Insulin helps keep your blood sugar normal. This helps stop diabetes from damaging your eyes, heart, nerves and kidneys.

**Normal blood sugar levels are:**

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Before meals</td>
<td>70-130 mg/dL</td>
</tr>
<tr>
<td>After meals</td>
<td>Less than 180 mg/dL</td>
</tr>
<tr>
<td>Fasting blood sugar</td>
<td>Less than 90-110 mg/dL</td>
</tr>
<tr>
<td>2 hours after meals</td>
<td>Less than 140-180 mg/dL</td>
</tr>
</tbody>
</table>

Your healthcare provider will tell you what levels are right for you.

Some people need one shot of long acting insulin a day, that works slowly all day. Others may use regular or short-acting insulin at mealtime to get the energy from the food that is eaten.

If you are using insulin at mealtime, you need to check your blood sugar before eating and then use the insulin dose recommended by your healthcare provider. Do not decide on your own how much insulin you need.

Blood sugar goes up with food, stress, and sickness. It goes down with diabetes pills, insulin, exercise, and not eating. Test often and know your blood sugar.

High blood sugar is called “hyperglycemia.” This is dangerous.

If your blood sugar is very high – over 500 mg/dL – call your healthcare provider right away. You may need emergency care.

**Signs of a very high blood sugar or hyperglycemia include:**

- Dry mouth
- Thirst
- Peeing a lot
- Hunger
- Warm, dry skin with no sweating
- Sleepiness
Blood sugar levels can change when you are sick. So test your blood sugar more often. Call your healthcare provider when you are sick.

Low blood sugar or “hypoglycemia” can be very dangerous, even life threatening.

**It can be caused by:**

- Not eating enough food
- Drinking alcohol on an empty stomach
- Exercising without eating
- Skipping a meal
- The wrong amount of diabetes medications—either too much insulin or diabetes pills.

**Signs of low blood sugar are:**

- Sudden hunger
- Shaking
- Sweating
- Fast heartbeat
- Sleepiness
- Dizziness or confusion
- Anxiety
- Difficulty speaking
- Weakness
- Acting funny or not making sense to family or friends

Check your blood sugar if you think it is too high or too low. If it is low, eat a snack, such as an orange, banana, or a piece of toast.

**It is a good idea to carry a pre-measured amount of sugar, like a snack or glucose gel or tablets.**