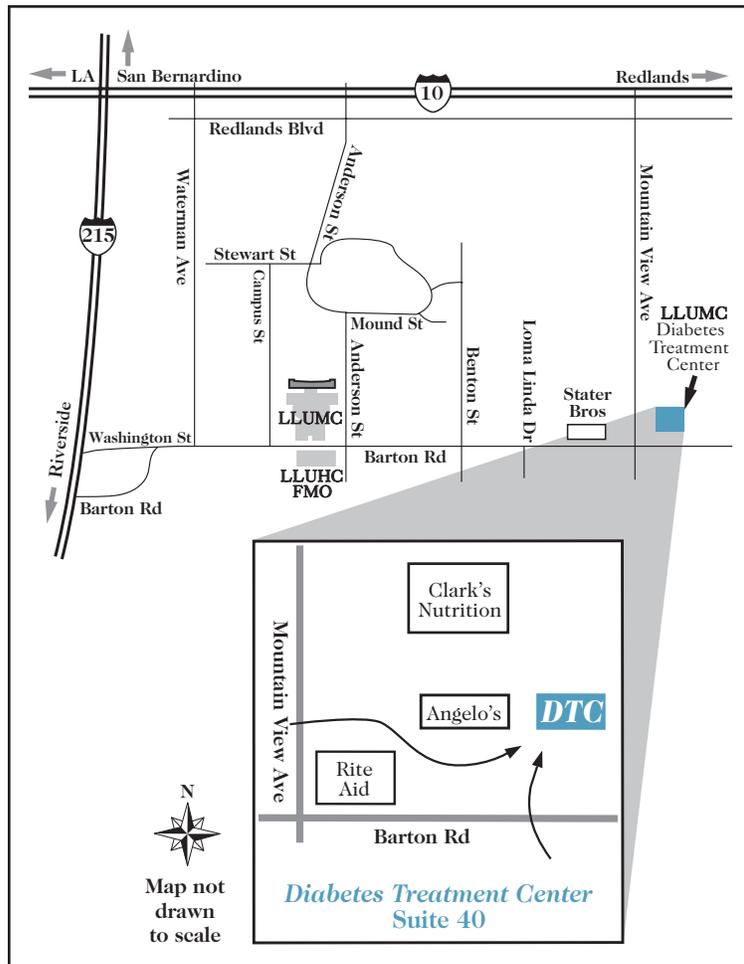
Diabetes Treatment Center  
11285 Mountain View Ave #40  
Loma Linda, CA 92354  
**Phone: 909-558-3022**  
Fax: 909-558-3023

**Classes offered Tuesdays & Wednesdays:**  
**9:00am, 1:00pm and 5:00pm**  
*Classes are 2 hours long Class schedule is subject to change*  
*En Español: Tuesdays at 9:00 am*

## What to expect:

## What to Bring:

<p><b>Class 1:</b> On the Road to Better Managing your Diabetes</p> <p>Date: <i>Please arrive on time</i></p> <p>Time:</p>	<p><b>Diabetes basics and your personal goal</b></p> <p>Check weight and A1C What is diabetes? Feelings about diabetes What is insulin? Diabetes self-management is: Eating, activity and medications</p> <p>Myths about diabetes What is blood glucose (sugar)? Monitoring blood glucose at home What to do with home glucose results</p>	<ul style="list-style-type: none"> <li>• 1 guest - optional</li> <li>• Snack – optional</li> <li>• List of medications</li> </ul>
<p><b>Class 2:</b> Diabetes and Healthy Eating</p> <p>Date: <i>Please arrive on time</i></p> <p>Time:</p>	<p><b>Personalized meal plan and nutrition</b></p> <p><b>Receive your individualized meal plan</b> 3 main nutrients in food Strategies for healthy eating</p> <p>How food goes to blood glucose How to plan meals Measure goal achievement</p>	<ul style="list-style-type: none"> <li>• 1 guest - optional</li> <li>• Snack - optional</li> </ul>
<p><b>Class 3:</b> Label Reading, Monitoring Your Blood Glucose</p> <p>Date: <i>Please arrive on time</i></p> <p>Time:</p>	<p><b>Label Reading, Blood Glucose Targets and Diabetes LABS</b></p> <p>What is your blood glucose target? Use your home blood glucose results to plan exercise medication changes What is the A1c lab test? Diabetes complications</p> <p>What to do with low blood glucose (<i>hypoglycemia</i>) What to do with high blood glucose (<i>hyperglycemia</i>) Measure goal achievement</p>	<ul style="list-style-type: none"> <li>• 1 guest - optional</li> <li>• Snack - optional</li> </ul>
<p><b>Class 4:</b> Continuing Your Journey (2 months after Class 3)</p>	<p><b>Refresher of all classes –Gifts and prizes to all who attend</b></p> <p>Re-check weight and A1C, compare to your Class 1 results <i>Special Prize for person who lowers A1c the most and who lowers weight the most</i> Measure final Goal Achievement</p> <p>Results sent to your doctor</p>	<ul style="list-style-type: none"> <li>• 1 guest –optional</li> <li>• Snack – Optional</li> <li>• <b>Your meal plan</b></li> </ul>



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



# ADULT DIABETES EDUCATION REFERRAL FORM

0822

## → = REQUIRED INFORMATION BY MOST INSURERS

<b>Patient Name</b>		<b>DOB</b>
First Name	Last Name	
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.		
→ <b>DIAGNOSIS</b> - Check (✓) all that apply: (Pre-diabetes education not covered by health insurance - offered fee-for-service)		
<input type="checkbox"/> Type 2 diabetes, uncontrolled	<input type="checkbox"/> Secondary diabetes	
<input type="checkbox"/> Type 1 diabetes, uncontrolled	ICD code required for secondary diabetes _____	
<input type="checkbox"/> Pre-diabetes	(If using ICD E08, must also list the ICD associated with the underlying condition.)	
→ <b>REASON(S) FOR REFERRAL</b> - Check (✓) all that apply:		
<input type="checkbox"/> Recurrent elevated blood glucose	<input type="checkbox"/> Recurrent hypoglycemia	<input type="checkbox"/> Retinopathy
<input type="checkbox"/> Change in diabetes treatment regimen	<input type="checkbox"/> Neuropathy	<input type="checkbox"/> Chronic kidney disease
<input type="checkbox"/> Nephropathy	<input type="checkbox"/> Dyslipidemia	<input type="checkbox"/> Non-healing wound
		<input type="checkbox"/> Cardiovascular disease
		<input type="checkbox"/> Hypertension
		<input type="checkbox"/> Other: _____
→ <b>LANGUAGE PREFERENCE</b> <input type="checkbox"/> English <input type="checkbox"/> Spanish <input type="checkbox"/> Other:		

Group education required by most insurers unless patient has barriers to group education. For individualized education, see 1:1 Education below

<b>GROUP EDUCATION</b>	<input type="checkbox"/> <b>COMPREHENSIVE EDUCATION (CE) classes</b> ( 5 classes total 10 hours) POINT OF CARE TESTING Diabetes Self-Management Education (DSME) 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, within 3 to 4 months if not available. <b>MEDICARE COVERAGE</b> 10 hours initial DSME in 12-month period from the first date of visit. Eligible for 2 hours annual follow-up training with a new order.
	<input type="checkbox"/> <b>REFRESHER CLASS - 2 hour class</b> <u>MUST HAVE CE PREVIOUSLY</u> Intended as annual refresher and education update.

<b>1:1 EDUCATION</b>	<input type="checkbox"/> <b>CARBOHYDRATE COUNTING CLASS</b> Should be ordered in combination with comprehensive education (CE) if newly diagnosed or CE not taken previously.
	<input type="checkbox"/> <b>SELECT 1:1 EDUCATION SESSION TYPE(S)</b> three to six 1 hour sessions. Check (✓) all that apply: <input type="checkbox"/> Comprehensive education <input type="checkbox"/> Carbohydrate counting <input type="checkbox"/> Refresher education → <b>REASON(S) for 1:1 EDUCATION</b> (convenience not recognized by insurers). Check (✓) all that apply: <input type="checkbox"/> Impaired vision <input type="checkbox"/> Impaired hearing <input type="checkbox"/> Language other than Spanish/English <input type="checkbox"/> Eating disorder <input type="checkbox"/> Impaired mental status/cognition <input type="checkbox"/> Learning disability (please specify): _____
	<input type="checkbox"/> <b>MEDICAL NUTRITION THERAPY - MNT MUST BE ORDERED BY MD OR DO ONLY.</b> Individualized nutrition assessment and counseling provided by registered dietitian specialized in diabetes education. Includes assisting patient to understand the disease process, the role of food choices and physical activity in the management of diabetes, establish goals, priorities and individualized action plans that emphasize responsibility for self-care. <b>MEDICARE COVERAGE</b> 3 hours of one-on-one the first year service is provided. 2 hours annual follow-up training with a new order.

<input type="checkbox"/> <b>CONTINUOUS GLUCOSE MONITORING (PROFESSIONAL TRIAL)</b> Sensor placement for glucose reading every 5 minutes for minimum 72 hours, additional appointment needed for downloading and interpretation to detect nocturnal hypoglycemia, postprandial hyperglycemia and erratic blood glucose excursions.
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<input type="checkbox"/> <b>PERSONAL CONTINUOUS GLUCOSE MONITOR</b> Ambulatory CGM of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours patient provided equipment, sensor placement, hook-up, calibration of monitor, patient training, removal of sensor and print out of recording.
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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: \_\_\_\_\_

DSME can be ordered by an MD, DO or mid-level provider managing the patient's diabetes.  
MNT must be ordered by a MD or DO only.



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