

A Guide to Your Bariatric Surgery

Patient Handbook

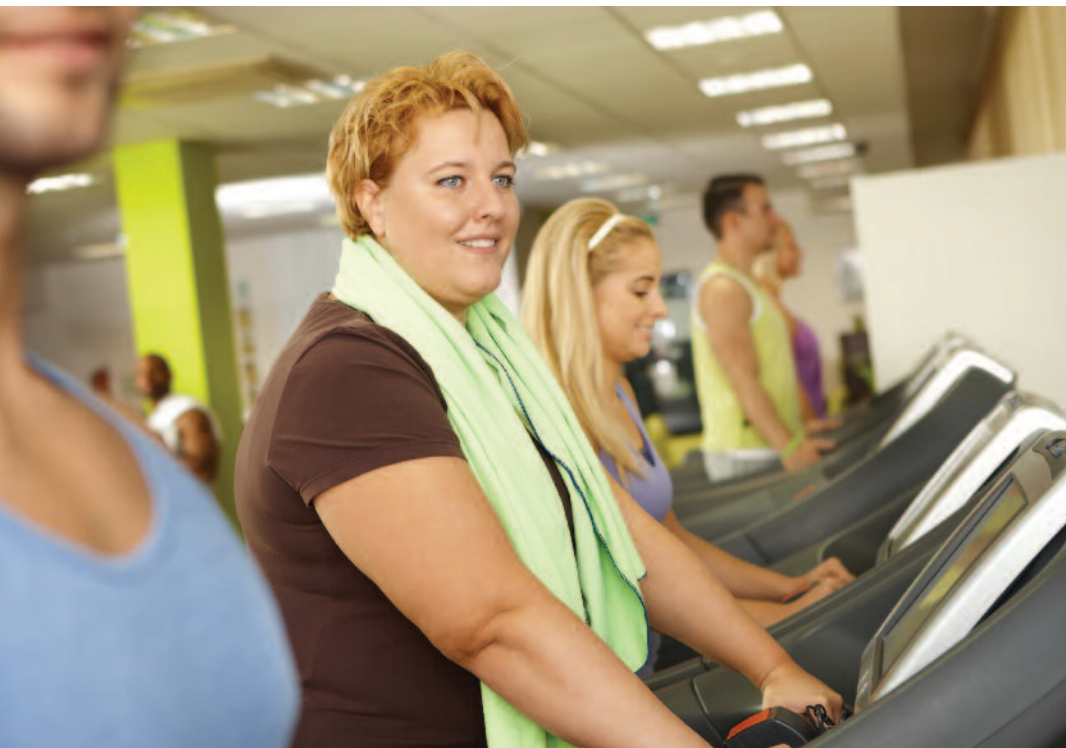


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Welcome to WakeMed

Please bring this handbook to all of your bariatric appointments.

This patient handbook explains the bariatric surgery program offered by WakeMed Bariatric Surgery & Medical Weight Loss. Our multi-disciplinary team of surgeons, advanced practice providers, nurses, dietitians, exercise specialists and psychologists provides a comprehensive program, and we are honored to be a part of your journey to better health. Our bariatric surgery program meets and exceeds the American Society for Metabolic and Bariatric Surgery (ASMBS) standards as a Center of Excellence with board-certified bariatric surgeons.

In this handbook, we provide detailed information about the bariatric surgery process. We believe that educating patients and preparing them for bariatric surgery is the foundation of patient success and continued support after surgery is essential for long-term weight loss. Bariatric surgery is a journey and we are here to help you along the way to a healthier you.

Introduction to the program

WakeMed Bariatric Surgery & Medical Weight Loss is a comprehensive program that includes:

- Fitness Consulting
- Nutrition Counseling
- Support Group Services
- Psychological Evaluation
- Pre-operative Testing & Medical Clearance
- Specialized Inpatient Bariatric Care
- Post-Operative Lifelong Follow-up
- Medical Weight Loss Integration

Health problems associated with obesity

Obesity is the most common medical disorder in the United States. More than two thirds of U.S. adults are overweight or obese and the rate has steadily increased since 1960. Obesity in America has doubled in fewer than 20 years. It is a leading cause of preventable death among American adults.

Obesity is associated with several of health problems. People with obesity have a significant increase in heart disease and early death due to high blood pressure, high blood cholesterol and type 2 diabetes. Other common problems that people with obesity face include sleep apnea, respiratory insufficiency (shallow breathing), heartburn or reflux disease (GERD), fatty liver disease, asthma, hernias, gallbladder disease, stress urinary incontinence, knee and back pain, infertility and some cancers.

Daily life for those who are obese is affected in many ways. Carrying extra weight is painful and debilitating. Often times size alone will limit access or comfort in society. Most people who struggle with obesity have tried dozens of weight loss methods including diets and medications, but are unable to lose weight and keep it off. For many, chronic dieting has led to biochemical changes causing resistance to weight loss. Scientific studies show that a minority of very obese people get permanent weight loss using the usual methods, such as diet, exercise and behavior modification.

Obesity is very difficult to treat. When other medically supervised methods have failed, bariatric surgery can offer a good option for weight loss. The long-term success of the surgery depends in large part on your motivation and willingness to make lifestyle changes.

What is bariatric surgery?

Bariatric surgery is the area of surgery that is devoted to weight loss. The term “bariatric” comes from the Greek word “baros” for weight. The field of bariatric surgery is a specialty that offers surgical treatment for people who are suffering from health problems as a direct result of too much weight when other measures have not been

successful. Surgery and procedures for morbid obesity involve changes to the stomach, or to the stomach and small bowel. These procedures reduce your stomach size and some also change the hormones linked to food intake and hunger, thus helping you with weight loss.

There are several operations or procedures available for morbid obesity: intragastric balloon, gastric band, Roux-en-Y gastric bypass, sleeve gastrectomy and single anastomosis and traditional duodenal switch. Each bariatric procedure or surgery has its own benefits and risks. Our providers will help you decide which procedure best meets your needs and goals.

If you are thinking about bariatric surgery, it is important to understand that these operations are not plastic or cosmetic surgery. As with all surgical procedures, there are real risks that come with weight loss surgery. For this reason, surgery is only offered to those who meet the criteria of morbid obesity (see page 8) – when the medical risk of continued obesity outweighs the risk of the surgery itself.

All of our bariatric procedures are done endoscopically or with laparoscopic instruments through several small incisions. Endoscopy involves placing a flexible scope through the mouth and inflating the stomach without any incisions on the abdomen. Devices can then be placed in the stomach or removed through the scope. Laparoscopy involves inserting a video telescope into the abdomen through one incision. Additional incisions are placed in the upper abdomen. The operation is then carried out using specialized instruments. This approach has the advantage of smaller incisions, less pain, quicker recovery, fewer wound problems, earlier discharge from the hospital and less scarring while providing the same weight reduction as the traditional open approach. The typical stay in the hospital is one night.

In the rare situations where bariatric surgery cannot be safely completed with the laparoscope, an incision from the breastbone to just above the umbilicus (navel, belly button) is used.

Patient selection

A successful surgery is gauged not only by weight loss, but also by the improvement of your medical issues. Before surgery, we will evaluate your medical issues and calculate your excess body weight. Excess body weight is the weight over what a person of your height should ideally weigh. We consider weight loss of more than 50% of pre-operative excess body weight a good result. We expect 85 to 90% of patients to achieve a good to excellent result.

The average patient loses 50% to 70% of excess body weight with sleeve gastrectomy 50% to 75% of excess weight with gastric bypass and 60% to 85% with duodenal switch, but there is a great deal of variation with some patients losing more and some losing less.

With that weight loss, patients have a high likelihood that many of their medical issues will improve or go away completely. In addition, you can see improvement of some medical issues even before weight loss occurs. For example, persons with diabetes can see improvement or remission of their diabetes within a few weeks of surgery.

Bariatric surgery may be right for you if:

- You are at least 18 years old.
- You have a body mass index (BMI) of 30* or greater with comorbidities (health problems), OR you have a BMI of 40 or greater without comorbidities.
- You have physical problems and/or diseases related to obesity including, but not limited to: diabetes, high blood pressure, elevated blood fats, heart problems, sleep apnea, chronic back or knee pain or degenerative arthritis.
- You have been overweight for more than 5 years.
- Your serious attempts to lose weight have had only short-term success.
- You are prepared to make major changes in your eating habits and lifestyle.
- You are willing to continue working with our bariatric team for lifetime follow-up care.

Bariatric surgery may not be right for you if:

- You have medical conditions that make the surgery too risky.
- You currently have a problem with drug, alcohol or tobacco abuse.
- You have an unstable psychiatric condition such as schizophrenia.
- You have an uncontrolled eating disorder.
- You are not ready to make dietary changes and make physical activity a part of your life.
- You are not committed to lifelong follow-up.

* The American Society for Metabolic and Bariatric Surgery (ASMBS) recognizes a patient with a BMI over 30 with comorbidities should be considered for bariatric surgery. However, insurance providers currently only recognize patients with a BMI over 35 with comorbidities to be candidates for bariatric surgery. In the case that insurance won't cover the procedure, we do have self-pay options for patients concerned enough about their health to proceed with surgery outside of insurance.

Are you a candidate for bariatric surgery?

Calculating Ideal Weight & BMI

Body mass index (BMI) is a measurement calculated using your weight and height. We calculate ideal body weight using BMI. A BMI of 25 is considered “ideal”. Ideal body weights based on BMI are often not a realistic goal weight for our patients, but are a recognized standard of body weight measurement that we use to calculate your excess body weight. You can identify your BMI using the table below using your weight in pounds and your height in inches.

If your BMI falls into the purple range (> 40), your weight qualifies for bariatric surgery. If your BMI falls in the red or dark yellow range ($> 30^*$ but < 40), you may qualify for bariatric surgery if you have other health problems related to obesity such as diabetes, high blood pressure, elevated cholesterol and others.

Weight (pounds) Body Mass Index (BMI) TABLE																						
	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330
4'5"	30	33	36	39	40	43	45	48	50	53	55	58	60	63	65	68	70	73	75	78	80	83
4'6"	29	31	34	37	39	41	43	46	48	51	53	56	58	60	63	65	68	70	72	75	77	80
4'7"	28	30	33	36	38	40	42	44	47	49	51	54	56	58	61	63	66	68	70	72	75	77
4'8"	27	29	31	34	36	38	40	43	45	47	49	52	54	56	58	61	63	65	67	70	72	74
4'9"	26	28	30	33	35	37	39	41	43	46	48	50	52	54	58	59	61	63	65	67	69	72
4'10"	25	27	29	31	34	36	38	40	42	44	46	48	50	52	54	57	59	61	63	65	67	69
4'11"	24	26	28	30	32	34	36	38	40	43	45	47	49	51	53	55	57	59	61	63	65	67
5'0"	23	25	27	29	31	33	35	38	39	41	43	45	47	49	51	53	55	57	59	61	63	65
5'1"	23	25	27	28	30	32	34	36	38	40	42	44	45	47	49	51	53	55	57	59	61	62
5'2"	22	24	26	27	29	31	33	35	37	39	40	42	44	46	48	49	51	53	55	57	59	60
5'3"	21	23	25	27	28	30	32	34	36	38	39	41	43	44	46	48	50	51	53	55	57	59
5'4"	21	22	24	26	28	29	31	33	34	36	38	40	41	43	45	46	48	50	52	53	55	57
5'5"	20	22	23	25	27	28	30	32	33	35	37	38	40	42	43	45	47	48	50	52	53	55
5'6"	19	21	23	24	26	27	29	31	32	34	36	37	39	40	42	44	45	47	49	50	52	53
5'7"	19	20	22	24	25	27	28	30	31	33	35	36	38	39	41	42	44	46	47	49	50	52
5'8"	18	20	21	23	24	26	27	29	30	32	34	35	37	38	40	41	43	44	46	47	49	50
5'9"	18	19	21	22	24	25	27	28	30	31	33	34	36	37	39	40	41	43	44	46	47	49
5'10"	17	19	20	22	23	24	26	27	29	30	32	33	35	36	37	39	40	42	43	45	46	47
5'11"	17	18	20	21	22	24	25	27	28	29	31	32	34	35	36	38	39	41	42	43	45	46
6'0"	16	18	19	20	22	23	24	26	27	29	30	31	33	34	35	37	38	39	41	42	43	45
6'1"	16	17	19	20	21	22	24	25	26	28	29	30	32	33	34	35	37	38	40	41	42	44
6'2"	15	17	18	19	21	22	23	24	26	27	28	30	31	32	33	35	36	37	39	40	41	42
6'3"	15	16	18	19	20	21	23	24	25	26	28	29	30	31	33	34	35	36	38	39	40	41
6'4"	15	16	17	18	20	21	22	23	24	26	27	28	29	30	32	33	34	35	36	38	39	40
6'5"	14	15	17	18	19	20	21	23	24	25	26	27	29	30	31	32	33	34	35	36	38	39
6'6"	14	15	16	17	19	20	21	22	23	24	25	27	28	29	30	31	32	34	35	36	37	39
6'7"	14	15	16	17	18	19	20	21	23	24	25	26	27	28	29	30	32	33	34	35	37	39
6'8"	13	14	15	17	18	19	20	21	22	23	24	25	26	28	29	30	31	32	33	34	35	37
6'9"	13	14	15	16	17	18	19	20	21	23	24	25	26	27	28	29	30	31	32	33	34	35
6'10"	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	34	35

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The bariatric procedures



Gastric balloon

Performed in the endoscopy suite, Obalon Balloon System patients swallow a capsule that contains a small balloon which travels to the stomach. The physician inflates the balloon, which takes up space in the stomach and makes you feel full more quickly. Once placed, patients can drive and immediately resume daily normal activity. Over the next several months, two additional balloons will be placed for a total of three – all of which are removed in the endoscopy center at the hospital at six months.

On average, most Obalon patients lose around 30 percent of their total body weight with appropriate dietary changes and exercise.

Side effects are generally mild and include nausea and abdominal pain. Gastric perforation is a rare but serious complication associated with the balloon.

Adjustable gastric banding

Adjustable gastric banding (Lap Band) is the only adjustable weight loss surgery. It works by placing an inflatable silicone band around the top part of the stomach, which creates a small pouch and, in effect, makes the stomach smaller.

This pouch holds about a half-cup of food, rather than the roughly six cups that a normal stomach holds. It fills with food quickly, which means patients won't be able to eat as much and will feel full faster, yet it also allows them to absorb nutrients from food normally.

The band can be adjusted to meet your needs. For instance, it can be deflated if you become pregnant and it can be tightened if you are not losing enough weight to make a healthy difference.

During the procedure, the surgeon uses laparoscopic techniques, making a small incision and using instruments to implant an inflatable silicone band into your abdomen. Like a belt, the band is fastened around the upper stomach to create a new, tiny stomach pouch that limits and controls the amount of food you can eat. It also creates a small outlet that slows the emptying process into the stomach and the intestines.

The band is connected by tubing to a reservoir, which is placed under the skin during surgery. To change the size of the band, saline solution is injected into or withdrawn from the tubing with a fine needle, which inflates or deflates the band's inner surface.

You will have office visits to receive fluid adjustments through your port.

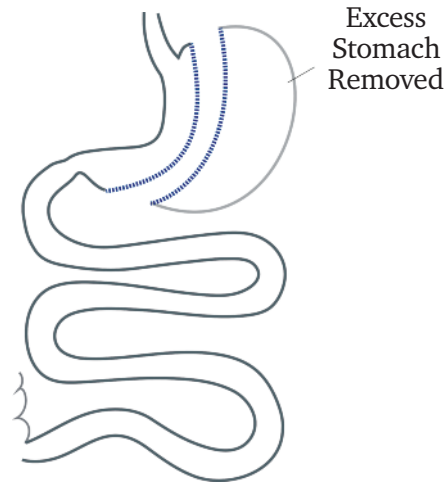
While not common, excessive vomiting can result if you eat too quickly; take large bites of food; drink fluids with your meals/snacks; eat dry, tough or sticky foods; or have your band adjusted to where it is too tight. If these things are avoided, excessive vomiting should not be an issue.

Gastric band patients typically lose 20-40 percent of their excess weight. The ideal patient for a band is someone who is determined to make lifestyle changes. Patients will typically lose less weight with this procedure than other surgical options. Results vary by patient.

Disadvantages

- Slower and less reliable weight loss than other bariatric procedures
- Regular followup is critical for optimal results. Even after reaching and maintaining success weight, patients may still need to see their bariatric provider for further adjustments.
- Requires an implanted medical device
- In some cases, effectiveness may be reduced due to slippage of the band
- High instance of removal and revisional procedures due to band erosion, slippage or vomiting
- Gastric banding can help patients feel satisfied sooner and with less food, but it won't eliminate the desire to eat. Patients need to follow their specific diet and exercise guidelines provided by the bariatric surgeon to achieve success.

A hospital stay after a gastric band procedure is typically the same day, or less than 24 hours. Many patients return to normal activity within one to two weeks. Heavy lifting is restricted for about four weeks.



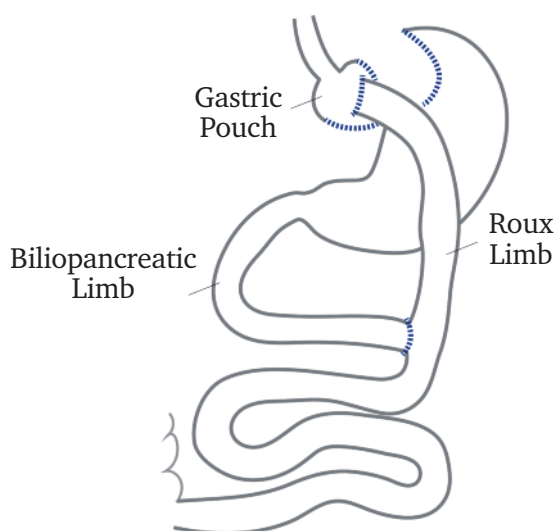
Sleeve gastrectomy

Sleeve gastrectomy is a bariatric procedure that decreases the size of your stomach and changes the 'appetite' hormone messages in the gut. A normal stomach can hold several quarts. A sleeve gastrectomy will decrease the size of your stomach so it can only hold 4 to 5 ounces.

During the procedure, the sleeve is created using a surgical stapler and the stomach is divided. The excess stomach is removed. The valve at the outlet of the stomach remains. This helps normal stomach emptying and allows for the feeling of fullness. The food channel is not rerouted or bypassed. Because no bypass or rerouting takes place, food is absorbed in its normal manner. This makes vitamin and nutrient deficiencies less likely to occur. The sleeve gastrectomy procedure is the least invasive bariatric surgery that does not involve a device. It is not reversible or adjustable.

Sleeve gastrectomy makes the stomach much smaller so that less food can be eaten at a meal. It also changes the gut hormones that provide chemical feedback to the brain to curb hunger and increase the feeling of being full after small amounts of food. This also has a positive impact on how the body regulates insulin and blood sugar.

Typical weight loss from this surgery is 50% to 70% of excess body weight. See page 10 for potential risks of this procedure.

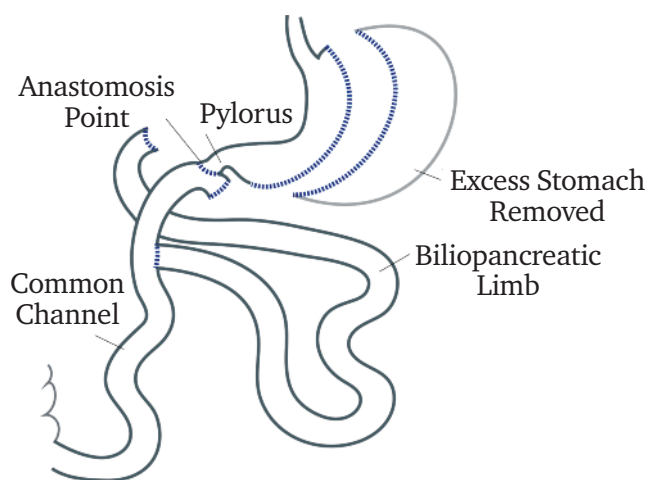


Gastric bypass

The gastric bypass creates a very small upper stomach pouch (less than one ounce) by dividing the stomach. Instead, food passes out of the upper pouch through a small opening into the small intestine. Most of the stomach and the first part of the small intestine are bypassed by the food. The point where the bile and pancreatic secretions are returned to mix with the ingested food is placed several feet down from the stomach. The major objective is to reduce the size of the stomach so that less food can be eaten at a meal and to change the way nutrients are absorbed in the small intestine.

The surgery also changes the gut hormones that provide chemical feedback to the brain to curb hunger and increase the feeling of being full after small amounts of food. This also has a positive impact on how the body regulates insulin and blood sugar.

Typical weight loss from this surgery is 50% to 75% of excess body weight. See page 10 for potential risks of this procedure.



Duodenal switch

The single and dual anastomosis duodenal switch surgeries are bariatric procedures offered by some of our surgeons. Your surgeon will explain the possible types of duodenal switch that may be right for you. First, a smaller stomach is created by removing a portion of the stomach, very similar to the sleeve gastrectomy. Next, a large portion of the small intestine is bypassed. The first portion of the small intestine is divided just past the outlet of the stomach. A segment of the last portion of small intestine is then brought up and connected to the outlet of the newly created stomach, so that when you eat, the food goes through a newly created stomach and empties directly into the last segment of the small intestine.

The bypassed small intestine, which carries the bile and pancreatic enzymes that are necessary for the breakdown and absorption of protein and fat, is reconnected to the last portion of the small intestine so that these enzymes can eventually mix with the food stream. Similar to other bariatric surgeries, the duodenal switch helps to reduce the amount of food that is consumed. Unlike the other procedures, there is a significant amount of small bowel that is bypassed by the food stream and food does not mix with the bile and pancreatic enzymes until very far down the small intestine. This results in a significant decrease in the absorption of calories and nutrients (particularly protein

and fat) as well as nutrients and vitamins dependent on fat for absorption (fat soluble vitamins and nutrients). Like other bariatric surgeries, the duodenal switch also affects gut hormones in a manner that impacts hunger and fullness, as well as blood sugar control. The duodenal switch is considered to be the most effective surgery for the treatment of diabetes.

During the last few years, the single anastomosis duodenal switch, a less invasive, modified version of the duodenal switch, has become an option. It is also sometimes referred to as the SADS, SIPS, SADI, SADI-S, or Loop DS procedure. Instead of using two connections as in the Roux-en-Y gastric bypass or the more traditional duodenal switch, a single connection is made in a loop configuration. By having one connection instead of two, the surgery is performed more quickly and with less risk of leak.

The ideal patient for a duodenal switch has more weight to lose, particularly patients with a BMI over 50 or with insulin dependent diabetes. Additional benefits are a lower incidence of ulcers than a gastric bypass operation.

Typical weight loss from this procedure is 60% to 85% of excess body weight. See the following page for potential risks and complications of this procedure.

Potential risks & complications of surgery

Bariatric surgeries are very safe operations. Major studies show complication rates that are similar to laparoscopic cholecystectomy (gallbladder removal). The main immediate concern is leakage from the staple line or intestinal connections. Symptoms of leakage include pain, fever and shortness of breath. Leakage, though rare, is potentially fatal.

Specific risks and possible complications of the **sleeve gastrectomy** include:

- Narrowing or stricture of the sleeve
- Leakage from staple line
- Heartburn or reflux
- Low vitamin or mineral levels (lower risk than gastric bypass or duodenal switch)
- Malnutrition related to rapid weight loss (lower risk than gastric bypass or duodenal switch)
- Weight regain (more potential for weight regain than other bariatric surgeries)

The specific risks and possible complications of the **gastric bypass** (Roux-en Y) include:

- Leakage from connections (<1%)
- Ulcers at the connections
- Narrowing of connections
- Hernias around bypassed intestine
- Dumping syndrome due to loss of the valve between the stomach and intestine
- Low vitamin or mineral levels – may lead to anemia and bone loss (lower risk than duodenal switch)
- Malnutrition related to rapid weight loss (lower risk than duodenal switch)
- Weight regain

The specific risks and possible complications of the **duodenal switch** include:

- All the potential risks/complications for sleeve gastrectomy and gastric bypass above except risk of ulcer and dumping syndrome.
- Greater potential for nutritional deficiencies than other bariatric surgeries. People who undergo duodenal switch must take more vitamins than those who have gastric bypass or sleeve gastrectomy.
- Weight regain.

Laparoscopic surgery has its own set of risks and possible complications. They include:

- Spleen or liver damage (sometimes requiring spleen removal)
- Damage to major blood vessels
- Lung problems
- Deep vein thrombosis (DVT) or blood clots
- Perforation of the stomach, esophagus or intestines during surgery
- Bleeding
- Infection in the abdomen or wound
- Pulmonary embolism (PE) or blood clots in the lungs
- Need for reoperation
- Conversion to open surgery
- Death

If any complications occur, you may need to stay in the hospital longer. You may also need to return to the hospital after discharge. A number of less serious complications can also occur, such as dehydration, nausea and vomiting.

Patient information seminar

When you call the office to make your first appointment, you will be scheduled for a bariatric consult with one of our bariatric providers. Before this appointment, you will attend a patient information seminar either in person or online.

The topics covered in the seminar include:

- Indications for surgical weight loss
- The anatomy and physiology of the surgeries for weight loss
- Short-term and long-term patient outcomes, data and statistics
- Risks and complications
- Pre-operative vitamin, mineral, nutrition and exercise programs necessary for good surgical outcomes and lifelong weight maintenance
- Post-surgery followup
- Insurance and timelines for how soon patients can expect to have surgery

Seminars are free and are held regularly for those interested in learning more about weight loss surgery. Patients are invited to bring relatives and friends to a seminar. We also offer an online option.

After the seminar, read all of the materials in the Bariatric Patient Handbook carefully so that you will come into the office consult well informed. As you read the handbook, write down any questions that come to mind so that your specific concerns can be addressed at your initial consult.

Please bring this handbook to your bariatric visits.

Pre-operative visits

Provider visits

During your initial bariatric consult, we will calculate your BMI and ideal body weight. The provider will discuss and review your medical history, do a brief physical exam and decide from a surgical standpoint if you are a good candidate for weight loss surgery. If you are a candidate, your provider will discuss the benefits, expected outcomes and risks for the surgical procedures. If you are not a good candidate for surgery, or your BMI does not meet the cut-offs for bariatric surgery, we will give you information on our medical weight loss program.

We will review your diet/weight loss history and assess your current nutrition, exercise and sleep patterns. Your bariatric provider will work with you to make healthy lifestyle changes as we work through the pre-surgery process. Please bring your current medication list, including supplements, to the consult. We will evaluate your current medications to determine if they may be contributing to your weight gain and discuss potential alternatives. We will also discuss the importance of support from family and friends and the patient support groups available to you.

Most patients make the decision to go forward with surgery at the initial consult. We will begin scheduling additional follow-up appointments, testing, nutrition and fitness evaluations, a sleep study and a psychiatric screening. If you have chronic medical conditions, we may need to order further testing and obtain surgical clearance from the specialists involved in your care.

In addition, some insurance companies require patients to complete a medically supervised weight loss program before they will consider authorization for weight loss surgery. If you are required by your insurance company to complete a medically supervised weight loss program, we will schedule you for the required number of pre-op visits you need to meet the requirement.

If you smoke cigarettes or use products that contain nicotine, you will have to stop. Smoking can cause ulcers, bleeding and leaks from the connections made during surgery. Nicotine prevents good wound healing. Smoking lowers lung capacity and increases your chances of having a blood clot. **Patients must be tobacco and nicotine-free for a minimum of six weeks prior to surgery.** A pre-op urine nicotine screen may be checked to measure nicotine levels to ensure that you are nicotine-free. **Patients will have their surgery postponed if nicotine levels are positive.** Please see your primary care provider for help with smoking cessation.

Comprehensive weight management

Research shows that patients have shorter anesthesia times and better recovery after losing a small amount of weight before surgery. Pre-operative weight loss has been shown to decrease the size of the liver and to decrease the amount of fat in the abdomen. This helps the surgeon see inside the abdomen. It can also decrease the time it takes to do your surgery and increase your safety. Making healthy lifestyle changes, such as increasing activity, taking vitamins and eating a healthy diet before surgery, will put you in the best possible shape for major surgery and general anesthesia. Making these changes before surgery will also help you establish the new lifestyle patterns you need to be successful after surgery.

Nutrition consults

All patients, including self-pay patients, will be required to meet with one of our dietitians to develop a personal nutrition plan to help with weight loss. Your dietitian will determine the number of visits needed for you to be cleared for surgery.

You are invited to bring a support person with you. We cannot accommodate young children at these appointments. Please make other arrangements for your children. Dietitian visits may be covered by insurance.

Your dietitian will discuss your pre-op diet as well as your post-op nutrition and vitamin supplement recommendations. Following the dietitian's recommendations closely after surgery will be a significant factor in the prevention of weight regain and nutrient deficiencies in the years after surgery.

The nutrition information includes:

- Review of the bariatric nutrition handbook
- In-hospital and home-from-the-hospital diet progression
- Sample menus
- Do's and Don'ts
- Selecting and preparing liquid, pureed and soft foods
- Reading food labels
- Vitamin and mineral supplementation
- Support resources

Your dietitian team is an important part of your journey to weight loss and better health. You will meet with our dietitians after surgery to make sure you are comfortable following the nutrition guidelines.

Exercise consults

Physical activity is important for heart health and for maintaining lean muscle mass with weight loss. Unless you are physically unable, we will ask that you begin a walking or other aerobic exercise activity prior to your surgery. You will need to have a plan in place so that you are ready to restart exercise as soon as you are able after surgery. If you are unable to walk, look into aquatic or rehab programs at a local fitness center. You may be referred to our fitness specialist to help create short- and long-term goals and develop a fitness plan that's designed specifically for you.

The fitness specialist will review pre- and post-operative exercise including:

- Cardiovascular fitness
- Resistance/strength training
- Flexibility
- Balance

You will also receive resources for incorporating exercise at home, an exercise plan and a fitness packet.

WakeMed Healthworks offers a post bariatric surgery fitness program at the Raleigh Campus and Cary Hospital locations. Contact our fitness specialist for more details at (919) 350-8613.

Support group

Bariatric patient support groups are proven to be an essential part of the recovery process for many patients. Research shows that patients who regularly attend support group meetings have better weight loss. All potential and post-operative patients and their families are invited to attend the WakeMed Bariatric Support Group meetings, which are held on the second Wednesday of each month in the WakeMed Cary Hospital Conference Center at 6:30 pm. These meetings are free and there is no registration required to attend.

Support groups offer a comfortable forum to learn and ask questions for patients who have already had bariatric surgery and for people considering or awaiting surgery. Patients can learn a tremendous amount when sharing individual experiences.

Support groups tend to be upbeat, informative and forward looking! Because we think that support group attendance is so important to patient education and patient recovery, your bariatric team may require you to attend a support group meeting prior to having surgery.

Psychiatric consult

Behavior problems, such as binge eating and emotional problems, such as depression and anxiety, are not cured by surgery. In fact, these kinds of problems can actually worsen after surgery. All patients are required to be evaluated by a mental health professional before surgery to ensure success after surgery. This visit is an insurance requirement and should be reimbursable.

Sleep apnea

People who have a BMI over 35 have a very high rate of sleep apnea or obstructive sleep apnea (OSA). This is a condition where your airway collapses and you stop breathing when you sleep. OSA can lead to dangerously low oxygen levels while also causing poor sleep. Sleep apnea is a serious condition that increases your risk of heart attack, stroke, high blood pressure and abnormal heart rhythm. Signs of sleep apnea are daytime sleepiness, weight gain, snoring and gasping during sleep.

Sleep apnea is diagnosed using a sleep study or polysomnogram. Unless you are already using a continuous positive airway pressure (CPAP) device, or have had a recent sleep study, you may be tested for OSA. You will spend a night in a sleep lab sleeping in a comfortable, secure, climate controlled room while being monitored by a sleep technician. Depending on your insurance, your sleep study may be done at home.

If the test shows sleep apnea, you will need to be treated. The most common treatment for sleep apnea is CPAP. This is a machine that helps you breathe during the night and keeps your airway open. You will be fitted for your CPAP machine and will need to use it every night while sleeping. If you have equipment issues or mask problems, do not stop using your CPAP. Contact your equipment company or sleep medicine specialist so they can help you make the proper adjustments.

You will bring your CPAP machine to the hospital when you come for surgery. You will need it for your overnight stay.

After surgery, many patients find that their sleep apnea improves with weight loss and consider discontinuing the CPAP device use. You will need to return for a follow-up sleep study with the sleep medicine specialist to determine if it is safe to stop CPAP therapy. Your bariatric provider will help you decide when this may be appropriate.

Final pre-surgery visit

At your pre-operative visit with the surgeon, results from your pre-operative lab work and studies will be reviewed. Our surgeons will not operate on you if you have failed to be compliant with the recommended course of treatment. The bariatric surgeon will review the surgery and answer your questions. When you feel that you fully understand everything about the surgery, you will be asked to sign a surgical consent form. Preparation for surgery, surgery date and time, as well as post-operative instructions and medicine management will be reviewed with you. You will be given post-op medicine prescriptions that we ask you to fill before your surgery.

You will be instructed to follow a pre-operative 'liver reduction' diet in the weeks before surgery.

Before surgery, you will go to WakeMed Cary Hospital for pre-operative testing. The nurse will get a medical history and provide more information to you including when to arrive at the hospital, where to go once inside the hospital and eating/drinking instructions. The nurse will also answer any questions you have. You will also meet with an anesthesiologist. Pre-op bloodwork will be drawn for testing. All female patients with reproductive potential will have a pregnancy test prior to surgery. You will also attend the bariatric surgery pre-op class at WakeMed Cary Hospital.

Your surgery will be performed at WakeMed Cary Hospital. If you are from out of town, you may need to make arrangements to stay overnight in the Cary area before your surgery.

If you get a cold, cough, fever or experience any changes in your condition before surgery, please call your bariatric office. We may need to reschedule your procedure.

Day of surgery

You will stay at least one night in the hospital. In most cases, you will be discharged the next day. Bring only your necessities to the hospital, including:

- This handbook
- Your nutrition manual
- Your CPAP (if you have one)
- Clear liquid protein drink
- A small overnight bag

Family members (or significant others) may accompany you to Day Surgery. There, you will be prepared for surgery, an IV will be started and you will be given medication to reduce the chance of nausea and vomiting. You may also be given IV medicine to relax you. To decrease the risk of developing blood clots, sequential compression devices (SCDs) will be placed on your legs and you may receive a blood-thinning medication.

While you are in surgery, your family will be advised to wait in the Day Surgery Waiting Area near the operating room. Your surgery will take between 1 to 2 hours

depending on the type of procedure you are having and if any extra procedures are needed. Immediately after your surgery, your surgeon will go to the Day Surgery Waiting Area to give your family a progress report while you recover.

After surgery

Following the procedure, you will be taken to the recovery room and you will stay there until you are awake. Once you are awake and recovered from the anesthesia, you will usually go to a room on one of the surgical nursing floors.

As a precaution, you will have oxygen through a tube under your nose after surgery. You will have an oxygen monitor clip on your finger to make sure that you are breathing well.

After the operation, you should take frequent deep breaths and cough. This is very important to keep your lungs fully expanded, clear secretions and prevent pneumonia. Some discomfort may be present from the incisions, especially when coughing, but coughing is still important. Coughing, deep breathing or sneezing will not break your sutures. Deep breathing and coughing are encouraged every hour while awake for the next several days. To help with your breathing, you will use the incentive spirometer (plastic breathing device) every hour while you are awake. You will be shown how to use it during your pre-operative class.

Medicine will be available for pain if you require it. While it may not take all the pain away, it will make you more comfortable. Most patients require pain medication for a short time after surgery. You will also have medication ordered in case you have nausea. It is important to let the nursing staff know if you experience pain or nausea. It is much easier to control both pain and nausea if you get medicine before it worsens. Keeping your pain under control will speed your recovery.

Sequential compressive devices (SCDs), will stay on your legs to prevent blood clots in your legs. The best way to prevent blood clots and pneumonia (the two most common problems after surgery) is to get out of bed and walk. You will get out of bed to a chair and will be walking with help down the hall on the day of surgery.

You will begin drinking sugar-free clear liquids on the day of surgery. Occasionally, an upper GI (an X-ray test to check for leaks) will be ordered before starting the sugar-free, clear liquid diet.

If you have diabetes, your blood sugar will be monitored while you are in the hospital. Patients who receive insulin will receive it on a sliding-scale basis as needed. At the time of discharge, your nurse will advise you on how to take your diabetes medicines once you get home.

If you are tolerating liquids well and your pain is controlled with oral pain medication, you will be discharged the day after surgery. You will attend a group class on the nursing unit with the bariatric nurse and registered dietitian. A detailed discharge instruction sheet will be given to you before you leave with information about diet, wound care, activity, showering, fever, pain, nausea/vomiting, medications and other instructions. You may go home on a reflux medicine, even if you do not have reflux, in order to prevent ulcers. If you are not having any issues at your 3-month follow-up, we will discuss stopping this medicine.

Patients at home

It is important for you to get up and walk many times each day after you are home. We recommend that you not stay in one place longer than 30 minutes at a time unless you are sleeping and that you keep your legs elevated when you are seated. You may use stairs as necessary. Allowing your legs to dangle over the edge of a chair or the edge of a bed for more than a few minutes will cause your circulation to slow and may allow blood clots to form. Daily exercise should be started immediately and progressively increased. Your fitness plan will be tailored to you.

Do your breathing exercises using the incentive spirometer (IS) device every hour while awake for several days after surgery.

At home, you may shower, but avoid submerging your incisions for four weeks. Pat your incisions dry after you shower. Do not use any ointments or bandages over your surgical sites and allow them to be open to air. Your sutures will dissolve and the glue will peel off during the next few weeks. Some swelling and bruising around the surgical sites is normal. If the swelling becomes severe,

it may indicate bleeding and you should contact your bariatric provider. Mild discomfort is also normal. If pain becomes severe, please contact your bariatric office. You may experience numbness and itching around the surgical sites. This is normal and typically gets better in two to three months.

Some larger medications may need to be crushed for the first 30 days after surgery. Check with your bariatric team to determine how to handle your medications.

You will need to make sure that you pay special attention to your fluid and protein intake. All liquid sweets, such as soda (including diet soda), juice, or sweet tea, should be avoided permanently after discharge. Be very careful to remain on the special diet in the Bariatric Surgery Nutrition Guidelines booklet for eight weeks to allow complete healing of the staple line and/or connections. All meals should be eaten sitting up.

You will begin taking a B-complex vitamin on the day you come home from the hospital. Your B-complex must be chewable, liquid or smaller than a Skittle and contain at least 12mg of B1 (thiamine).

There are many bariatric-specific vitamins available, such as Bariatric Fusion, Celebrate and Bariatric Advantage. You will start your bariatric multivitamin regimen two weeks post-op. You will continue this bariatric vitamin regimen for the rest of your life. Please see the recommended bariatric vitamin and mineral supplementation regimen recommendations handout or talk to your bariatric provider or registered dietitian. Many of the bariatric vitamin regimens can be purchased at the Envision Nutricenter (919) 234-4907.

Regular multivitamins do not contain the proper levels of vitamins and minerals that you need after surgery and should not be used.

When to call the bariatric provider:

- Fever greater than 101°F
- Chills, night sweats
- Redness and increased pain around the surgical sites
- Increased shortness of breath
- Excessive bleeding at the surgical sites
- Dizziness or lightheadedness
- Inability to keep fluids down
- Racing heart beat
- Change in mental status such as confusion
- Pain that is unrelieved by pain medication
- Chest pain that continues for more than five minutes



Post-operative appointments & follow-up care

You will have four to five scheduled appointments in the office during the first year after surgery. Your first appointment will be two weeks after surgery. Your second appointment (unless you need to come in sooner) will be four to six weeks after surgery. You return for 3-, 6- and 12-month post-op visits. You will also meet with the registered dietitian post-op. You will continue to follow up with your bariatric providers at least once a year for the rest of your life.

Work, activity & exercise

Many patients find that they can return to work in one to two weeks, however some patients need up to four weeks before being able to resume the activities of work. The ability to return to work varies from patient to patient and is a function of the demands of your job and the speed of your individual recovery. It is important to remember that you are recovering from surgery, eating very little and losing weight rapidly. The first few weeks are a time to get to know your new digestive system and focus on nutrition, gradually increasing exercise and keeping hydrated.

You will be expected to start back on a modified version of your pre-operative exercise program the day you get home from the hospital. Most patients resume a walking program. Be sure you are drinking at least 64 ounces of water as you increase your exercise. You may need more than 64 ounces to make up for sweating, especially in the warmer months. Exercise will become easier after your surgery as you lose excess weight, build stamina and develop cardiovascular fitness. Work up to doing your exercise most days of the week for a minimum of 30 minutes each day. Find an exercise routine that you enjoy and can continue to do the rest of your life. Your workout plan should include plans for exercise even when the weather does not cooperate.

Call our fitness specialist at (919) 350-8613 for more information on the post-bariatric surgery fitness program at WakeMed Healthworks.

Remember, blood clots can form in the legs as late as four to six weeks after surgery and are aggravated by inactivity. If you must drive a long distance, plan to stop the car every 30 minutes to walk around for a while. We recommend that you avoid flying long distances on a plane for several weeks after surgery. If you must fly, get up and walk every hour and be sure to stay hydrated.

Light housekeeping is fine as soon as you feel able. Sexual activity may be resumed two weeks after surgery

or as soon as you feel able. Plan to return to driving a car after you have discontinued taking pain medication. You may lift up to 20 pounds for the first four weeks following your surgery. Increase strenuous activities slowly and use pain as an indication of overdoing it. Add weight lifting (resistance training) exercises to your activity starting the second month after surgery.

Post-operative nutrition plan

When you get home from the hospital, you will start the nutrition plan as outlined in the nutrition handbook. Follow this plan very carefully. You will be scheduled for a visit with the dietitian after your two-week post-op visit and again at three months post-surgery. You will slowly advance from a sugar-free liquid diet to a solid diet. The diet progression will take about eight weeks. Vomiting should be avoided as much as possible. If you do not follow the diet restrictions carefully, you may trigger blockage or vomiting episodes, which can lead to stretching the new pouch or esophagus. Patients may have to return to the hospital or undergo a second operation **as a direct result of overeating and/or starting solid foods too soon.**

Both hydration and adequate protein intake are important. Your body is trying its best to heal and fight off infection. Without adequate protein intake, your body will not have the nutrition it needs to heal. To make sure that you get enough protein after surgery, you will drink high protein liquid meal replacements and count protein grams. Depending on your gender and surgery type, you will need to get between 60 and 100 grams of protein per day.

At this time in your recovery, you will need to concentrate on drinking enough fluids to prevent dehydration. You will need to drink a minimum of 64 ounces of sugar-free, non-carbonated fluid every day. Avoid caffeinated drinks for at least two months. If you do drink caffeinated beverages, do not count the drink as part of your fluid intake because caffeine can lead to dehydration.

General rules to follow

- Eat a small, protein-focused meal every three to four hours for approximately four to six meals per day.
 - Take small bites, chew well and pause between bites.
 - Take 20 to 30 minutes to eat each small meal. By going slowly with your meals, you will learn which foods are tolerated more readily and avoid eating too much too fast.
 - Drink liquids between meals only. Avoid liquids until 30 minutes after a meal. You may take small sips of liquid with your meals. Drinking fluids within 30 minutes after eating may lead to vomiting or cause the food to be “washed through.” Since the feeling of satiety is a function of stretch placed on the stomach wall, flushing foods through the pouch too soon after eating will lead to early or between-meal hunger.
 - Always include high protein foods at each meal. Protein should come first, followed by non-starchy vegetables and then complex carbohydrates. Follow the Plate Method provided by your dietitian. The nutrition consultation and handbook will provide you with information to help you formulate balanced, high protein, low fat, low carbohydrate meals. Having bariatric surgery does not mean you need to cook or eat different meals than the rest of your household. This is a great opportunity to engage your family in healthy eating and encourage them to consume more nutrient-focused foods.
 - Relax and enjoy mealtimes. Wait until you are more relaxed before eating if you are under stress or anxious at mealtime. Highly stressful situations will often cause food intolerances.
 - Do not drink sweet drinks, such as fruit juice (even unsweetened), sweetened coffee drinks, soda, sweet tea or lemonade. Do not add sugar to your drinks. Sweet drinks add too many calories and have little or no nutritional value.
 - Do not drink carbonated beverages. These can make you feel bloated and stretch the pouch. The phosphoric acid in dark colas also lowers the absorption of calcium.
 - Do not drink alcohol including hard liquor, beer, wine or wine coolers. Alcohol can cause postoperative complications, including ulcers. Alcohol provides calories but no nutritional value. Also, after bariatric surgery a very small amount of alcohol can lead to excessively elevated alcohol levels and intoxication.
- We ask that you avoid all alcohol for at least 12 months after surgery.**

- Stop eating when you feel full. You do not need to finish your entire portion if you are full. Continuing to eat after you are full will cause nausea and vomiting.
- Call your doctor if you are not able to eat due to nausea and vomiting, or if you have severe diarrhea or are vomiting for more than 24 hours.
- Moist foods may be tolerated better than foods that are dry or have a tough texture.

Post-operative concerns

Nausea/dehydration

The presence of nausea the first few days after surgery can lead to dehydration if it is not treated. Nausea may be due to overeating, fullness, pain medication or not eating. Be sure to use your prescribed anti-nausea medicines if needed. Some patients also get relief with decaffeinated peppermint, green or ginger tea. Eating slowly, chewing your food thoroughly and not starting solids too soon after surgery can prevent vomiting. Avoid lying down after eating. Vomiting that does not stop for several hours could indicate that the stomach pouch or intestine is blocked. Call your bariatric provider if vomiting cannot be controlled with the measures above.

Hydration is also challenging due to a new smaller stomach that has a limited capacity to hold fluids and the need to wait 30 minutes after eating before having something to drink. The goal is to drink at least 64 ounces of water daily. Carry your water bottle with you and take frequent sips. It may help to set reminders to help you remember to drink. If you are experiencing post-op nausea or cannot get in your fluids, you may become dehydrated. Signs of dehydration include:

- Decreased urine output
- Dark yellow, concentrated urine
- Dry mouth and swollen tongue
- Confusion, palpitations, weakness, dizziness and fainting

If you feel you are becoming dehydrated and cannot replace your fluids, call your bariatric provider for instructions.

Dumping syndrome

Eating foods that are made of highly concentrated sugar and/or fat may cause “dumping syndrome” in patients who have had gastric bypass surgery. Dumping syndrome occurs when food, especially sugar, moves too fast from the stomach to the small intestine. Dumping syndrome usually occurs because of poor food choices, such as refined and high glycemic carbohydrates. It can also occur with dairy, some fats and fried/spicy foods. Dumping can also be triggered by drinking fluids with the meal. Symptoms can occur 30 to 60 minutes after a meal and can last up to 60 minutes. Symptoms include:

- Nausea/vomiting
- Abdominal pain and cramping
- Diarrhea
- Feeling uncomfortably full or bloated
- Sweating
- Weakness/dizziness
- Flushing of the face or skin
- Rapid or irregular heartbeat

“Late dumping” can occur one to three hours after eating and the symptoms are due to reactive hypoglycemia (low blood sugar) related to increased insulin release after sugar is eaten. Late dumping symptoms include sweating, shakiness, loss of concentration, hunger and passing out.

Following the nutrition guidelines in your nutrition handbook, particularly avoiding refined, processed carbohydrates or sweets, will help prevent dumping and promote continued weight loss.

Bowel changes

Occasionally diarrhea occurs and is more common with the duodenal switch. Surgery may unmask previously unidentified lactose intolerance. If you are experiencing gas and diarrhea, try eliminating dairy from your diet. Sugar alcohols should also be eliminated. You will learn quickly which foods you can and cannot tolerate.

Constipation is more frequently seen following bariatric surgery, particularly with the sleeve or gastric bypass. It is usually due to insufficient intake of water and may be corrected by focusing on drinking more water. You may need to increase your fluids (water and protein shakes) to more than 80 ounces daily. Some nutrient supplements, including calcium and iron, may contribute to constipation. Protein meal replacements

and narcotic pain medication can also slow bowel function. Discuss treatment for constipation with your bariatric provider. After bowel movements have been established, continued issues with constipation can be treated with the addition of fiber products like Benefiber.

Bariatric patients may have more flatulence or gas due to the shortened bowel. Gas comes from two sources: swallowed air and normal breakdown of certain foods by bacteria in the intestines. Foods high in carbohydrates cause more gas. The carbs that cause the most gas are typically beans, some fruits, soda, milk products, foods containing sorbitol, or dietetic products. Lactose is commonly the culprit of gas, so try lowering your lactose containing foods. Yogurt is better tolerated than milk.

Trouble swallowing

Dysphagia, or trouble swallowing, can be caused by eating too fast, too much, or not chewing well enough when the stomach has been made smaller. Food backs up into the esophagus and causes chest pressure or tightness in the throat. It is important to stop eating if you have these symptoms, otherwise, vomiting may occur. You can avoid dysphagia by chewing very well (15 to 20 times) and eating slowly (putting the fork down between bites).

You will find a list of foods to avoid in the nutrition handbook. Past experience indicates that, with many patients, certain foods may not be tolerated. Some of the foods you might want to avoid are potato skins, onion skins, fruit peelings, the membrane between orange and grapefruit sections, the stringy portion of celery, asparagus, string beans and untoasted bread. Some patients have difficulty with chicken, steak and pork. Many patients have some difficulty with rice, pasta and tortillas.

Typically, any swallowing issues improve with time. If your difficulty swallowing does not improve with these measures, please contact your bariatric provider.

Scars

All new scars are red, dark pink, or purple. It takes about a year for this to fade. Once your surgery sites are fully healed, you may start using silicone pads and scar minimizing creams to make the scars softer, smoother and closer to your skin's natural color. We recommend that you protect your scars from the sun for a year after surgery. Wear sunscreen with SPF of at least 15 when out in sunny weather.

Hair loss/skin changes

Hair thinning and dry skin is expected after rapid weight loss. It is temporary. During the phase of rapid weight loss, calorie intake is much less than the body needs. This can lead to hair loss. The hair loss should get better once your weight stabilizes. Hair loss usually is noticeable two to six months after surgery. You can minimize your dry skin and hair loss by taking your bariatric vitamins as prescribed and making sure you get your recommended amount of protein. Avoid hair treatments, coloring and excess shampooing.

Loss of bone and muscle mass

Calcium is stored in the bones. Strong bones need calcium, phosphorous and other nutrients, in addition to weight bearing exercise in order to stay strong. When rapid weight loss occurs and proper vitamin and mineral supplementation is missing, weakened bones, or osteoporosis is more likely. Similarly, when weight is lost rapidly, the body will turn to its muscle stores for fuel and you will lose lean muscle mass. Following the guidelines for exercise, vitamin/mineral and protein intake will help you keep your bone and muscle mass while you are losing large amounts of fat after surgery.

Taking medications

Some larger pills may need to be crushed or changed to liquid form for the first 30 days after your operation. After that, pills are generally not a problem. Some medications should not be crushed because they are "time released". Check with your bariatric provider if you have questions about whether to crush any of your pills.

Anti-inflammatory drugs that may irritate the stomach, such as aspirin, Motrin, Advil and Aleve should not be used after gastric bypass surgery. Non-steroidal anti-inflammatory drugs (NSAIDs) can cause ulceration, bleeding, stricture and even rupture of the connections.

Vitamins & minerals

Before surgery, you must make a lifetime commitment to taking supplemental vitamins and minerals. Because you are consuming smaller amounts of food (and therefore getting less nutrition) after your surgery, you will likely not get the minimum requirement of many nutrients, vitamins and minerals. The American Society of Metabolic and Bariatric Surgery (ASMBS) recommends that all bariatric surgery patients take a bariatric formulated multivitamin regimen following surgery. More information about this is available in your nutrition handbook.

When you get home from the hospital, you will start taking a B-complex vitamin. You will begin your bariatric vitamin regimen two to four weeks after surgery, when instructed by your provider. **Regular multivitamins will not provide the micronutrients that you need after surgery.** Only use bariatric formulated vitamins approved by your bariatric team. You will need to stay on these supplements for the rest of your life. We will recheck your vitamin and mineral status regularly.

Hormones & pregnancy

Women who are taking birth control pills, hormone pills, or using patches to prevent pregnancy, treat menopausal symptoms, polycystic ovarian syndrome, irregular periods, or migraine headaches, will be required to come off of their hormone therapy for one month prior to surgery and stay off the medications for one month post-op. These medications can increase your risk of developing blood clots.

Acceptable forms of birth control during this period are diaphragms, when used with spermicidal cream and condoms, if used in conjunction with spermicidal foam. Once you restart your oral contraceptive, be aware that gastric bypass and duodenal switch surgeries may make birth control pills less effective. Also, weight loss often leads to increased fertility. **Pregnancy should be avoided for 12 to 18 months after bariatric surgery.** If you do become pregnant, please notify us so that we can collaborate with your OB/GYN doctor and dietitian to ensure that you are getting adequate nutrition.

Emotional concerns

Bariatric surgery has both physical and psychological effects. In the early months after surgery, you may experience some depression and a sense of loss related to emotional attachments you may have had to food. Although you had weight loss surgery to improve your health, the surgery changes a lifestyle that you know well and have some comfort with. When you are confronted with the reality of the 'new you', it is normal to experience emotional distress. Occasionally, adjustments to your changing body and relationship to food begin to interfere with your life. Counseling may be necessary during this period of change. We can help you find counselors who are skilled in working with people who have had weight loss surgery. Please discuss any difficulties you are having with emotional adjustment with your bariatric provider or schedule an appointment with a mental health professional.

You will need to learn new ways to deal with the emotions that caused you to eat. In the past, one of the ways you coped with stress may have been to eat. One of the keys to success with this surgery is to learn to replace those comforts with healthy activities. This will take time and you may need help learning new coping methods.

Emotional health tips

- Expect to have ups and downs as the weeks go by. If you are teary, have a good cry.
- Keep a journal of your experiences and feelings.
- Set realistic goals. Have a plan for the future! Share your goals with someone who supports you.
- Keep busy with work, exercise and new interests that don't revolve around food.
- Talk to your family and other patients for support. Attend support group regularly.
- Recognize that your partner may be having difficulty dealing with the changes in you and keep the lines of communication open.
- Some of your relationships may change through this journey and that is normal. Identify those people who are supportive and surround yourself with their love and care. You deserve it!
- Make time for yourself. Bariatric surgery does a lot of things, but it does not create more time in your day. Take care of yourself and create a home and work environment that supports your goals.
- Your inner voice is powerful. Speak positively to yourself. Pat yourself on the back for even the smallest of victories.

Obesity & support group websites

Get more support and information by visiting these websites:

- **The American Society for Metabolic and Bariatric Surgery** www.asmb.org
- **Obesity Medicine Association** www.obesitymedicine.org
- **The Obesity Society** www.obesity.org
- **Obesity Help** www.obesityhelp.com
- **Obesity Action Coalition** www.obesityaction.org

Benefits, expectations & outcomes

Bariatric surgery is not a cure for obesity; it is a tool to help you lose weight and improve your health. Weight loss is not automatic. Your behavior after surgery plays a very large part in your outcome.

After bariatric surgery, you can expect to feel full with smaller meals, have less hunger and feel an improved sense of self-control. You will find it easier to avoid snacking between meals. To be successful, you will need to avoid junky snacks and high calorie liquids and focus on eating a healthy balanced diet. You will need to avoid drinking fluids for 30 minutes after meals. Increases in your physical activity and exercise will help you on your journey to better health.

You will lose weight fairly rapidly at first. Weight loss does not follow a predictable trend and can alternate between periods of significant weight loss, followed by no weight loss. Twelve to 18 months after the operation, weight loss usually plateaus. Long-term success will depend on your new healthier eating and exercise habits. Weight loss for a sleeve averages 50% to 70% of excess body weight. Weight loss for a gastric bypass averages 50% to 75% of excess body weight, while duodenal switch, weight loss averages 60% to 85% or more of excess weight. Because there are so many factors involved in an individual's weight (genetic, social, emotional, cultural), there is no test that can accurately predict who will do very well with weight loss and who will lose a smaller amount.

Recognize that plateaus are normal. It is not uncommon for patients to question why their weight loss has stalled at times and wonder if the operation is not functioning properly. Some factors to consider when experiencing weight loss fluctuations are your hydration status, menstrual cycle and muscle mass changes. Subtle eating habit changes can stall your weight loss. Go back to your nutrition manual and food tracking. Are you getting the appropriate amount of protein? Are you grazing? Have you been measuring your portion sizes? If you suspect your weight stall may be related to eating behaviors, go back to the basics. Make an appointment with the dietitian if you need help getting back on track.

Remember, bariatric surgery does not guarantee easy and consistent weight loss. It is a tool that, if used appropriately, will help you achieve successful weight loss.

Follow up closely with your bariatric team. If you are experiencing weight gain, we can help you maximize your nutrition and fitness plans. Weight loss medications to assist with your lifestyle efforts may be helpful in some patients as well.

Weight loss surgery has been shown to dramatically improve medical conditions, such as diabetes, high blood pressure, obstructive sleep apnea, reflux disease (GERD) and joint pain. Weight loss may improve conditions such as congestive heart failure, high cholesterol, high triglycerides, urinary incontinence, menstrual irregularity and knee/back pain. Patients with type 2 diabetes obtain excellent results after surgery. Many physicians believe that bariatric surgery may be the best treatment for type 2 diabetes in the seriously obese patient.

Patients with asthma find that they have fewer and less severe attacks after surgery, especially when attacks are triggered by episodes of gastric reflux. Other respiratory problems are improved after surgery. Patients who were unable to walk without getting short of breath prior to surgery find that they can actually participate in most family activities and can begin more vigorous exercise within a few months after surgery. Sleep apnea (difficulty breathing during sleep) decreases dramatically as patients lose weight.

Achieving success

One of the most essential keys to success after weight loss surgery is to thoroughly understand that the surgery is not magical. The new smaller stomach that restricts your capacity to eat and gives you an early feeling of satiety is a “tool” you use to help you control your weight for life. This tool is one part of a larger journey that you are on to maintain a healthy lifestyle. In order for the tool to work, the new lifestyle changes you have learned need to be put to use. The sooner you become completely familiar with the guidelines in this booklet, the better you will do and the greater success you will enjoy!

Insurance & financial information

Each patient is personally responsible for his/her financial obligations for the surgical treatment of their obesity. When you first contact our office to make an appointment, we will check on your insurance coverage for weight loss surgery and then communicate with you about the results of the inquiry.

Bariatric surgery is covered by most insurance plans when it can be established that the patient is “morbidly obese,” that the surgery is “medically necessary,” and that the patient has attempted and failed at previous weight loss trials. Despite the fact that our national bariatric society guidelines indicate that bariatric surgery should be considered at a BMI over 30 for patients with certain chronic medical conditions, most insurance companies define “morbid obesity” as a BMI over 40 or over 35 with an established obesity related medical condition. So, while you may qualify for surgery at the lower BMI, your insurance will likely not cover bariatric surgery unless you meet their definition of “morbid obesity”. In the case that insurance won't cover the procedure, we have self-pay options for patients concerned enough about their health to proceed with surgery outside of insurance.

Nutrition consults may be covered by your insurance. It is your responsibility to check with your insurance company to determine if nutrition counseling is a covered benefit.

The process of obtaining insurance authorization to cover bariatric surgery involves several steps and in some cases, different strategies, depending on the type of insurance and the practices of individual insurance companies. Proof of medical necessity may also include the need for further medical testing to measure and clarify the degree of health risk of a given health problem. A psychological evaluation is required prior to surgery. Also, insurance carriers often want proof that you have attempted weight loss under supervision of a physician.

After completing the required bariatric work-up, the patient will meet with the surgeon to discuss findings and surgery. Once the indications for surgery have been evaluated and testing is completed, we will prepare and submit a request for authorization of surgery to your insurance company. Surgery is not guaranteed until we receive preauthorization from your insurance company or have signed off on a cash payment option. Please note the potential turn-around time for obtaining insurance coverage can be several weeks.

Self-pay patients, as well as any patient whose insurance did not cover the full payment, will be responsible for expenses as a result of any complications of surgery. We will inform you of the amount for which you will be personally responsible after we contact your insurance provider to determine the amount payable for this procedure. This information should be available to you before the surgery is scheduled. If you are interested in learning about the cash “self” pay options, please call your bariatric provider and we can provide you with the current rates.

You or your insurance company will be responsible for the costs of all labs or studies completed as part of your hospital stay. All payments for hospital services, anesthesia services and consultants must be paid prior to the date of service.

We will be happy to work with you and look forward to providing you excellent service and the highest quality treatment for surgical weight loss.

Notes

[illegible]

Acknowledgment

I have read the complete WakeMed Bariatric Patient Handbook in preparation for bariatric surgery and understand the contents.

Patient Name (printed)

Patient Signature

Date



www.wakemed.org

Raleigh Campus • Cary Hospital • North Hospital
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