

# Considering Bariatric Surgery?

Learn about minimally invasive  
*da Vinci*® Surgery



*da Vinci*.Surgery

# The Condition:

## Obesity

Obesity is defined as having a body mass index (BMI) of 30 or greater. Obesity is a serious medical condition that can have a negative effect on your health.

Obesity rates have more than doubled since 1980 with nearly 500 million adults worldwide considered obese.<sup>1</sup> In the United States alone, obesity affects nearly 65% of adults and is the second leading cause of preventable death.<sup>2</sup>

Obesity often leads to other serious health problems such as heart disease, stroke, cancer, arthritis, high blood pressure, sleep apnea and diabetes – conditions that can cause early death or disabilities.<sup>2</sup>

The good news is even modest weight loss can reduce your risk for these diseases or outcomes.<sup>2</sup>

### BMI Categories

Normal	18.5–24.9
Overweight	25.0–29.9
Obesity	30.0–39.9
Extreme Obesity	40.0+

If you don't know your BMI, there are many simple online calculators available, including one at the National Institutes of Health website:

[http://www.nhlbi.nih.gov/health/educational/lose\\_wt/BMI/bmicalc.htm](http://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm)

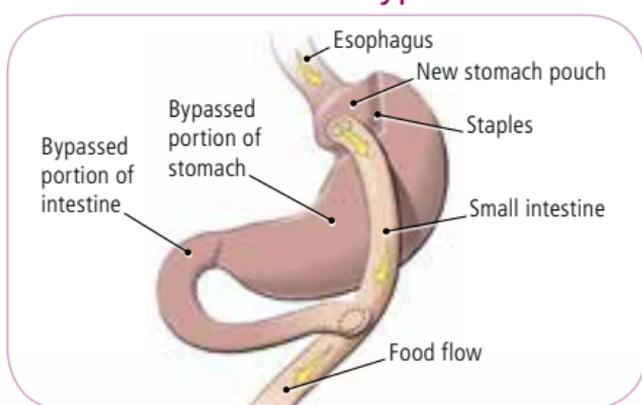
# The Surgery:

## Bariatric Surgery

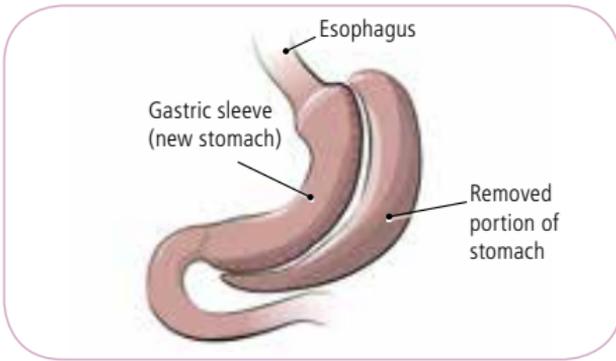
While there are many non-surgical treatments for obesity such as dieting, exercise, and medication, bariatric surgery may also be recommended for people who are morbidly obese (40+ BMI). Surgery may be recommended to patients who are committed to following a healthy diet and exercise plan after recovering from surgery. The most common bariatric procedures are Roux-en-Y gastric bypass and gastric sleeve surgery; gastric banding is sometimes used.

Gastric bypass permanently reduces your stomach size and reroutes your digestive tract. During this procedure, your surgeon divides your stomach to create a new, smaller stomach. The new stomach is connected to the small intestine and bypasses the larger part of your original stomach. Your new stomach is now much smaller — as is the amount of food it can hold.

### Gastric Bypass



## Gastric Sleeve Surgery



During gastric sleeve surgery, also known as sleeve gastrectomy, the majority of your stomach is removed. As with gastric bypass, the smaller, sleeve-shaped stomach that remains is sealed and holds only smaller amounts of food.

Gastric band surgery reduces your stomach size using an adjustable band wrapped around the stomach. Some patients like the idea that lap banding is reversible, but removing the band requires a second operation.

Bariatric surgery is often performed using minimally invasive surgery. Minimally invasive surgery (laparoscopy) is done through a few small incisions using long, thin surgical instruments and a tiny camera. The camera takes images inside your body. The images are sent to a video monitor in the operating room which guides surgeons as they operate.



*da Vinci Surgery/Laparoscopy Incisions*

# *da Vinci* Surgery:

## A Minimally Invasive Surgical Option

State-of-the-art *da Vinci* Surgery is another minimally invasive surgical option for patients considering bariatric surgery. The *da Vinci* System features a magnified 3D high-definition vision system and special wristed instruments that bend and rotate far greater than the human wrist. *da Vinci* enables your doctor to operate with enhanced vision, precision, and control.

As a result of *da Vinci* technology, *da Vinci* Bariatric Surgery offers the following potential benefits compared to traditional laparoscopy:

- › Lower rate of gastrointestinal leaks<sup>3,4</sup>
- › Lower risk of converting to open surgery<sup>4</sup>
- › Shorter hospital stay<sup>4</sup>
- › Lower risk of needing follow-up surgery<sup>4</sup>

Additional potential benefits of *da Vinci* Surgery include:

- › Low rate of complications<sup>5,6</sup>
- › Short hospital stay<sup>5</sup>
- › Reduced surgeon fatigue (due to the *da Vinci* System ergonomics)<sup>6,7</sup>

**Risks & Considerations Related to Bariatric Surgery for Morbid Obesity includes:** gastric bypass (stomach reduction surgery), sleeve gastrectomy and duodenal switch: leaking and/or narrowing at the spot where two parts of the bowel were reconnected, leaking from where the bowel is cut, malnutrition, dumping syndrome (food moves too quickly into small intestine), dehydration, need for supplementation of vitamins, minerals and protein.

Additionally, morbidly obese patients are typically not candidates for *da Vinci* Surgery.

## **Important Information for Patients:**

Serious complications may occur in any surgery, including *da Vinci*® Surgery, up to and including death. Examples of serious or life-threatening complications, which may require prolonged and/or unexpected hospitalization and/or reoperation, include but are not limited to, one or more of the following: injury to tissues/organs, bleeding, infection and internal scarring that can cause long-lasting dysfunction/pain. Risks of surgery also include the potential for equipment failure and/or human error. Individual surgical results may vary.

Risks specific to minimally invasive surgery, including *da Vinci* Surgery, include but are not limited to, one or more of the following: temporary pain/nerve injury associated with positioning; temporary pain/discomfort from the use of air or gas in the procedure; a longer operation and time under anesthesia and conversion to another surgical technique. If your doctor needs to convert the surgery to another surgical technique, this could result in a longer operative time, additional time under anesthesia, additional or larger incisions and/or increased complications.

Patients who are not candidates for non-robotic minimally invasive surgery are also not candidates for *da Vinci*® Surgery. Patients should talk to their doctor to decide if *da Vinci* Surgery is right for them. Patients and doctors should review all available information on non-surgical and surgical options in order to make an informed decision. For Important Safety Information, including surgical risks, indications, and considerations and contraindications for use, please also refer to [www.davincisurgery.com/safety](http://www.davincisurgery.com/safety) and [www.intuitivesurgical.com/safety](http://www.intuitivesurgical.com/safety).

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## The Enabling Technology: *da Vinci* Surgical System

The *da Vinci* Surgical System is designed to provide surgeons with enhanced capabilities, including high-definition 3D vision and a magnified view. Your doctor controls the *da Vinci* System, which translates his or her hand movements into smaller, more precise movements of tiny instruments inside your body.



Though it is often called a "robot," *da Vinci* cannot act on its own. Surgery is performed entirely by your doctor. Together, *da Vinci* technology allows your doctor to perform routine and complex procedures through just a few small openings, similar to traditional laparoscopy.

The *da Vinci* System has brought minimally invasive surgery to more than 2 million patients worldwide. *da Vinci* - changing the experience of surgery for people around the world.

**Your doctor is one of a growing number of surgeons worldwide offering *da Vinci*<sup>®</sup> Surgery.**

For more information and to find a *da Vinci* surgeon near you, visit:

**[www.daVinciSurgery.com](http://www.daVinciSurgery.com)**

<sup>1</sup> World Health Organization. Obesity and overweight. Fact sheet N°311. May 2012. <http://www.who.int/mediacentre/factsheets/fs311/en/>. <sup>2</sup> <http://www.ahrq.gov/research/obesitybrf.pdf>. <sup>3</sup> Snyder BE, Wilson T, Leong BY, Klein C, Wilson EB. Robotic-assisted Roux-en-Y Gastric bypass: minimizing morbidity and mortality. *Obes Surg*. 2010 Mar;20(3):265-70. Epub 2009 Nov 3. <sup>4</sup> Hagen ME, Pugin F, Chassot G, Huber O, Buchs N, Iranmanesh P, Morel P. Reducing Cost of Surgery by Avoiding Complications: the Model of Robotic Roux-en-Y Gastric Bypass. *Obes Surg*. 2011 May 3. [Epub ahead of print]. <sup>5</sup> Diamantis T, Alexandrou A, Nikiteas N, Giannopoulos A, Papalambros E. Initial experience with robotic sleeve gastrectomy for morbid obesity. *Obes Surg*. 2011 Aug;21(8):1172-9. <sup>6</sup> Tieu K, Allison N, Snyder B, Wilson T, Toder M, Wilson E. Robotic-assisted Roux-en-Y gastric bypass: update from 2 high-volume centers. *Surg Obes Relat Dis*. 2012 Jan 16. [Epub ahead of print]. <sup>7</sup> Yu SC, Clapp BL, Lee MJ, Albrecht WC, Scarborough TK, Wilson EB. Robotic assistance provides excellent outcomes during the learning curve for laparoscopic Roux-en-Y gastric bypass: results from 100 robotic-assisted gastric bypasses. *Am J Surg*. 2006 Dec;192(6):746-9.