What are some potential benefits of using a glucose sensor or continuous glucose monitor (CGM)?

- Requires fewer fingersticks
- Shows where your glucose is now and where it is going
- Provides alerts for your highs and lows

What are some other things to consider about glucose sensors or CGMs?

- You need to wear the sensor all the time (24/7) to get the most benefit
- Glucose readings are available all the time, which some people say can be overwhelming
- They provide more glucose data to share with healthcare providers and family members

### AVAILABLE SENSORS

<table>
<thead>
<tr>
<th>Sensor</th>
<th>How many parts does it have?</th>
<th>Does it offer alerts and alarms?</th>
<th>How do I view data?</th>
<th>How do I share the data with family members?</th>
<th>How many fingersticks are needed to calibrate the sensor?</th>
<th>How long is the sensor used?</th>
<th>How does it attach to the body?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dexcom G6</td>
<td>3: transmitter, sensor, and receiver</td>
<td>Yes, can be customized</td>
<td>On a smartphone (Apple or Android), or the receiver</td>
<td>Real-time data can be shared using an app; family members can also receive text message alerts</td>
<td>None</td>
<td>10 days</td>
<td>Sensor is inserted in 1 step, and integrated adhesive holds the sensor and transmitter in place</td>
</tr>
<tr>
<td>Medtronic Guardian Connect</td>
<td>3: transmitter, sensor, and smartphone used as the receiver</td>
<td>Yes, can be customized</td>
<td>On an Apple smartphone</td>
<td>Data from whenever you scan can be shared using an app</td>
<td>None</td>
<td>7 days</td>
<td>Sensor is inserted with the use of a Medtronic one-press insertion aid, then the sensor and transmitter are held in place by an outer adhesive</td>
</tr>
<tr>
<td>Abbott FreeStyle Libre 14 Day+</td>
<td>2: sensor and receiver</td>
<td>No</td>
<td>On a smartphone (Apple or Android) or on the receiver</td>
<td>Real-time data can be shared using an app</td>
<td>None</td>
<td>14 days</td>
<td>Sensor is inserted in 1 step, and integrated adhesive holds it in place</td>
</tr>
<tr>
<td>Senseonics Eversense+</td>
<td>3: transmitter, implantable sensor, and smartphone/ smartwatch used as the receiver</td>
<td>Yes, can be customized</td>
<td>On a smartphone (Apple or Android) or smartwatch</td>
<td>Real-time data can be shared using an app</td>
<td>2 per day</td>
<td>90 days</td>
<td>Sensor needs to be inserted by a doctor, nurse practitioner, or physician assistant, then the transmitter sits outside the body and is held in place by an adhesive</td>
</tr>
</tbody>
</table>

*Indicated for use in adults aged 18 years and older with diabetes.

How do I get a CGM sensor?

If you think a CGM sensor might be right for you, visit DiabetesWise.org for more information about:

- What others think about using each type of sensor
- Key questions to ask your diabetes care team
- Insurance coverage and costs
- Support resources
## Insulin Pumps: Are They Right for You?

**What are some potential benefits of using an insulin pump?**
- Requires fewer injections
- Makes giving insulin easier (compared with traditional injections)
- Is easy to use when on the go
- Has a built-in dosing calculator

**What are some other things to consider about insulin pumps?**
- Setting it up and getting used to it can take some time
- It needs to be worn all the time
- You still need to do diabetes self-care and count carbohydrates

### AVAILABLE INSULIN PUMPS

<table>
<thead>
<tr>
<th></th>
<th>Medtronic MiniMed 630G System</th>
<th>Medtronic MiniMed 670G System</th>
<th>Insulet Omnipod System</th>
<th>Tandem t:slim X2 Insulin Pump</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does it need tubing to give insulin?</td>
<td>Yes, tubing connects the pump to your body</td>
<td>Yes, tubing connects the pump to your body</td>
<td>No, self-contained pod that does not need tubing</td>
<td>Yes, tubing connects the pump to your body</td>
</tr>
<tr>
<td>Does it connect to a meter?</td>
<td>Yes, wireless transmission from CONTOUR NEXT LINK 2.4 meter</td>
<td>Yes, wireless transmission from CONTOUR NEXT LINK 2.4 meter</td>
<td>Yes, wireless transmission from CONTOUR NEXT ONE blood glucose meter</td>
<td>No</td>
</tr>
<tr>
<td>Does it have a compatible/integrated sensor?</td>
<td>Yes, wireless transmission from Guardian Sensor 3</td>
<td>Yes, wireless transmission from Guardian Sensor 3</td>
<td>No, but may be used with any CGM sensor</td>
<td>Yes, wireless transmission from Dexcom G6 sensor</td>
</tr>
<tr>
<td>Can I customize the insulin bolus increment (in case I need less insulin)?</td>
<td>Yes, can be set as small as 0.025 (bolus range is 0.05 to 30 units)</td>
<td>Yes, can be set as small as 0.025 (bolus range is 0.05 to 30 units)</td>
<td>Yes, can be set as small as 0.05 (bolus range is 0.05 to 30 units)</td>
<td>Yes, can be set as small as 0.01 (bolus range is 0.05 to 25 units)</td>
</tr>
<tr>
<td>Is it water resistant?</td>
<td>Yes, up to 12 feet for 24 hours</td>
<td>Yes, up to 12 feet for 24 hours</td>
<td>Yes, up to 25 feet for 60 minutes for the pod (the PDM is not water proof)</td>
<td>Yes, up to 3 feet for 30 minutes</td>
</tr>
</tbody>
</table>

CGM = continuous glucose monitoring; PDM = personal diabetes manager.
*For more details on using the Medtronic MiniMed 670G System in auto mode, please see the guide Automated Insulin Delivery Systems: Are They Right for You?

### How do I get an insulin pump?

If you think an insulin pump might be right for you, visit [DiabetesWise.org](http://DiabetesWise.org) for more information about:
- Other people’s experiences using the different types of pumps, which may help you decide which pump to try first
- Key questions to ask your diabetes care team
- Insurance coverage and costs
- Support resources

Developed by Med-IQ in collaboration with JDRF.
What is an automated insulin delivery system and how does it work?
• Also known as an artificial pancreas, a hybrid closed-loop system, or a smart pump and sensor
• Consists of an insulin pump, continuous glucose monitor (CGM), and algorithm/brain on the pump or separate smartphone app
• Senses glucose and adjusts insulin automatically; “gives less if low, gives more if high”

What are some potential benefits of using an automated insulin delivery system?
• Requires you to make fewer decisions/calculations because the machine does it for you
• Helps you spend more time in your target glucose range with fewer highs and lows
• Requires fewer fingersticks and needles/injections

What are some other things to consider about using an automated insulin delivery system?
• You need to wear 2 devices at all times
• You still need to count carbs and bolus when you eat
• You still need to do diabetes self-care
• It can provide more alerts and alarms, which can cause “alarm fatigue” in some people
• The system is not perfect (but each generation is getting better)

How do I get an automated insulin delivery system?
If you think an automated insulin delivery system is right for you, visit DiabetesWise.org for more information about:
• People’s experiences with using FDA-approved and DIY automated insulin delivery systems
• Key questions to ask your diabetes care team
• Insurance coverage and costs
• Support resources

Types of Automated Insulin Delivery Systems

COMING SOON

<table>
<thead>
<tr>
<th>System</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medtronic MiniMed 670G System</td>
<td>First automated insulin delivery system approved for use in the United States (since 2016); can be used in people with type 1 diabetes aged 7 years and older</td>
</tr>
<tr>
<td>Tandem Control-IQ Hybrid Closed-Loop System</td>
<td>(expected in late 2019)</td>
</tr>
<tr>
<td>DIY Automated Delivery Systems</td>
<td>What is it? Sometimes people make their own automated insulin delivery systems and then offer the instructions as a Do-It-Yourself (DIY) approach to others for free (also called open source). It is usually done with an extra small, specialized device, a CGM, a smartphone app, and an older compatible insulin pump. These systems are not FDA-approved but many patients use DIY systems like OpenAPS and Loop.</td>
</tr>
<tr>
<td>Omnipod HORIZON Automated Glucose Control System</td>
<td>(expected in late 2020)</td>
</tr>
</tbody>
</table>

Developed by Med-IQ in collaboration with JDRF.