

*Please talk with your physician or advanced practice provider (APP) about the blood glucose range that is best for you.*

## Diabetes: Hypoglycemia and Hyperglycemia

### Hypoglycemia

Hypoglycemia happens when your blood glucose (blood sugar) level drops too low to give your body the energy it needs to function. This also known as low blood glucose. A target blood glucose range is different for every person. In most cases, a person with diabetes who has a level below 70 mg/dL needs low blood glucose treatment.

#### **Symptoms**

- Hunger
- Nervousness and shakiness
- Sweating
- Dizziness or lightheadedness
- Sleepiness
- Confusion
- Difficulty speaking
- Feeling anxious or weak
- Irritability or mood change

**Hypoglycemia also can happen while you are sleeping. Signs to watch for include:**

- Damp pajamas or sheets from sweating
- Crying out or having nightmares
- Feeling tired, irritable or confused when you wake up

#### **Causes of hypoglycemia**

People taking medications to lower blood glucose can have their blood glucose levels fall too low for a number of reasons, including:

- Eating meals or snacks that are too small
- Delaying or skipping meals
- Taking too much medication to lower your blood glucose level
- Increasing your activity or exercise
- Drinking too much alcohol

#### **Prevention**

Following a regular schedule is important for keeping your blood glucose at the right level. Take your medication at the usual times with your usual meals and activities. Here are some tips to help you prevent hypoglycemia:

- Some diabetes medications can cause low blood glucose levels. Ask your physician or APP about your medications.

- Meal plans designed by a registered dietitian can help you eat regular meals that fit your preferences and lifestyle.
- Physical activities, such as playing sports or doing exercise, may require that you eat a snack or an adjust your medication. Talk with your physician or APP about what is right for you.
- Check your blood glucose levels regularly. Simply checking will help you know if you are having a hypoglycemic episode. A blood glucose level is low when it is 70 mg/dL or lower.
- Keep a quick source of sugar, such as glucose tablets or gel, with you at all times. This way, if you have a hypoglycemic episode, you can treat the problem right away.

***Treatment — follow the “Rule of 15”***

- If you think your blood glucose level is too low, use a blood glucose meter to check it. If your blood glucose level is 70 mg/dL or lower, follow the “Rule of 15.”
- If you do not have your meter with you and are feeling symptoms of low blood glucose, follow the “Rule of 15” until you feel better.
- “Rule of 15”
  1. Take 15 grams of a fast-acting carbohydrate. **Take only 1 of these options:**
    - 3 to 4 glucose tablets or a tube of glucose gel
    - Small (4-ounce) juice box
    - 3 sugar packets
    - 8 ounces of skim milk
  2. Wait 15 minutes.
  3. Check your blood glucose again.
  4. Repeat the treatment until your blood glucose is within your target range or, if you do not have your meter, until you feel better.

## Hyperglycemia

Hyperglycemia is another name for high blood glucose. Please talk with your physician or APP about the blood glucose range that is right for you.

***Symptoms***

- Thirst
- Frequent urination
- Tiredness
- Blurred vision
- Feeling hungrier
- Dry skin
- Slow-healing wounds

### ***Causes of hyperglycemia***

Your blood glucose levels may get too high for many reasons, including:

- A change or increase in the amount of food you eat
- Wrong dose or missed dose of insulin or diabetes medications (pills or injectables)
- Taking medications that have hyperglycemia as a side effect
- Not getting enough physical activity
- Emotional stress
- Illness or infection

### ***Long-term complications***

There are long-term problems that you can get from having hyperglycemia, including:

- Heart disease
- Kidney disease
- Vision loss
- Nerve damage
- Liver damage
- Skin sores
- Infection

### ***Prevention and treatment***

You can avoid hyperglycemia in many cases. Follow these steps to help manage your blood glucose:

- Keep track of the food you eat.
- Look for ways to improve your eating habits.
- Ask your registered dietitian for help.
- Take your insulin or diabetes medications (pills or injectables) in the prescribed doses and at the correct times. Contact your physician or APP if you have questions.
- Drink plenty of water to prevent dehydration.
- Try increasing your physical activity slowly and make it a part of your lifestyle.
- Reduce stress through relaxation training or stress management.
- Contact your physician or APP as soon as possible for treatment if you are sick.
- Do not skip diabetes medications or insulin on days you are sick.