**Meet Eric.** Eric is one of 12.5 million children between the ages of 2 and 19 who are overweight. That number is growing every year.

**12.5 MILLION CHILDREN**

Overweight and obese children are at greater risk for getting serious health conditions, including:

- diabetes
- heart conditions
- high blood pressure
- high cholesterol

Eric and his family have been eating a healthier diet and getting more physical activity into their daily routine. But Eric’s body mass index (BMI), a measure of a person’s weight as compared to a person’s height, is over 40, in spite of everything he’s done.

**BMI Categories:**

- **Underweight**: <18.5
- **Normal weight**: 18.5–24.9
- **Overweight**: 25–29.9
- **Obese**: 30+

Bariatric surgery can help get weight down to a healthier level.

- It is an option when adolescents reach what is sometimes called “skeletal maturity”—about the age of 13 for girls and 15 for boys.
- Eric’s doctor tells Eric and his family that while bariatric surgery is a good idea for Eric, it’s only one step in the process to getting to a healthier weight.
- Bariatric surgery is not a magic bullet. Eric will have to change the way he eats and keep getting plenty of physical activity, among other changes he may have to make.
There are two types of bariatric surgery that are performed on young people:

<table>
<thead>
<tr>
<th>Description</th>
<th>Roux-en-y gastric bypass (RYGB) surgery</th>
<th>Adjustable gastric band (AGB) surgery</th>
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<tr>
<td>Staples or plastic band are used to create a small pouch at the top of the stomach. The new smaller stomach is connected directly to the small intestine.</td>
<td>Adjustable silicone band is placed around the top of the stomach, creating a small pouch that holds much less food. When the pouch is filled with food, feelings of hunger go away.</td>
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<td>Pros</td>
<td>Most frequently performed type of bariatric surgery in teens (80% of cases). Has been performed for many years and has a high success rate.</td>
<td>Lower rate of complications. Faster recovery time. Vitamin deficiencies are rare because the intestine is not affected.</td>
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<td>Cons</td>
<td>Involves cutting through the intestine, so it has a longer recovery time than AGB surgery. Cannot be reversed.</td>
<td>May not take off as much weight initially as RYGB surgery. May require replacement surgery at a later date.</td>
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<td>Possible side effects</td>
<td>Bleeding; anesthesia reactions; infections at the incision points; blood clot in the lung; bowel obstructions; “leaky” stomach or abdominal area, possibly leading to infection</td>
<td>Bleeding; infection; slippage of the band; erosion of the band into inside of stomach; spontaneous deflation of band due to leakage; enlargement of stomach pouch; blockage of the stoma (stomach outlet)</td>
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</table>

Eric’s new, smaller stomach is able to hold much less food than his “old” stomach could. It may only hold 1 cup of food at a time, as opposed to as much as 8 cups in the old stomach.

After Eric recovers and returns home, he:

- Will eat many smaller, low-calorie, low-fat, high-protein meals throughout the day, eat more slowly, and avoid high-fat and high-sugar foods.
- May have side effects from the surgery, such as pain in his stomach area, diarrhea, vomiting, or acid reflux (heartburn).
- May experience what is called “dumping syndrome,” which happens when the food moves too quickly through his digestive system.
- Will need to take vitamin and mineral supplements. By eating smaller amounts of food, Eric may not get all the nutrients he needs.

Today, Eric’s weight is in a much healthier range. He’s sticking to his new diet and getting more physical activity into his daily routine.

He’s feeling better than ever, and he’s happy that his risk for diabetes and serious heart problems has gotten much lower than it was.

Patients have questions. We have answers. The Hormone Health Network is your trusted source for endocrine patient education. Our free, online resources are available at hormone.org.