DIABETES

Self Care and Management

POMONA VALLEY HOSPITAL

MEDICAL CENTER

PVHMC Inpatient Diabetes Program
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Understanding Diabetes

Diabetes (also known as diabetes mellitus) is a disease that interferes with your body's ability to use blood sugar derived from food as energy. As a result, people with diabetes have blood sugar levels that are too high (hyperglycemia). There are a few different types of diabetes, which we will now review.

Prediabetes

Before a person is diagnosed with Type 2 diabetes, they commonly get prediabetes first. Prediabetes is a condition where blood sugar levels are higher than normal, but not quite high enough to be considered to have diabetes. Prediabetes puts one at higher risk of Type 2 diabetes as well as heart disease.

Lifestyle Change Program

The National Diabetes Prevention Program is proven to help prevent or delay Type 2 diabetes. It is based on research that showed:

58%

Weight loss of 5 to 7% of body weight achieved by reducing calories and increasing physical activity to at least 150 minutes per week resulted in a 58% lower rate of Type 2 diabetes.

71%

For people 60 and older, the program reduced the rates of Type 2 diabetes by 71%.

34%

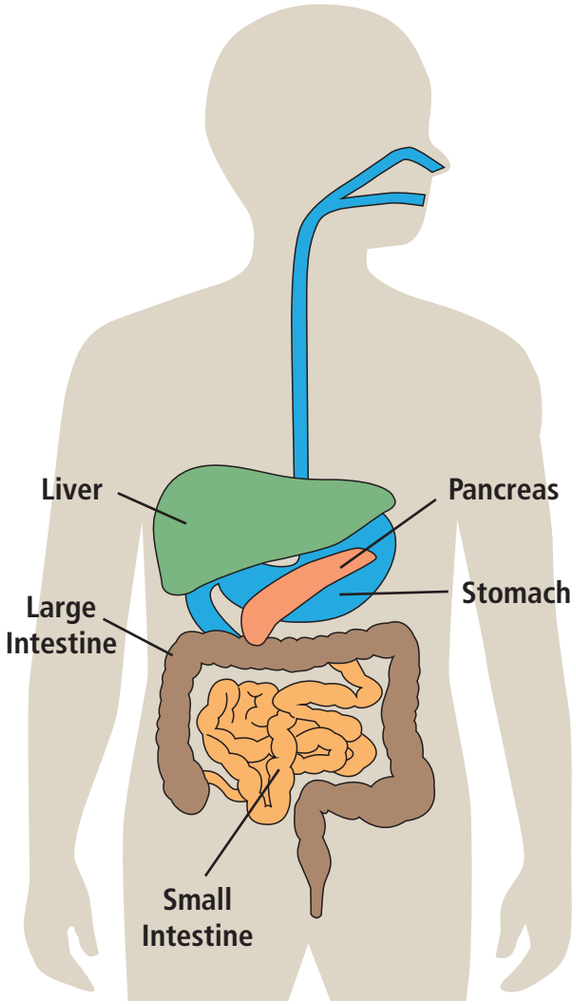
After 10 years, lifestyle change program participants had a 34% lower rate of Type 2 diabetes.

Type 1 Diabetes

With **Type 1 diabetes**, your body does not make any insulin, which leads to high blood sugar.

Your immune system attacks your pancreas—an organ near your stomach—and kills the cells that make insulin.

Because your body no longer makes any insulin, you have to inject insulin to control your blood sugar—but with the right treatment, one can live a long and healthy life.



Type 2 Diabetes

With **Type 2 diabetes**, your body fails to use insulin properly. Doctors call this insulin resistance. To make up for insulin resistance, your pancreas works harder to make even more insulin.

Over time, your pancreas isn't able to keep up with your body's insulin needs and stops being able to make enough insulin to keep your blood sugar levels within a healthy range.

Gestational Diabetes

Women who have never had diabetes before can develop high blood sugar levels while they are pregnant—also called **gestational diabetes mellitus** (GDM). As pregnancy progresses, hormones from the placenta block the women's ability to use insulin in her body the right way. This kind of insulin resistance is ***similar to*** what happens in Type 2 diabetes. Women that have had GDM are seven times more likely than those that have not, to become diagnosed with Type 2 diabetes after pregnancy.

If left untreated, gestational diabetes can cause harm to the baby. The extra glucose in your blood can pass through the placenta to your baby, causing the baby's pancreas to work harder to get rid of the extra sugar.

Because the baby is getting more energy than it needs from increased sugar in the blood, the baby's body will store the extra energy as fat. This can lead to problems during birth. Potential problems include larger babies, low blood sugar levels at birth, breathing complications. In addition, a high risk for obesity as well as Type 2 diabetes in the future.

Hyperglycemia

There are additional health related reasons one may be encouraged or required to take blood sugar control medications, such as Insulin.

Stress-Induced hyperglycemia: When your body is under stress—like injury or surgery—it can cause your blood sugar to go up.
Steroid-Induced hyperglycemia: Medications like steroid can be used to treat many different conditions (like inflammation), but one of their most common side effects is high blood sugar levels.

Neither of these conditions means that you have diabetes. They are simply part of the body's natural response to injury or medication, and you should only need to take insulin for a period of time to help control your high blood sugar.

For A1C

To interpret your result, first find your A1C number on the right (see chart). Then read across to learn your average blood sugar for the past 2 to 3 months.

HbA1c greater than 9, your average blood sugar is 210 mg/dl or greater.

HbA1c of 7.5 to 9, your average blood sugar is 180-210 mg/dl.

HbA1c of 6 to 7, your average blood sugar is 120-150 mg/dl.

% Hemoglobin A1c		Average Blood Glucose (mg/dl)
14		359
13.5		
13	Seriously	326
12.5	elevated	
12	levels	298
11.5		
11		269
10.5		
10	Elevated	240
9.5	levels	
9		212
8.5	Slightly	
8	elevated	183
7.5	Good	
7	Goal!	154
6.5		
6		125
5.5	Non-	
5	diabetic	97
4.5	levels	

Symptoms of High Blood Sugar

Regardless of they type of diabetes one may have, it is extremely important to work with a diabetes care team or specialist to properly manage it. If properly managed, the risks of serious diabetes-related problems can be reduced.

Common diabetes symptoms:

- Frequent urination
- Feeling very thirsty

- Feeling very hungry— even though you are eating normally
- Extreme fatigue

- Blurry vision
- Cuts or bruises healing very slowly
- Losing weight—even though you're eating more (type I diabetes)
- Tingling, numbness or pain in the hands or feet (Type 2 diabetes)

Managed diabetes:

- Increased energy levels and feeling better overall.

- Improved vision
- Hunger control
- Hydration control (thirst), less frequent urination.
- Weight control

- Reduced risk of complications

High Blood Sugar and Diabetes Problems

Diabetes increases your risk for serious health complications. Proper diabetes care and management can reduce risks.

Eyes

- Blurry vision
- Vision loss

Feet

- Skin changes
- Calluses
- Foot ulcers
- Poor blood flow

Skin

- Bacterial and fungal infections
- Itching
- Skin discoloration

Heart

- Chest pain
- Shortness of breath
- May not have any symptoms

Nerves

- Unusual sensations (tingling,burning, numbness, or shooting pain)
- Problems with digestion
- Sexual problems

Blood Vessels

- Slow healing of wounds

Kidneys

- Swelling in feet and legs
- Increase in blood pressure

Lower Your Risk

Managing your blood sugar not only allows you to feel better, but it can lower your risk of problems caused by diabetes.

There are many benefits to managing your blood sugar—it's an important way to stay healthy!

Know your numbers

There are some additional numbers that you should monitor with your diabetes care team. These numbers include ABC's—A1C, blood pressure and cholesterol. Follow your care team's advice on the right goals for you.

Brush up on your ABC's

Keeping your ABC's in your target range will help you lower your risk of heart problems or stroke.

People with Type 2 Diabetes should set individual goals to manage the ABC's of Diabetes:

Blood Sugar Goals

It's important to work with your diabetes care team to create customized blood sugar monitoring plans to suit your different needs.

How often do I need to check?

If you are using your blood sugar results to decide how much insulin to take, you'll need to check several times a day.

Using a Blood Sugar Meter

A meter measures the amount of sugar in your blood. You will use a lancet to prick your finger for a tiny drop of blood. The meter then gives you a reading that tells you the level of your blood glucose. Today's meters allow you to test on-the-go.

	TARGETS
A1C A test that measures your average blood sugar level over the past two to three months. It shows how much sugar is stuck to your red blood cells. This is a test your doctor orders.	**Less than 7%**
Preprandial blood sugar This means checking your blood sugar ***before*** eating a meal with your meter.	**80-130 mg/dL**
Postprandial blood sugar This means checking your blood sugar 1 to 2 hours ***after*** eating a meal with your meter.	**Below 180 mg/dL**

Your A1C is _____%

Some common times to check your blood sugar include:

- When you wake up
- When you go to bed
- Before or after injecting insulin
- Before or after you eat
- Any time you feel symptoms of high or low blood glucose
- Before and after exercise
- Before driving

Blood Pressure Targets for Adults

What the numbers mean	Healthy Blood Pressure	Early High Blood Pressure	High Blood Pressure
Systolic Pressure The pressure in your blood vessels when your heart beats	**Below 120 mmHg**	**120 to 140 mmHg**	**Above 140 mmHg**
Diastolic Pressure The pressure in your blood vessels when your heart relaxes between beats	**Below 80 mmHg**	**80 to 90 mmHg**	**Above 90 mmHg**

Cholesterol

"Bad" Cholesterol	"Good" Cholesterol	"Bad" Blood Fat
Low-density lipoproteins **<100 mg/dl**	High-density lipoproteins **>40 mg/dl**	Triglycerides **<150 mg/dl**
LDL can cause build-up of cholesterol in your arteries, damaging them	HDL helps remove cholesterol from your body, clearing your arteries	Raises your chances for heart attack or stroke
In general, the lower your LDL, the better	In general, the higher your HDL, the better	In general, the lower your triglycerides, the better

Blood sugar, blood pressure, and cholesterol are all linked. One value can throw off the others, and all are risk factors for heart disease.

Types of Diabetes Treatment

There are various methods used when managing diabetes with a care team. Lifestyle changes and medication are encouraged.

Lifestyle Changes

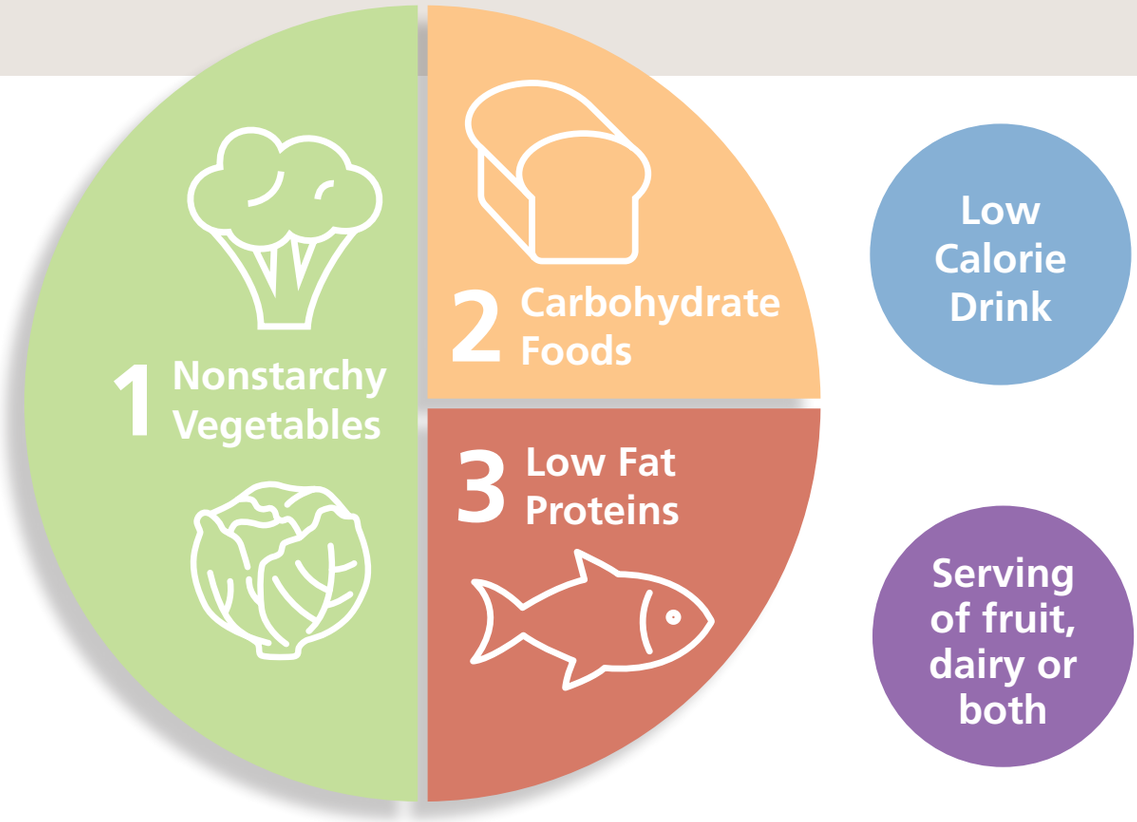
Making changes to live a healthier lifestyle can improve your diabetes and can possibly eliminate your need for medication. There are three main areas that can make the biggest change to your blood sugar:

- **Diet**
  Living with diabetes doesn't mean you can't enjoy the foods you love. You just need to eat well-balanced meals to help manage your blood sugar.
- **Exercise**
  By being active, and staying active, you can manage blood sugar as well as prevent Type 2 diabetes. Everyone can benefit from 150 minutes of exercise per week, not solely people with diabetes.
- **Weight loss**
  With proper diet and exercise, your weight can be reduced and blood sugar can be controlled. This results in an increase in energy as well as a healthier feeling overall. Even a small amount of weight loss makes a big difference!

Consulting with a diabetes care team specialist about making proper lifestyle changes prior to starting any type of new diet or exercise routine is encouraged.

Healthy Eating

Living with diabetes doesn't mean you can't enjoy the foods you love—you just need to eat well-balanced meals to help manage your blood glucose.



Using the Plate Method For A Balanced Meal Plan

The Create your Plate method

The American Diabetes Association recommends you follow this method to create healthy meals. These meals help keep your carbohydrate intake the same for every meal.

- ½ non starchy vegetables (spinach, broccoli)
- ¼ lean, low-fat protein (chicken or other poultry, fish, eggs, tofu)
- ¼ carbohydrates (bread, grains)

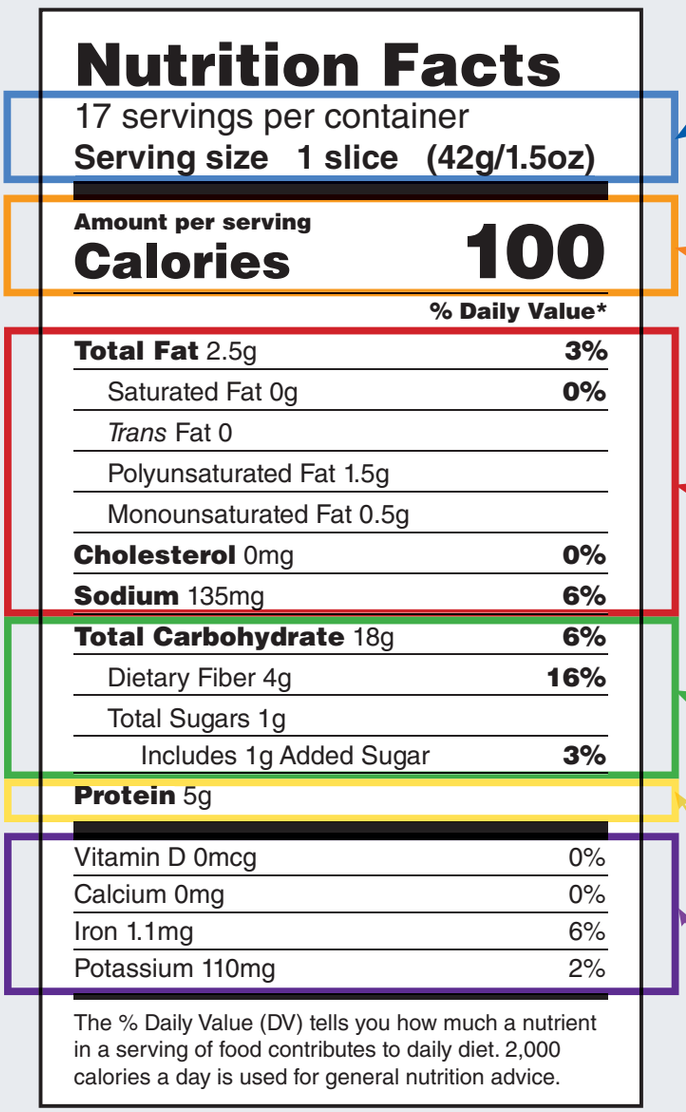
Add

- Low calorie drinks, such as water, unsweetened tea or coffee
- A serving of fruit, a serving of dairy or both as your meal plan allows; or salad (beware of high calorie dressings)

The plate method is one option for creating a healthy eating plan. It focuses on eating a healthy variety of foods and watching portions. Carbohydrate intake should be limited to 2-3 choices (30-45 grams) per meal for females and 3-4 choices (45-60 grams) per meal for males.

Carbohydrate (Carb) Counting

Carb counting is another option for meal planning. Carbohydrates are the nutrient that most affects your blood sugar level. Carbohydrate counting helps you control blood sugar by eating the right amounts of food. Ask your healthcare provider or dietitian how many carbohydrates you need each day.



Nutrition Facts

17 servings per container

Serving size 1 slice (42g/1.5oz)

Amount per serving

Calories 100

% Daily Value*

Total Fat 2.5g	**3%**
Saturated Fat 0g	**0%**
Trans Fat 0	
Polyunsaturated Fat 1.5g	
Monounsaturated Fat 0.5g	
Cholesterol 0mg	**0%**
Sodium 135mg	**6%**
Total Carbohydrate 18g	**6%**
Dietary Fiber 4g	**16%**
Total Sugars 1g	
Includes 1g Added Sugar	**3%**
Protein 5g	
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 1.1mg	6%
Potassium 110mg	2%

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

1) Start by looking at the serving size. All of the information on the label is based on the serving size, so you must calculate your nutritional intake based on how much you actually eat!

2) Check the calories per serving size. Checking the calories can help you manage your weight by balancing the number of calories you eat and drink with how much your body needs.

3) Check the fats, cholesterol, and sodium. Try to keep these nutrients to a minimum to help keep your heart healthy and lower your risk for disease. Try and keep saturated fat, cholesterol, and sodium less than 5% of daily value (DV) per serving and avoid trans fats.

4) Check the carbohydrates. Carbohydrates include starch, sugars (both natural and added) and fiber. Use these values to help calculate the total carbohydrates you are eating and to choose options with less added sugars and more fiber.

5) Check the protein. This shows you how much protein is in each serving.

6) Check the other nutrients in the food to help you choose options with more Fiber, Vitamin D, Calcium, Iron and Potassium.

Healthy Eating Plan

Grains and Starchy Vegetables	Fruit	Dairy
Read label for serving size: • Tortilla, corn 1 small (6 inches across) • Tortilla, flour 1 small (6 inches across) • Brown rice (1/3 cup) • Pasta (1/3 cup) • Oatmeal (1/2 cup) • Quinoa (1/3 cup) • Rolled oats (1/2 cup) • Whole-grain barley (½ cup) • Whole wheat (1/2 cup) • Wild rice (1/3 cup) • Pancake (4 inch) • Cereal (3/4 cup) • **Starchy Vegetables** • Potatoes (1/2 cup) • Plantain (1/3 cup) • Pumpkin (1 cup) • Acorn Squash (1 cup) • Green peas (1/2 cup) • Corn (1/2 cup) **Legumes/Beans** • Lentils (1/2 cup) • Black Beans (1/2 cup) • Pinto Beans (1/2 cup) **1 Choice = 15 grams**	**One serving is 1 small piece of whole fruit or 1/2 cup:** • Apple • Applesauce • Banana • Blackberry • Blueberry • Cantaloupe • Grapes • Grapefruit • Mixed Fruit • Orange • Mandarin • Peach • Pear • Pineapple • Plum • Raspberry • Strawberries • Watermelon **1 Choice = 15 grams**	**One serving is 1 cup:** • Fat free milk • Low fat milk • Plain non-fat yogurt • Non-fat light yogurt • Soy milk • Rice milk • Almond milk **Cheeses** • Hard cheese (1½ oz.) • Shredded cheese (1/3 cup) • Ricotta cheese (1/2 cup) • Processed cheese (2 oz.) • Cottage cheese (2 cups) **1 Choice = 15 grams**

Healthy Eating Plan

Non-Starchy Vegetables	Protein	Healthy Fats	Snacks
One serving is ½ cup cooked or 1 cup raw: • Asparagus • Artichoke • Zucchini • Brussels sprouts • Beets • Broccoli • Cabbage • Carrots • Cauliflower • Celery • Cucumber • Eggplant • Greens (collard, kale, mustard, spinach) • Mushrooms • Onions • Pea pods • Peppers • Salad greens (romaine, arugula) • Tomatoes • Turnips	**One Serving is 3-4 oz. of meat or seafood:** • Beef • Chicken • Fish • Ham • Lamb • Pork • Seafood **Meat Substitutes** *(check label for serving size)* • Almond butter • Cottage cheese • Cheese • Edamame • Egg • Egg substitute • Egg whites • Hummus • Peanut butter • Tempeh • Tofu • Albacore tuna • Lentils (Starch) • Black beans (Starch) • Pinto beans (Starch)	**Check label for serving size:** **Monounsaturated Fats** • Avocado • Canola oil • Nuts • Olives • Olive oil • Peanut butter • Peanut oil • Sesame seeds **Polyunsaturated Fats** • Corn oil • Sunflower oil • Mayonnaise • Soft margarine • Salad dressing **Omega-3 Fatty Acids** • Soybean products • Flaxseed oil • Flaxseed • Canola oil • Salmon • Albacore tuna • Sardines	**Less than 5 grams of carbs:** • 15 almonds • 3 celery sticks & 1tbsp. of peanut butter • 5 baby carrots • 5 cherry tomatoes & 1 tbsp. of ranch dressing • 1 hard-boiled egg • ¼ cup of fresh blueberries • 1 cup of light popcorn • 2 saltine crackers **10 - 20 grams of carbs:** • ¼ cup of dried fruit & nut mix • 1 cup of chicken noodle soup • 1 small apple or orange • 3 cups light popcorn • 1/3 cup hummus & 1 cup raw fresh cut veggies • 2 rice cakes & 1 tbsp. of peanut butter **30 grams of carbs:** • 6 oz. light yogurt & 3/4 cup of berries • 1 English muffin & 1 tsp. low fat margarine • 1 medium banana & 1 tbsp. peanut butter

Activity and Exercise

Get moving – it's good for your whole body! Exercise not only helps your body use insulin better, it also strengthens your heart and bones, improves blood flow, lowers blood glucose and blood pressure, improves cholesterol levels and relieves stress.

Exercise can help you –

- Keep your blood glucose in your target range
- Maintain a healthy weight
- Have more energy and lower your stress

The PVHMC Gym Wellness Program

Physical therapists will screen you on your first visit to set up an exercise program.

Staff are present to monitor your safety and are able to answer questions during each visit.

For more information, please call **PVHMC Rehabilitation Services** –

Pomona	909.865.9810
Chino Hills	909.630.7878
Claremont	909.865.9104
Covina	626.251.1361
La Verne	909.392.6531

Your Exercise Program

When? The best time to exercise is 1 to 1.5 hours after a meal. Check your blood sugar before you begin to exercise.

- If it is low *(under 100mg/dl)*, have a snack with starch in it before you start.
- If your blood sugar is high *(over 250 mg/dl)*, wait to exercise. Exercise may cause it to go even higher.

How much? Aim for 30-60 minutes a day on 5-6 days a week. Start with 5-10 minutes and work up to a longer time.

- Include warm up and cool down time.
- If you feel worse when you finish exercising than before you started, you have done too much. Scale back next time.

How Hard? You should be able to talk while you exercise. Ask your doctor what your target heart rate should be.

- Check with your doctor before you start an exercise program
- Choose activities you enjoy and think of ways to add more movement to your life
- Take a bottle of water with you
- Decide when you will exercise and write it on your calendar
- Protect your feet! Wear socks made from material that reduces friction and pulls moisture away from your skin and make sure your shoes are a good fit

Aerobic Exercise

The American Diabetes Association (ADA) recommends 30 minutes of medium to hard activity at least five days a week, for a total of 150 minutes per week. Remember to avoid an inactive lifestyle. Be sure to get up and move around every 30 minutes when sitting for long periods of time.

- Brisk walking
- Hiking
- Dancing
- Skating
- Swimming

Strength Exercise

The ADA also recommends strength training at least two times per week, in addition to aerobic activity. It helps your diabetes and reduces your risk of osteoporosis and injury.

- Weight machines or free weights
- Resistance bands
- Lifting light objects at home
- Calisthenics (using your own body weight)
- Heavy yardwork

Foot Care

Over time, diabetes can affect nerves and blood vessels that supply the legs and feet. This means you may not be able to feel if you have a cut or infection. Wounds on your feet may be slow to heal, and may infect easily. Because of this, you need to pay close attention to your feet.

Check your feet daily. Ask a family member for help if you have trouble seeing your feet, especially the bottoms. If you have problems with your feet, you should have your feet examined every time you see your health care provider.

Preventing Foot Problems

Foot exam *(a thorough examination once a year: have your feet looked at during every visit)*

Here's what you can do to help prevent serious health problems with your feet:

- Inspect your feet every day for cuts, cracks, sores, redness or swelling. Watch for cuts and scrapes that are slow to heal, itch, feel warm, ooze fluid or smell bad. If you notice any of these problems, contact your health care provider right away. He or she may refer you to a podiatrist (a specialist in foot health).
- Keep your feet clean and protect them from injury. Wash your feet in warm (not hot) water and dry thoroughly, especially between toes.
- Don't soak your feet.
- Do not go barefoot, and always wear clean socks and comfortable shoes that protect your feet.
- Do not trim any corns or calluses. Talk to your health care provider if you need help cutting and filing your toenails safely.
- Look for color changes in your feet (redness with streaks can signal a severe infection).
- The ADA recommends that you have a thorough foot exam at least once a year. Anyone who has diabetes should have their feet inspected at every office visit.

Medications

The first way to treat Type 2 diabetes is often meal planning, weight loss and exercise. Medications may be needed when these steps are not enough to bring blood sugar levels down to a healthy range.

Your doctor will decide which medication is right for you.

This depends on:

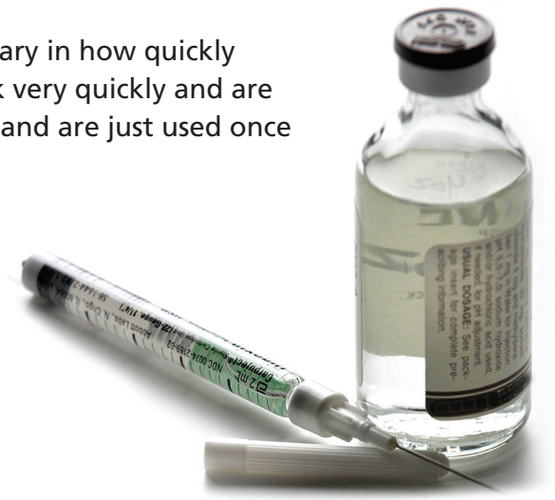
- your lifestyle
- physical condition
- how you respond to medication
- insurance coverage

Oral Medications (pills)

There are different types, or classes, of drugs that work in different ways to lower blood sugar.

Insulin

There are different types of insulin that vary in how quickly they lower blood sugar levels. Some work very quickly and are taken with meals. Others are long acting and are just used once or twice a day.



Oral Medications

Sulfonylureas *chlorpropamide (Diabinese), glipizide (Glucotrol and Glucotrol XL), glyburide (Micronase, Glynase and Diabeta), Glimepiride (Amaryl)*
Sulfonylureas stimulate the beta cells of the pancreas to release more insulin.

Biguanides *metformin* (Glucophage)
Biguanides lower blood glucose levels primarily by decreasing the amount of glucose produced by the liver. They also help to lower blood glucose levels by making muscle tissue more sensitive to insulin so glucose can be absorbed.

Meglitinides *repaglinide* (Prandin), *nateglinide* (Starlix)
Meglitinides are drugs that also stimulate the beta cells to release insulin.

Thiazolidinediones *rosiglitazone* (Avandia), *pioglitazone* (ACTOS)
Thiazolidinedione drugs help insulin work better in the muscle and fat and also reduce glucose production in the liver.

DPP-4 Inhibitors linagliptin (Tradjenta), saxagliptin (Onglyza), sitagliptin (Januvia), alogliptin (Nesina)
These medications prolong the action of gut hormones, increase insulin secretion, and delays gastric emptying.

SGLT2 Inhibitors canagliflozin (Invokana), dapagliflozin (Farxiga), empaglifozin (Jardiance), ertugliflozin (Steglatro)
Glucose in the blood passes through the kidneys. Sodium-glucose transporter 2 (SGLT2) works naturally in the kidney to absorb glucose, and SGLT2 inhibitors block this action, causing excess glucose to be eliminated in the urine.

Oral medication combinations
Because the drugs listed above act in different ways to lower blood glucose levels, they may be used together. Many combinations are prescribed together as a single pill for convenience. The most common biguanide is metformin (Glucophage, Metformin hydrochloride ER, Glumetza, Riomet, Fortamet).

Alpha-Glucosidase Inhibitors acarbose (Precose), meglitol (Glyset)
This helps the body lower blood glucose by blocking the breakdown of starches, slowing the rise in blood glucose levels after a meal.

Insulin

Rapid Acting insulin glulisine (Apidra), insulin lispro (Humalog and Admelog), insulin aspart (NovoLog) and (Fiasp)
- Peak: about 15 minutes
- Onset: 1 or 2 hours after injection
- Duration: lasts between 2-4 hours

Regular or Short-Acting regular (Humulin R and Novolin R)
- Peak: about 30 minutes
- Onset: about 2 to 3 hours after injection
- Duration: lasts between 3 to 6 hours

Intermediate Acting NPH (Humulin N and Novolin N)
- Peak: about 2 to 4 hours after injection
- Onset: 4 to 12 hours later
- Duration: It is effective for about 12 – 18 hours

Long Acting insulin detemir (Levemir) insulin glargine (Lantus and Basaglar), degludec (Tresiba)
- Peak: between 2 and 4 hours
- Onset: long acting insulin is continuous or 'peakless,' the action mimics the way your body normally releases insulin
- Duration: lasts up to 24 hours

Concentrated Insulin
Humulin Regular U-500 (Regular Bolus/Basal)
Humalog U-200 (Lispro Bolus)
Toujeo Solostar U-3000 (Glargine Basal)
Tresiba U-200 (Degludec Ultra Basal)

Inhaled Insulin insulin regular human (Afrezza)
- Peak: about 12 minutes
- Onset: 35 to 45 minutes
- Duration: 1.5 to 3 hours

Other Injected Medications

In addition to pills and insulin, some medications to control blood sugar are injected.

Synthetic amylin pramlintide (Symlin)

Synthetic amylin slows food moving through the stomach. This can decrease appetite and may cause weight loss. It also reduces glucose production by the liver. Helps lower after-meal glucose levels.

GLP-1 analogues exenatide (Byetta and Bydureon), liraglutide (Victoza), dulaglutide (Trulicity), semaglutide (Ozempic) (Wegovy)

GLP-1 analogues stimulate the release of insulin when blood glucose is high and decrease the amount of glucose produced by the liver. They also slow food's movements through the stomach, which decreases appetite and may lead to weight loss.

Insulin/Injectable Combos

Xultophy – Insulin degludec or Tresiba + Liraglutide (Victoza)
Soliqua – Insulin glargine (Lantus) + Lixisenatide (Adlyxin)

- ***What if my blood sugar stays too high?***
  If your blood glucose levels remain too high, your medication may need to be adjusted. Do not adjust your medication on your own. Talk to your doctor about possible changes.

Understanding Insulin Therapy

What is insulin and why do I need to inject it?

Insulin is the most effective treatment option for managing blood sugar. It is a hormone (a natural chemical) that is made by your pancreas (an organ near your stomach). Insulin helps your body use sugar for energy and balance your blood sugar *(also called blood glucose).*

Your insulin therapy journey depends on your type of diabetes

Type 1 Diabetes

People with type 1 diabetes do not produce insulin. They require multiple insulin injections each day. This usually means one injection with a long acting insulin and several injections of fast or rapid acting insulin before meals each day.

Type 2 Diabetes

Pills may eventually lose their effect on controlling diabetes. If this happens, people with Type 2 diabetes will need to start using insulin. This usually starts with one injection per day of insulin.

What is basal-bolus insulin therapy?

A basal-bolus injection regimen is a way people with type I or Type 2 diabetes can use injections to control their diabetes. It involves:

Basal Insulin (long acting insulin injected once or twice a day)

- Basal insulin keeps your blood sugar stable throughout the day but doesn't cover starch eaten in meals
- This type of insulin dose usually does not change from day to day unless you have lost or gained weight

Bolus insulin (rapid or short-acting insulin) usually injected with each meal.

- Also known as prandial (during-meal) insulin
- Bolus insulin controls the blood sugar spikes from meals
- This type of insulin is also used to correct high blood sugar values
- This type of insulin dosage can change from meal to meal and day to day depending on blood sugar values and food eaten

How do I know how much insulin to inject?

Your healthcare team will develop a treatment plan to meet your personal needs. This includes how much insulin to inject. You will still need to test your blood sugar on a regular basis to help guide you.

The following factors can influence how much insulin you need to inject:

- What you eat
- How much sleep you get
- How much you exercise and when
- Where you inject your insulin
- When you take your insulin injections
- Illness
- Stress, both physiological and physical

Regular testing using a blood glucose meter is an important part of healthy living with diabetes. Regular testing can help you feel well and avoid serious complications like hypoglycemia (low blood sugar) and hyperglycemia (high blood sugar).

Insulin delivery options

Insulin syringe and vial: Many people inject with an insulin syringe and a vial of insulin. The syringe is a hollow plastic tube with a plunger inside and a needle at the end.

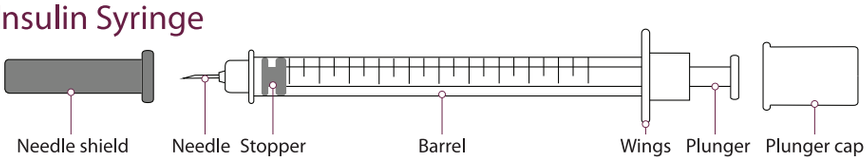
Insulin pen: It is a convenient device that lets you dial up your insulin dose and then inject it through a needle. Insulin pens can either be prefilled with insulin and disposable, or reusable with insulin cartridges. Pen needles do not come with insulin pen and, just like insulin syringes, requires a separate prescription.

Insulin pump: It is about the size of a cell phone. An insulin pump is a small, computerized device that delivers insulin into your body via a thin tube called a catheter. Insulin pumps can be programmed to closely mimic your body's normal release of insulin.

Patch pump: An insulin patch pump is a small device that sticks directly to your body, and infuses insulin through a tiny cannula into your skin.

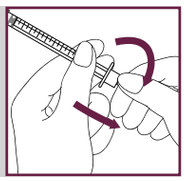
Injecting with an Insulin Syringe

Parts of an Insulin Syringe



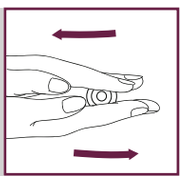
How to inject

1



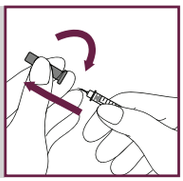
Wipe the top of the insulin bottle. Arrange your supplies. Wash your hands. **To expose the plunger, twist the white plunger cap** then pull it off.

2



If you are taking cloudy insulin, roll the bottle between your hands until it is uniformly cloudy. To avoid the formation of air bubbles, **do not shake** the bottle of insulin.

3



To expose the needle, **twist the orange needle shield then pull it straight off**, being careful not to bend the needle or let the needle touch anything.

4

Pull the insulin syringe plunger down; align the thin black line of the plunger (closest to the needle) with the desired number of units on the insulin syringe. You need air in the insulin syringe equal to the amount of insulin you will take.

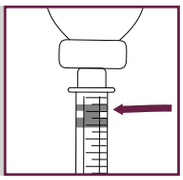
5

Hold the insulin syringe like a pencil. Push the needle straight through the center of the rubber top of the insulin bottle and **push the plunger down completely**.

6

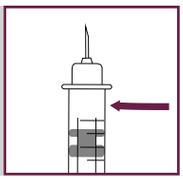
Leave the needle in the insulin bottle. Carefully t**urn the bottle and the insulin syringe upside down** so the bottle is on top.

7



Pull the plunger down slowly. Align the thin black line of the plunger (closest to the needle) **with the desired number of units** on the insulin syringe.

8

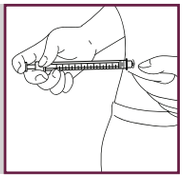


If air bubbles appear in the insulin syringe, inject the insulin back into the vial. Then redraw the insulin following steps 6 and 7.

9

Confirm the dose is correct, and then **clean a small area of skin**. Let it dry completely before injecting.

10



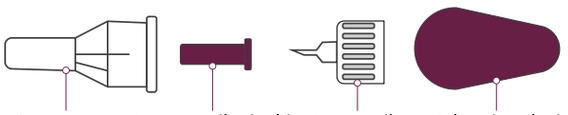
Hold the insulin syringe like a pencil. **Pinch up your skin and push the needle quickly through the skin at 90°** (straight in) to the skin surface. **Push the insulin in with the plunger**. Pull the needle out of your skin. Release the skin pinch-up.

11

Do not recap used needles. Use the needle once and dispose of it properly.

Injecting with a Pen Needle

Parts of a Pen Needle

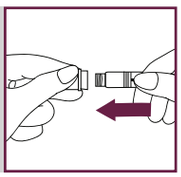


How to inject

1

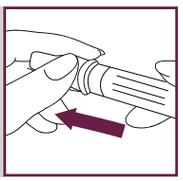
Arrange your supplies. **Remove the pen cap and wipe the stopper.**

2



Wash your hands. Remove the seal and push the new needle **straight onto the pen. Do not put the needle on at an angle.** Screw it on tight.

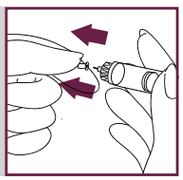
3a



Remove the outer cover.

Warning: Remove both the outer cover and the inner needle shield (3b) before an injection. If both the outer cover and the inner needle shield are not removed before use, the medication or dose may not be injected, which may result in serious injury or death.

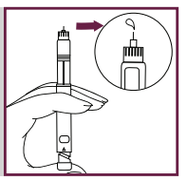
3b



Remove the inner needle shield.

Warning: Remove both the outer cover (3a) and the inner needle shield before an injection. If both the outer cover and the inner needle shield are not removed before use, the medication or dose may not be injected, which may result in serious injury or death.

4

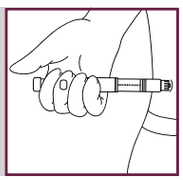


Check the flow of medication by **dialing 2 units and with the needle facing up, press the thumb button until you see a drop of medication.** Repeat if necessary until you see a drop of medication.

5

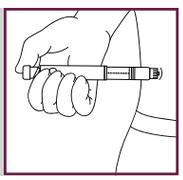
Dial your medication dose. Clean a small area of skin. Ensure the skin surface is completely dry before injecting.

6



Inject straight in at a 90° angle.

7



Press the thumb button down. Post-injection, **count for 10 seconds** before removing the needle from your skin to help ensure an accurate dose.

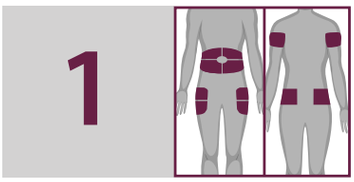
8

Use the needle once and dispose of it properly.

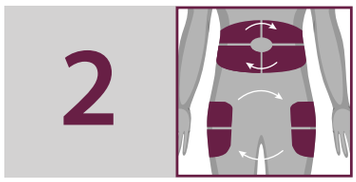
Healthy injection site selection and rotation

- Always use a new injection site. Do not inject into the same site repeatedly.
- A single injection site should not be used more than once every four weeks.

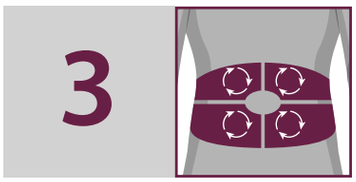
Where to Inject



Choose an area.



Divide that area into four sections.



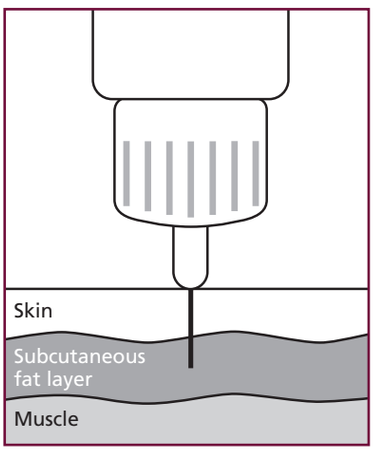
Select an injection site in a section to start injecting. Use one section per week.

Inject one finger width away from your last injection.

Why it is important to use the shortest needle

To work properly, insulin needs to be deposited in the subcutaneous layer just below your skin.

If the needle is too long and the insulin goes into your muscle, it can cause serious complications like hypoglycemia.



Always inject with a new needle

- Pen needles should only be used once—they are no longer sterile after use.
- Reuse may lead to needle tip damage, which may result in injection pain or damage to the skin.

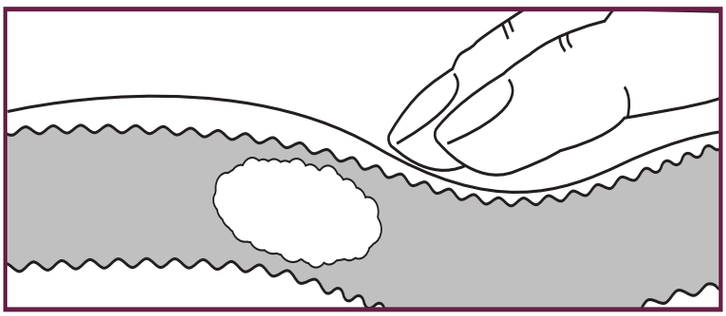
Lipohypertrophy (Lipo)

Lipohypertrophy is one of the most common complications of insulin injections.

Type 1 diabetes
76%
of patients had lipohypertrophy

What is lipohypertrophy (Lipo)?

Lipohypertrophy is a thickening, rubbery swelling under the skin that can happen to people where they inject insulin. These lumps may be soft or firm. Because it is under the skin, you may not always be able to see lipohyperthrophy. You may have to press on your skin to feel it.



What causes lipohypertrophy?

There are three risk factors that make people more likely to develop lipohypertrophy:

1. Using insulin for a longer period of time
2. Not rotating injection sites correctly
3. Reusing needles

What happens when you inject into lipohypertrophy?

If you inject into lipohypertrophy, your insulin may not be absorbed into your body correctly. This can affect your blood glucose control.

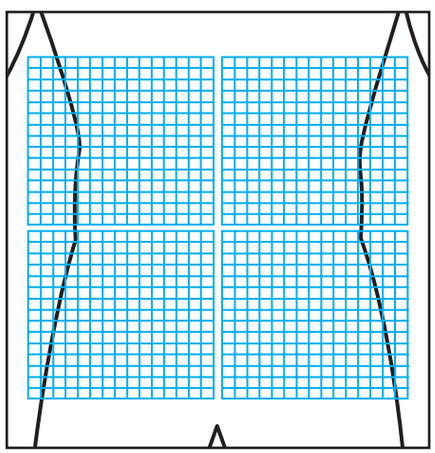
In a scientific study

22%

of the insulin injected into lipohypertrophy was not absorbed into the body.

Tracking and managing lipohypertrophy

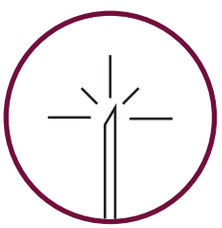
If you have lipohypertrophy at your injection sites, you can use a tracking tool with a grid to mark them—and then avoid injecting into them until they heal. Ask your healthcare provider to examine sites at each visit, or at least every year.



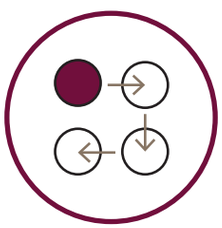
Work with your diabetes care team to track any lipohypertrophy that you do have and follow their instructions on how to manage it. You may need to change how much insulin you inject and where.

Preventing lipohypertrophy

It's important that you keep your injection sites healthy to prevent lipohypertrophy. There are two ways you can prevent lipohypertrophy with every injection.



Replace your needle every time you inject.



Always rotate injection sites.

Home Sharps (Needles) Waste Management

- The proper way to dispose of sharps waste is to use only State-approved sharps containers. Check availability in your County or ask your pharmacist or doctor about them.
- When your sharps container is about 3/4 full, seal it securely.
- Keep your sharps containers out of reach of children and pets.
- Bring your filled sharps container to any of the following collection sites for proper disposal. Obtain a new container at:

    1) Los Angeles County Household Hazardous Waste Collection Events
    2) Antelope Valley Environmental Collection Center (AVECC)
    3) City of Los Angeles' S.A.F.E. Centers
    4) Los Angeles County Department of Public Health

Additional sites may be available. Call 1(888) CLEAN LA or visit www.888CleanLA.com for more information.

You can receive a BD home sharps container free of charge by calling **1-888-BDCARES (1-888-232-2737).**

Containers can be purchased at your local:

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

The following are mail-back services approved by the California Department of Public Health (fees may apply):

- GRO & Associates 800.207.0976 (www.sharpsdisposal.com)
- Medasend, Inc. 800.200.3581 (www.medasend.com)
- Republic Services (www.republicsharps.com)
- Sharps Compliance, Inc. 800.772.5657 (www.sharpsinc.com)
- Stericycle, Inc. 800.355.8773 (www.stericycle.com)

Household Hazardous Waste (HHW) Collection Facilities:

- San Dimas Sheriff Station
  270 S Walnut Ave., San Dimas, CA 91773 - 909.450.2700
- Walnut Sheriff Station
  21695 Valley Blvd., Walnut, CA 91789 - 626.913.1715
- City of La Verne Fire Department
  2061 Third St., La Verne, CA 91750 - 909.596.5991
- Joslyn Senior Center
  660 N Mountain Ave., Claremont, CA 91711 - 909.399.5488
- Public Works Service Center
  5050 Schaefer Ave., Chino, CA 91710 - 909.591.9824
- Walgreen's Pharmacy - #5797
  1086 W. Arrowhead Hwy, San Dimas, CA 91773 - 909.599.7896
- Upland City Yard
  1370 North Benson, Upland, CA 91786 - 909.931.4343
- City of Rancho Cucamonga Household Hazardous Waste Facility
  8794 Lion St., Rancho Cucamonga, CA 91730 - 909.477.2700
- Ontario Household Hazardous Waste Facility
  1430 South Cucamonga Ave., Ontario, CA 91761 - 800.645.9228
- San Bernardino County Household Hazardous Waste
  2824 East W. St., San Bernardino, CA 92415 - 909.382.5401

Per California State Law, it is illegal to dispose of sharps (needles) in the trash, recycling bin or composting bins. It is also illegal to transport sharps in a non-biohazard container.

Managing Hyperglycemia

Watch for the signs and know what to do

Hyperglycemia
(high blood sugar)
Above 200 mg/dL

Watch for:

- Increased thirst
- Sleepiness
- Frequent urination
- Blurry vision
- Increased hunger
- High blood glucose
- High levels of sugar in your urine
- Sores that are not healing

What to do:

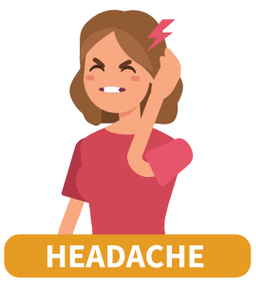
- Set blood sugar goals with your doctor
- Test your blood sugar frequently
- Test your urine for ketones if your blood sugar is greater than 240 mg/dL

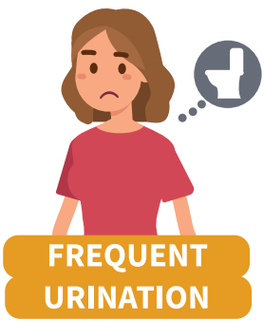
Causes:

- Not enough insulin
- Too much food
- Infection, fever, illness
- Emotional stress

Recommendations:

- Drink sugar-free fluids
  (if you can swallow)
- Participate in a healthy activity, such as going for a walk





Managing Hypoglycemia

Watch for the signs and know what to do

Hypoglycemia
(low blood sugar)
Less than 70 mg/dL

Watch for:

- Cold sweat, faintness, dizziness, headache
- Pounding heart, trembling, nervousness
- Blurred vision
- Hunger
- Irritability or personality change
- Unable to wake up

What to do:

- Test your blood sugar *(if possible)*
- If less than 70 mg/dL or feeling symptoms of low blood glucose, treat with 15 grams of glucose *(rule of 15)*
- Wait 15 minutes and retest your blood sugar
- If your blood sugar is still less than 70 mg/dL, treat again with glucose tablets, liquids or foods containing sugar. Follow with your next meal or snack
- Do not give anything by mouth if the person is not conscious
- If the person is unconscious, give glucagon according to package directions and call 911

Causes:

- Taking too much insulin
- Not eating enough food, or delayed meal or snacks
- Unusual amount of exercise
- Recent weight loss

Treatment:

- The ***Rule of 15***: Consume glucose tablets or 15 grams of carbohydrates
- Common examples of 15-20 grams of simple carbohydrates include:
  - Glucose tablets *(follow package instructions)*
  - Gel tube *(follow package instructions)*
  - 2 tablespoons of raisins
  - 4 ounces (1/2 cup) of juice or regular soda *(not diet)*
  - 1 tablespoon of sugar, honey, or corn syrup
  - 8 ounces of nonfat or 1% milk
  - Hard candies, jellybeans or gumdrops *(see package to determine how many to eat)*

Severe Hypoglycemia

If left untreated, hypoglycemia may lead to a seizures, unconsciousness (passing out) or coma. In this case, someone else must take over. The people you are in frequent contact with (for example, friends, family members and coworkers) should be instructed on how to administer glucagon to treat severe hypoglycemic events.

Treating Severe Hypoglycemia

Glucagon is a hormone produced in the pancreas that stimulates your liver to release stored glucose into your bloodstream when your blood glucose levels are too low. Injectable glucagon kits are used as a medication to treat someone with diabetes that has become unconscious from a severe insulin reaction. Glucagon can be injected or inhaled.

Glucagon kits are available by prescription. Speak with your health care provider about whether you should buy a glucagon kit, and how and when to use it.

Steps for treating a person with severe hypoglycemia:

1) The person should inject glucagon (the same way insulin is injected) into the buttock, arm or thigh, following the manufacturer's instructions.
2) When you regain consciousness (usually in 5-15 minutes), you may experience nausea and vomiting.
3) If you have needed glucagon, let your health care provider know, so they can discuss ways to prevent severe hypoglycemia in the future.

Don't hesitate to call 911. If someone is uncoscious and glucagon is not available or someone does not know how to use it, call 911 immediately.

Do NOT:

- Inject insulin (will lower blood glucose even more)
- Provide food or fluids (individual can choke)
- Put hands in mouth (individual can choke)

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 before you become ill. This will make it easier to take care of your diabetes when you are not feeling well. Your team can also let you know when to contact them.

Keep track of your blood sugar

It is important to check your blood sugar often when you are sick. Even if your blood sugar is usually under good control, it can vary when you're sick. Check it every six hours for a mild illness and every three to four hours for a severe illness. If you use insulin, also check for ketones. Call your diabetes care team if your blood sugar levels are 250 mg/dL or higher for two checks, or as directed by your diabetes care team, regardless of your ketone level.

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. Do not skip your diabetes pills or insulin even if you feel too sick to eat.

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.

Ask your diabetes care team about how to adjust your insulin dose when you are sick.

If you take diabetes pills, take your usual dose. If you vomit up the pills or are not eating, call your diabetes care team. Your team may tell you to stop your sulfonylurea medicine (glipizide, glyburide, glimeperide). Ask your diabetes team about how to adjust your diabetes pills when you are sick. 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. Switch back and forth between drinks that contain sugar and drinks that do not. For example, for one hour, drink regular fruit juice and soft drinks. The next hour, drink sugar-free soft drinks, tea or water. If you can't follow your meal plan, drink fluids that contain salt, like bouillon or clear soup.

When to call your diabetes care team

You can call your diabetes care team any time you have questions or concerns. But you should definitely call if:

- 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
- You are not sure what to do

My sick day plan

It's a good idea to make a sick day plan with your diabetes care team before you get sick. That way you will know what to do if you get sick.

Do not make any changes to your diabetes care plan without first checking with your diabetes care team. If you have any questions or concerns about what to do when you are sick, be sure to contact your team.

Diabetic Ketoacidosis (DKA)

Diabetic Ketoacidosis (DKA) is a deadly but avoidable complication of type 1 and occasionally Type 2 diabetes. DKA starts with not having enough insulin and leads to serious imbalances in the blood. When there is not enough insulin, many cells of the body are starved for sugar and the body tries to make energy from products like fat. This causes the blood to become more acidic, which can result in serious problems.

Symptoms of DKA:

- Very thirsty
- Frequent urination
- Nausea and vomiting
- Drowsy
- Deep breathing
- Fruity smell to the breath
- Stomach pain

Prevention of DKA:

- Check blood sugar frequently
- Always take your insulin as needed
- Have urine keto sticks available
- Call your diabetes care team
- Monitor yourself for symptoms

PVHMC Diabetes Community Resource List

Pomona Valley Hospital Medical Center

- **Inpatient Diabetes Program Information**
  1798 North Garey Ave., Pomona, CA - Call 909.865.9501 ext. 4819 and ext. 4020
  Free Diabetes 101 Classes, 2nd Tuesday of the Month, 6:30-7:30pm

Juvenile Diabetes Research Foundation (JDRF): (Type 1 Diabetes)
Dedicated JDRF staff and volunteers offer guidance and support at all ages and stages of the disease.

- **Inland Empire and Desert Cities Chapter**
  985 Kendall Dr., Suite A-329., Irvine, CA - 909.241.8716. Email: inlandempire@jdf.org
- **Los Angeles County**
  811 Wilshire Blvd, Suite 1600, Los Angeles, CA 90017 - 213.233.9901. Email: losangeles@jdf.org

Follow Up Care/ Education/ Medications and/or Supplies:

- **Chaparral Medical Group**
  1940 North Orange Grove Ave., Pomona, CA - 909.865.6900 - Education-Diabetes Self-Management Training (DSMT) and Medical Nutrition Therapy (MNT)
- **Chino Valley Medical Center**
  5451 Walnut Ave., Chino, CA - 909.464.8780 - Free Community Diabetes Education classes and workshops. Free Community Diabetes Education classes and workshops held the 4th Wednesday of every month
- **Diabetes Care Partners**
  336½ S. Glendora Ave C, West Covina, CA - 877.227.3889 - Education-Diabetes Self-Management Training (DSMT), on-demand courses, modules, and weekly coaching - fees vary
- **Community Hospital of San Bernardino**
  1805 Medical Center Dr., San Bernardino, CA - 909.806.1816 - Free pre-diabetes and diabetes education, nutritional and cooking classes, diabetes self-management and support groups
- **East Valley Community Health Center**
  1555 South Garey Ave., Pomona, CA - 855.535.5545 - Non-L.A. County residents - Sliding scale fee available (income based)
- **Loma Linda University**
  11285 Mountain View Ave., #40, Loma Linda, CA - 909.558.3022 - Diabetes and Nutrition Education
- **Mini Pharmacy**
  2425 Porter St., Los Angeles, CA 90021 - 888.545.6464 - Home Delivery of Glucometer supplies and testing strips and prescription pharmacy services

- **Park Tree Community Health Center**
  1450 Holt Ave., Pomona, CA - 909.630.7927
  1556 S. Sultana Ave., Ontario, CA - 909.469.9017
  2680 E. Riverside Dr., Ontario, CA - 909.469.9013
  Primary care services, dental, no or low cost prescriptions, accepts uninsured (income based sliding scale fees)
- **We Care Pharmacy**
  2121 N D St., San Bernardino, CA - 909.693.3376 or 877.301.0636 - Requires MD referral - IEHP accepted, Self-referral (call in) - for Diabetes Management available
- **Western University of Health Sciences**
  795 E. Second St, Pomona, CA - 909.706.3802 - Virtual Diabetes class with nutritionist and pharmacist, cooking demos, weight loss, and healthy lifestyle

Additional Resources and Phone Numbers:

If you do not have insurance or cannot afford the office visits, please call 1.800.DIABETES (1.800.342.2383), a representative is available to assist you in finding low-cost clinics in your community.

- American Diabetes Association - 1.800.DIABETES (800.342.2383) - www.diabetes.org
- National Diabetes Education Program - 800.860.8747 - www.ndep.nih.gov
- Academy of Nutrition and Dietetics - 312.899.0040 - www.eatright.org

Transportation Resources:

Check with your insurance company to see if your insurance plan will cover transportation. Enrollment in these services can take time. Call as soon as you think you may require such services.

Access Transportation
800.883.1295. www.assessla.org
Pomona Transportation Authority
909.596.7664
Dial-A-Ride
909.623.0183. Area Pomona
Dial-A-Ride
909.596.7644. Area: Claremont, La Verne, San Dimas

Go to the Emergency Room if:
Your blood sugar is over 400 mg/dl, eye or head injuries, chest pain, difficulty breathing, loss of balance, fainting, severe abdominal pain, infection, deep cuts or open wound and bone fractures. 1798 N. Garey Ave., Pomona, CA, 91767 - 909.865.9500

Go to Urgent Care if:
You have eye irritation, fever without rash, migraine, cough/cold, vomiting, urinary tract infection, minor cuts, and sprain/strain injuries.
Pomona Valley Health Center Urgent Care hours are -
8:00 am - 8:00 pm, Monday through Friday
9:00 am - 5:00 pm weekends and most holidays.
Locations:

- **Chino Hills Crossroads** - 3110 Chino Avenue, Suite 150, Chino Hills, CA 91709 - 909.630.7868
- **Claremont** - 1601 Monte Vista Avenue, Claremont, CA 91711 - 909.865.9977
- **La Verne** - 2333 Foothill Boulevard, La Verne, CA 91750 - 909.392.6511- www.mypvhc.com

You Can Live With Diabetes

A plan for post-discharge and self management

MEDICATIONS

- Take your medications as directed **every day. Do not skip medications.**
- Carry a current list with you and show it to **all** of your physicians.
- **Avoid** over-the-counter medications, unless recommended by your physician.
- Talk to your physician about **rotating** injection sites.
- **Don't run out** of insulin, medications or supplies.
- **Plan ahead.** Purchase diabetic medications and supplies in advance.

STOP Smoking!

Call 1.877.448.7848

For more information call our Diabetes Program:

909.865.9501

ext. 4819 or ext. 4020

HEALTHY GOALS

- Schedule your appointment with your doctor before hospital discharge.
- Test your blood sugar and write it down in your logbook. Bring your logbook with you when you see your physician.
- Blood Sugar target: 80-130mg/dL
- Check your feet daily for redness, swelling, or breaks in the skin.
- Wear socks and comfortable shoes.
- See your podiatrist regularly. Cut your toenails straight across and smooth with an emery board. Don't go barefoot, even indoors.
- See your dentist every 6 months.
- See your eye doctor every year.

Goals To Maintain

- Hemoglobin A1C
- Blood pressure less than 130/80
- Cholesterol LDL level less than 70.

MEALS

Improve blood sugar control and minimize risk of heart disease

- Eat moderate sized meals throughout he day with small snacks in between
- Plan well balanced meals.

- If at risk for low blood sugar, do not skip a meal. Carry a source of carbohydrate. Treat with 4 glucose tablets or 4 oz. fruit juice or 4 oz. soda or 1 tbsp. of sugar.
- Reduce trans and saturated fats. Eat healthy fats like fish, nuts and vegetable oils in small amounts.
- Use salt and sugar in moderation.
- Drink little to no alcohol and always with food.

EXERCISE

Get Moving!

- Regular physical activity or moderate intensity for 30 minutes a day helps reduce risk.
- Check with your physician before starting any physical activity program.
- Look for an activity you enjoy.
- Wear comforable supportive shoes and cotton socks.
- Carry something to eat that contains sugar while exercising.
- Avoid exercise if your blood sugar is over 250 mg/dL or under 100 mg/dL.

POMONA VALLEY HOSPITAL

MEDICAL CENTER

Expert care with a personal touch

TAKE ACTION

Go to the Emergency Room if:

- Your blood sugar is over 400 mg/dL.

Call your Physician if:

- You are vomiting and unable to keep down food, medications, or liquids.
- You are ill or have a fever for more than 24 hours.
- You have blood sugars higher thatn 200 mg/dL for more than 24 hours.
- Unusual increase in hunger of thirst.
- Frequent or excessive urination.
- Your feet have redness, swelling, or a break in the skin.
- You have unplanned weight loss of 5 lbs. or more.

Sick Day Rules

- Always take your insulin or diabetic pills.
- Test your blood sugar before each meal and at bedtime.
- Follow your meal plan. If you can't eat, drink a 4 oz. sugared beverage every hour.

Diabetes 101 Class

Diabetes management is not a simple task. When you are informed about the best steps to take, you can manage it more successfully. Attending these **FREE** educational classes will help you gain a better understanding of living well with diabetes. These classes are for those with both Type 1 and Type 2 diabetes, and is hosted by a clinical diabetes specialist from Pomona Valley Hospital Medical Center's Diabetes Team.

Come and learn about:

- Diabetes in general
- What glucose levels mean
- How episodes of high and low sugar are treated
- How to check sugars
- Medications and their side effects
- Preventing complications
- Lifestyle modifications like diet and exercise and how they can (positively) affect your health

Every 2nd Tuesday of the month

6:30 - 7:30 pm

Diabetes Nutrition Class

Come and learn about:

- **Healthy eating:** what are calories, essential nutrients, food groups, reading labels, and more
- Healthy eating with prediabetes
- Healthy eating with diabetes

Every 3rd Tuesday of the month

6:30 - 7:30 pm

Space is limited, please RSVP. *Virtual education options available.

Held in the 3rd floor OPP Room 1
Robert and Beverly Lewis Outpatient Pavilion
1798 N. Garey Ave., CA 91767

For more information, or to RSVP, please call our **Diabetes Education Program at 909.865.9501 ext. 4020 or 4819.**

POMONA VALLEY HOSPITAL
MEDICAL CENTER
Expert care with a personal touch

PVHMC follows local public health COVID-19 guidelines.

Diabetes log book

My blood glucose

Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Diabetes log book

My blood glucose

Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Diabetes log book

My blood glucose

Date:	Before	Insulin	After
	Time, blood glucose		**Time, blood glucose**
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		**Time, blood glucose**
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		**Time, blood glucose**
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		**Time, blood glucose**
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Diabetes log book

My blood glucose

Date:	Before	Insulin	After
	Time, blood glucose		**Time, blood glucose**
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		**Time, blood glucose**
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		**Time, blood glucose**
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		**Time, blood glucose**
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Diabetes log book

My blood glucose

Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
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Bedtime			
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Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Date:	Before	Insulin	After
	Time, blood glucose		Time, blood glucose
Breakfast			
Lunch			
Dinner			
Bedtime			
Dinner			

Nationally recognized, Pomona Valley Hospital Medical Center is the area's leading provider of comprehensive healthcare with centers of excellence in cancer, heart and vascular, trauma, and women's and children's services. We also have an award-winning emergency department and neighborhood health centers for quality care close to home. Through our expert physicians and advanced technology, we offer the perfect blend of state-of-the-art medical treatment and personalized care.

Follow us on:

Scan with your smartphone for more information:

POMONA VALLEY HOSPITAL
MEDICAL CENTER

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