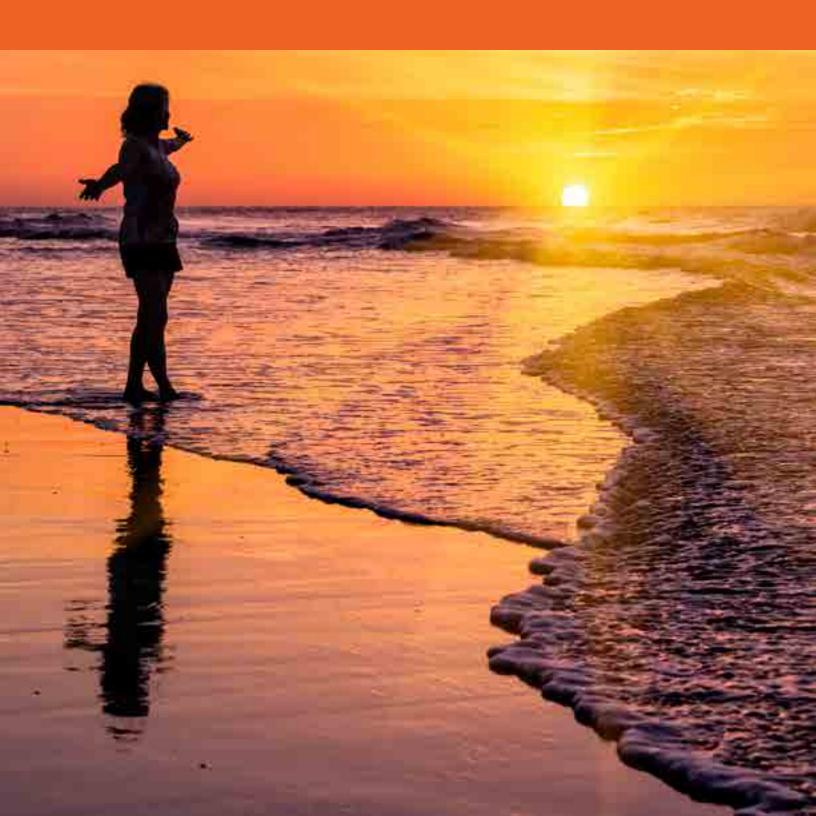
# Bariatric Surgery Center **Patient Information Packet**











# Salem Health Bariatric Surgery Center Patient Information



Salem Health Bariatric Surgery Center 875 Oak St. SE, Building C Suite 4010 Salem, OR 97301

Phone: 503-814-5286

Fax: 503-814-5469

bariatric.surgery@salemhealth.org

salemhealth.org/bariatric

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### How to get started

View the online information session at salemhealth.org/getstarted.
You'll need and a computer with headphones or speakers. Allow one to two hours to watch the video.

Call your insurance company about bariatric surgery coverage. Use the enclosed Insurance Coverage Worksheet. (If you have questions about your coverage, call our insurance specialist at 503-814-5286 and select option 3.)

If you smoke, vape, or consume any tobacco or marijuana products, you must be free of those products for at least six weeks before bringing in your packet. We reserve the right to drug test anyone.





# Complete and submit the following forms

(Please return ALL the following documents so your packet can be reviewed quickly):

- 1. Bariatric health questionnaire
- 2. Information session review (complete after watching the required video link)
- 3. Authorization form
- 4. Insurance coverage form

### How to return the packet

 By mail using the prepaid envelope (one of our staff will call you to review your packet).

OR

• Bring it to our office (Salem Hospital, Building C, Suite 5040) Monday through Friday from 8:30 a.m. to 4 p.m.

OR

 Email the completed forms to bariatric.surgery@ salemhealth.org.



# **Body Mass Index Table**

Sleeve or Lap Bypass range

Lap Bypass range

Open Gastric Bypass range

Not a candidate

Lbs.	4 ft 8 in	4 ft 9 in	4 ft 10 in	4 ft 11 in	5 ft	5 ft 1 in	5 ft 2 in	5 ft 3 in	5 ft 4 in	5 ft 5 in
155	35	34	32	31	30	29	28	27	27	26
160	36	35	33	32	31	30	29	28	27	27
165	37	36	34	33	32	31	30	29	28	27
170	38	37	36	34	33	32	31	30	29	28
175	39	38	37	35	34	33	32	31	30	29
180	40	39	38	36	35	34	33	32	31	30
185	41	40	39	37	36	35	34	33	32	31
190	43	41	40	38	37	36	35	34	33	32
195	44	42	41	39	38	37	36	35	33	32
200	45	43	42	40	39	38	37	35	34	33
205	46	44	43	41	40	39	37	36	35	34
210	47	45	44	42	41	40	38	37	36	35
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275	62	60	57	56	54	52	50	49	47	46
280	63	61	59	57	55	53	51	50	48	47
285	64	62	60	58	56	54	52	50	49	47
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295		64			58	56	54	52	51	49
300 305	67 68	65	63 64	61 62	59 60	57 58	55 56	53	51	50
310	69	67	65	63	61		-	54	52	51 52
315	71	68	66	64	62	59 60	57 58	55 56	53 54	52
320	72	69	67	65	62	60	59	57	55	53
325	73	70	68	66	63	61	59	58	56	54
330	74	71	69	67	64	62	60	58	57	55
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350	78	76	73	71	68	66	64	62	60	58
355	80	77	74	72	69	67	65	63	61	59
360	81	78	75	73	70	68	66	64	62	60
365	82	79	76	74	71	69	67	65	63	61
370	83	80	77	75	72	70	68	66	64	62
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385	86	83	80	78	75	73	70	68	66	64
390	87	84	82	79	76	74	71	69	67	65
395	89	85	83	80	77	75	72	70	68	66
400	90	87	84	81	78	76	73	71	69	67
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410	92	89	86	83	80	77	75	73	70	68
415	93	90	8 <sub>7</sub>	84	81	78	76	74	71	69
420	94	91	89	8 <sub>5</sub>	83	79 80	77 78	74	72	70
425 430	95 96	92	90	87	84	81		75 76	73	71 72
435	98	93 94	91	88	85	82	79 80	77	74 75	72
440	99	95	92	89	86	83	80	78	76	73
445	100	96	93	90	87	84	81	79	76	73
450	101	97	94	91	88	85	82	80	77	75
455	102	98	95	92	89	86	83	81	78	76
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490	110	106	102	99	96	93	90	87	84	82
495	111	107	103	100	97	94	91	88	85	82
500	112	108	104	101	98	94	91	89	86	83

Lbs.	5 ft 6 in	5 ft 7 in	5 ft 8 in	5 ft 9 in	5 ft 10 in	5 ft 11 in	6 ft	6 ft 1 in	6 ft 2 in	6 ft 3 in	6 ft 4 in	6 ft 5 in	6 ft 6 in
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160	26	25	24	24	23	22	22	21	21	20	19	19	18
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490	79	77	74	72	70	68	66	65	63	61	60	58	57
495	80	78	75	73	71	69	67	65	64	62	60	59	57
500	81	78	76	74	72	70	68	66	64	62	61	59	58

### Bariatric Surgery Center weight loss surgery program

### Thank you for your interest in our program!

We're committed to helping improve the medical, social, emotional, and psychological lives of patients with obesity.

- We feel it's important to treat the entire person by providing appropriate physical and psychological support before, during and after your surgery.
- We're here to help you in every way we can. Please do not hesitate to contact our office with your questions or concerns.

### Team approach

Evaluations are done by our team with a wide range of expertise to give you the highest quality of preand post-surgical weight loss care.

Before surgery, all patients will have:

- A complete health evaluation by one of our surgeons.
- · A psychological evaluation to assess their preparedness for surgery and their expectations for the results of surgery.
- An individual nutrition and physical therapy consultation.

After surgery, all patients receive surgical care and follow-up, and are strongly encouraged to become involved in our support

group. This participation greatly increases the

chances of ultimate long-term success.

Salem Health is an accredited bariatric surgery center with the Metabolic and Bariatric **Surgery Accreditation and Quality Improvement Program** (MBSAQIP®)



The MBSAQIP works to advance safe, high-quality care for bariatric surgical patients through the accreditation of bariatric surgical centers. A bariatric surgical center achieves accreditation following a rigorous review process during which it proves that it can maintain certain physical resources, human resources, and standards of practice. All accredited centers report their outcomes to the MBSAQIP database.

### Will my insurance cover my surgery?

It's your responsibility to determine if your procedure and work up is covered by your insurance

> carrier. Our office will help you get the necessary pre-authorizations before



evaluation process and another authorization for the actual surgery. If your initial request for weight loss surgery is denied, we will assist you with a letter of medical necessity. However, the final responsibility for follow-up and further appeals on all insurance denials will be your responsibility.

### Overview

### What is obesity?

Obesity is defined by your body mass index (BMI) which can be calculated using your height and weight and a BMI chart. Refer to the BMI chart in this packet or online. BMI is a measure of your weight in relation to your height.

- Class 1 obesity means a BMI of 30 to 35
- Class 2 obesity is a BMI of 35 to 40
- Class 3 obesity is a BMI of 40 or more.

Classes 2 and 3, also known as severe obesity, are often hard to treat with diet and exercise

An adult is a good candidate for bariatric surgery to treat morbid obesity if they have BMI between 35 and 40, with a health issue related to the extra weight OR a BMI greater than 40.

### What causes obesity?

Severe obesity is a complex issue and has many causes. It's a serious disease that needs to be prevented and treated. Like obesity, the causes of severe obesity are widespread, but target three main contributors: behavior, environment and genetics.

### **Behavior**

alone.

In today's fast-paced environment, it's easy to adopt unhealthy behaviors. Behavior, in the case of obesity, relates to food choices, amount of physical activity and the effort to maintain your health.

Americans are now consuming more calories on average than in past decades. The increase in calories has also decreased the nutrients needed for a healthy diet. This behavioral problem also relates to the increase in portion sizes at home and when dining out.

While Americans are consuming more calories, they're not burning them off with enough physical activity. Physical activity is an important element in modifying and shaping behaviors. The influence of television, computers and other technologies discourage physical activity and add to the problem of obesity in our society.

### **Environment**

Environment plays a key role in shaping an individual's habits and lifestyle. There are many environmental influences that can impact your

health decisions. Today's society has developed

a more sedentary lifestyle. Walking

has been replaced by driving cars,

physical activity has been replaced by technology, and nutrition has been overcome by fast foods.

### **Genetics**

Science shows that genetics play a role in obesity. Genes can cause certain disorders which result in obesity.

However, not everyone who has a genetic tendency for obesity become obese. Research is currently underway to find which genes contribute most to obesity.

There are many medical conditions that are directly or indirectly caused by obesity.

Some of the diseases associated with extreme obesity include:

- Type 2 diabetes
- Body pain, hip and knee pain
- Metabolic syndrome
- Venous stasis ulcers
  - ► Increased operative risk with any surgery
- Elevated cholesterol
- Obstructive sleep apnea

- Deep vein thrombosis
  - ► Coronary artery disease
  - ► Cancer (including uterine, breast and prostate)
- Non-alcoholic steatohepatitis
- Stress urinary incontinence
- Increased risk of early death

### What treatments exist for obesity?

Weight loss programs fall into two broad categories. These include non-operative and operative methods.

### **Non-operative**

These programs include:

- Dietary aids
- Prepared foods
- Medications for weight loss
- Hypnosis
- Behavior modifications
- Exercise

Many patients with obesity have used these programs in the past with good results over a short period of time. Patients may lose 20 to 50 pounds, or more. However, in many cases, this entire weight loss is regained after five years. This is true even when the dietary program is combined with behavior modifications, psychotherapy, and anorexic drug therapy. The long-term success rate is very low.

There is no effective drug therapy for maintaining long-term weight loss. In addition, some medications have been associated with significant cardiopulmonary damage. Also, when the patient stops taking weight loss medication, they usually regain all the lost weight (and often more).

### **Operative methods**

There are three types of operations for obesity:

- 1. Making the stomach smaller.
- 2. Rearranging the intestines so you absorb less energy from your food.
- 3. A combination of both.

Roux-en-Y Gastric Bypass Surgery	Makes the stomach smaller, rearranging the intestines so you absorb less energy from your food
Laparoscopic Sleeve Gastrectomy	Making the stomach smaller
Biliopancreatic diversion (BPD) with duodenal switch	Makes the stomach smaller, rearranging the intestines so you absorb less energy from your food
Adjustable Gastric Band	Making the stomach smaller

Bariatric surgery is a tool. Regardless of your ultimate decision, the commitment to maintain long-term weight loss must come with the commitment to change your lifestyle. This is true whether you choose surgery or non-surgical treatments for weight loss.

### History of bariatric surgery

Bariatric or "weight loss" surgery began in the 1950s. Early surgeries were done because doctors noticed that patients who had abdominal surgery that shortened the length of their intestines or reduced the size of their stomachs tended to lose weight. Doctors used this knowledge to develop two surgical methods for weight loss:

- Decrease the ability of the small intestine to absorb calories and nutrients (malabsorptive procedure).
- Reduce the size of the stomach to restrict the amount of food a person can eat at one time (restrictive procedure).

### How you digest food and water

Anyone considering bariatric surgery should be familiar with how the gastrointestinal (GI) tract works. Once you chew and swallow, your food passes down the esophagus. The purpose of the esophagus is to warm any cold liquids or foods — and serves as a passage between the mouth and the stomach.

In the stomach, food is diluted by gastric secretions, which also include a high level of acid. Your stomach acts as a mixing area for this acid bath, as well as a reservoir for food, until it can continue into the small intestine.

As food leaves the stomach, it enters the duodenum, the start of the small intestine. Bile and pancreatic enzymes, which help digest fat and protein, are added here. The duodenum leads to the rest of the small intestines, called the jejunum and ileum. Each part of the intestine has a specialized function and absorbs specific nutrients. The overall length of the small intestine is approximately 20 feet. At the end of the small intestine, the food then passes into the large intestine through the ileocecal valve.

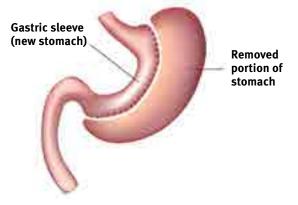
The job of the large intestine is to absorb water and electrolytes from the partially digested food. By doing so, it concentrates the remaining food and acts as a reservoir for the fecal material so they can be eliminated every one to three days.

# Types of weight loss surgery offered at Salem Health

### **Gastric sleeve**

In gastric sleeve surgery, also called laparoscopic sleeve gastrectomy, a surgeon removes about 80 to 90% of your stomach, leaving only a banana-shaped tube (about 6 to 7 ounces in size) that is closed with staples. This surgery reduces the amount of food

### LAPAROSCOPIC SLEEVE GASTRECTOMY



that can fit in your stomach, making you feel full sooner. Taking out part of your stomach may also affect gut hormones or other factors such as gut bacteria that may affect appetite and metabolism. This type of surgery cannot be reversed because some of the stomach is permanently removed.

### **Pros**

- No changes to intestines or rearrangement of internal organs.
- No objects placed in the body (lap band).
- Short hospital stay.

### Cons

- Cannot be reversed.
- Chance of vitamin shortage.
- Chance of acid reflux.
- Our program will not do a gastric sleeve on people with severe acid reflux or GERD, or a precancerous condition called Barrett's Esophagitis.

### **Gastric bypass**

Gastric bypass surgery, also called Roux-en-Y gastric bypass, has two parts:

- First, the surgeon staples your stomach, creating a small pouch (about one ounce in size) in the upper section. The staples make your stomach much smaller, so you eat less and feel full sooner.
- Next, the surgeon cuts your small intestine and attaches the lower part of it directly to the small stomach pouch.

Food then bypasses most of the stomach and upper part of your small intestine so your body absorbs fewer calories. The surgeon connects the bypassed section farther down to the lower part of the small intestine. This bypassed section is still attached to the main part of your stomach, so digestive juices can move from your stomach and the first part of your small intestine into the lower part of your small intestine.

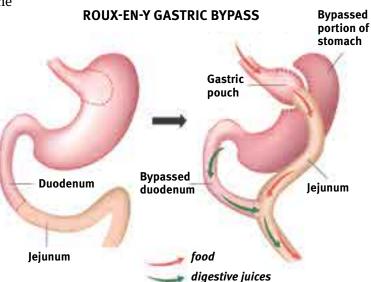
The bypass also changes gut hormones, gut bacteria, and other factors that may affect appetite and metabolism. Gastric bypass is difficult to reverse, although a surgeon may do so if it's absolutely necessary.

### **Pros**

- Slightly faster and greater weight loss than the laparoscopic sleeve gastrectomy.
- No objects placed in the body (lap band).

### Cons

- Difficult to reverse.
- Higher chance of vitamin shortage than a laparoscopic sleeve gastrectomy.
- Slightly higher chance of surgery-related problems than the gastric sleeve.
- May increase risk of alcohol use disorder.



# What's the difference between open and laparoscopic surgery?

In open bariatric surgery, surgeons make a single, large cut in the abdomen. More often, surgeons now use laparoscopic surgery, in which they make several small cuts and insert thin surgical tools through the cuts. Surgeons also insert a small scope attached to a camera that projects images onto a video monitor.

Laparoscopic surgery has fewer risks than open surgery — and may cause less pain and scarring

than open surgery. Laparoscopic surgery also may lead to a faster recovery.

Open surgery may be a better option for certain people. If you have a high level of obesity, had stomach surgery before, or have other complex medical problems — you may need open surgery.

# Who is a good candidate for bariatric surgery?

Bariatric surgery may be an option for adults who have:

1. A body mass index (BMI) of 40 or more.

### OR

2. A BMI of 35 or more with a serious health problem linked to obesity, such as type 2 diabetes, heart disease, or sleep apnea.

Weight loss surgery involves a serious decision. If you're considering it, you should know what's involved. Your answers to the following questions may help you decide if surgery is an option for you:

- Have you been unable to lose weight or keep it off using nonsurgical methods such as lifestyle changes or drug treatment?
- Do you understand what the operation involves and its risks and benefits?
- Do you understand how you're eating and physical activity patterns will need to change after you have surgery?
- Can you commit to following lifelong healthy eating and physical activity habits, medical

follow-up, and the need to take extra vitamins and minerals?

# What are the results of weight loss surgery?

The amount of weight people lose after bariatric surgery depends on the person and the type of surgery. People can expect to lose 50% to 75% of their excess body weight. Most people regain some weight over time, but the regained weight usually was small compared to their initial weight loss.

Researchers know less about the long-term results of gastric sleeve surgery, but the amount of weight loss seems to be similar to or slightly less than gastric bypass.

Your weight loss could be different. Remember, reaching your goal depends not just on the surgery, but also on sticking with healthy lifestyle habits

throughout your life. Studies show many people who have bariatric surgery lose about 15 to 30% of their starting weight on average, depending on the type of surgery they have.

However, no method, including surgery, is sure to produce and maintain weight loss. Some people who have bariatric surgery may not lose as much as they hoped. Over time, some people regain a portion of the weight they lost. The amount

of weight people regain may vary. Factors that affect weight regain may include a person's level of obesity and their type of surgery.

Bariatric surgery does not replace healthy habits, but may make it easier for you to consume fewer calories and be more physically active. Choosing



healthy foods and beverages before and after the surgery may help you lose more weight and keep it off long term. Regular physical activity after surgery also helps keep the weight off. To improve your health, you must commit to a lifetime of healthy lifestyle habits and following the advice of your health care providers.

# What are the risks and possible complications with surgery?

Patients with obesity have a higher surgical risk than non-obese patients. Other diseases including diabetes, heart disease, or lung disease, add to your risks. Complications of weight loss surgery can include death. Data involving nearly 60,000 bariatric patients from the ASMBS

Bariatric Centers of Excellence database show the risk of death within the 30 days following bariatric surgery averages

0.13% — or approximately one out of 1,000 patients.

Surgical risks and complications fall into two major groups:

- "Early complications" which occur while you're in the hospital or shortly after you leave the hospital and include:
- Leaks where the new connections in the stomach and GI tract have been made. This may require a return to the operating room.
- Bleeding due to the surgery on the stomach or intestines, as well as other structures that are very close to the stomach (such as the spleen or liver). Pre-operative anticoagulants given to prevent clots from forming in your legs may increase your risk of bleeding. If significant

bleeding does occur after your surgery, you may require a blood transfusion, an endoscopic procedure, and/or a return to the operating room for additional surgery to stop the bleeding.

- Clots can form in the large deep veins of the leg
  of any obese patient undergoing surgery. These
  can occasionally break free and move into the
  lungs, which could cause a life-threatening
  condition. For these reasons, you will be given
  an anticoagulant to help prevent this clotting
  problem. However, the risk can never be
  completely eliminated.
- Postoperative pneumonia occurs if you're unable to take deep breaths after surgery. Pulmonary

therapy will be given to help decrease

the likelihood of this complication.

These therapies include coughdeep breathing exercises,

> getting out of bed, walking as early as four hours after your surgery, frequent use of the incentive spirometer, and use of CPAP, if indicated.

 Wound infection or seroma (fluid collection). As with all major surgeries, infection

is a risk. Pre-operative antibiotics are given to prevent infection and careful monitoring for signs and symptoms of infection are done at the hospital. You will also be given careful instructions when you return home to call immediately for signs and symptoms of an infection starting.

 Gastric bypass only: Small bowel obstruction occurs due to "kinking" of the intestine in its new arrangement. This may also necessitate a repeat surgery.

- 2. "Late complications" that can occur months to years after surgery. These include:
- Narrowing of any new connections in the GI tract. This is usually due to scar tissue that will not stretch as well as normal bowel tissue.
   The hollow area inside your intestine becomes narrower at these points and may need to be stretched out by using a small balloon under endoscopy. Rarely, this may require a surgical revision.
- Narrowing of the gastric sleeve banana-shaped tube.
- Incisional hernias can occur anywhere the abdominal wall has been sewn back together.
   This may require additional surgery to correct.
- Similar to the early postoperative period, the intestine can become kinked and cause a bowel obstruction. With late complications, these obstructions are usually due to scar tissue forming around the bowel (adhesions).
- Ulcers can occur where the stomach and the intestine are newly connected. This frequently occurs with smoking and NSAID and aspirin use.
   These are usually treated with acid-blocking medications. These rarely require a surgical repair.

- Approximately 20% of patients can develop clinically significant gallstones following weight loss surgery. In these cases, removal of the gallbladder is indicated. Gallstone formation occurs due to the rapid weight loss and can occur within the first 18 months after surgery.
- Due to your decreased food intake, you may experience constipation. Drinking adequate amounts of fluid can prevent constipation. At times patients may require stool softeners to relieve constipation.
- Acid reflux may occur after gastric sleeve surgery.
   Avoid NSAIDs, smoking and alcohol to decrease these symptoms. Use of an acid-blocking medication may be required long-term.

### Pre-surgery and post-surgery

### How do I prepare for surgery?

In accordance with NIH recommendations, appropriate preoperative consultation is done to improve your chances for success.

- $\bullet$  Following your surgical consultation, appropriate
  - medical evaluations will be ordered by your surgeon. These include evaluations of ongoing disease processes, including diabetes, cardiovascular disease, hypertension, and significant respiratory problems.
- The psychiatric/psychological consultation allows for:
  - Evaluation of any circumstances which may make postoperative recovery difficult from a psychological standpoint.
  - 2. Assess the patient's postoperative expectations.
  - 3. Determines the patient's commitment to the necessary lifelong changes.
  - 4. Assessment and discussion of the risk of depression.
- Preoperative nutrition and physical therapy consultations are also scheduled to help educate patients on what the postoperative diet and exercise will be, and to help with achieving some degree of preoperative weight loss.
- About two weeks before surgery, you will go on a full liquid, sugar-free, non-carbonated, caffeinefree diet.

# What happens when I'm in the hospital?

You'll be admitted to the hospital the morning of your surgery. If you use a CPAP machine at home, bring this to the hospital with you the morning of your surgery. You will have admissions paperwork

to fill out as well as an additional consent form for surgery. Medication will be given to you to decrease your risk of infection and deep vein thrombosis. Your surgeon, an assistant, and a team of trained surgical nurses will perform your

operation. Your anesthesia will be administered by an anesthesiologist.

After surgery, you will go to a designated surgery unit where nurses have been trained to care for weight-loss surgery patients. A nurse will assist you with your post-surgery care, including using the incentive spirometer and getting out of bed and walking as early as four hours following your surgery. (Walking soon after surgery can help prevent serious complications such as blood clots and pneumonia.)

To prevent pain after your surgery, you will be given pain medication in your IV immediately after surgery and then liquid pain medication by mouth before you go home.

You may have a Foley catheter in place after surgery to drain your bladder of urine. This is usually removed one or two days after surgery. You may have one to two abdominal drains in place after the surgery. These are small tubes in your abdomen that will usually remain in place until discharge, but may stay in until your one week postoperative appointment in the clinic.

The morning after your surgery, you may have a test to confirm there are no leaks from your surgery and all of the parts are working as expected.

Depending on the type of surgery, you'll begin to take in one-ounce portions of clear or full liquids at regularly scheduled times the evening after surgery or post-operative day 1 and 2. Your diet will be advanced to full liquids after that and for two weeks after surgery. Your liquid intake will be carefully monitored by your nurse, dietitian and surgeon.

The average hospital stay is one to three days depending on the type of surgery you had and your overall health.

# What happens after I leave the hospital?

You'll be scheduled for your first follow-up office visit approximately one week following your discharge from the hospital — and then regular office visits on a pre-determined schedule for life. If at any time after you leave the hospital you have concerns related to your weight loss surgery, Bariatric Surgery Center staff or the on-call bariatric surgeon are always available to help you. It's important for your health and success at weight loss to attend each scheduled follow-up visit.

AFTER surgery you will be on a liquid diet for two weeks — then liquids and soft foods for the second two weeks — and then gradually add regular foods after that. You may not feel hungry for up to six months following your surgery, and during this time you'll lose weight easily. After that time,

however, some dilatation of the pouch occurs and you'll be able to eat more at each setting. You may begin feeling hungry at this time as well. This is a very important time for you to rely on your resources to help you. Regularly scheduled visits with your bariatric provider and dietitian can help you understand why these changes have occurred, what food choices will help you and help prevent weight regain.

We highly encourage you to become involved in a support group before and after surgery to discuss with other patients how their lives have been changed after surgery compared to their lives before



surgery. Attending support groups over the long term helps to maintain your weight loss. Members of your support group may have already experienced this change and be able to give you tips and offer support. Building these strong relationships before you face these challenges will make you more successful in overcoming hurdles.

### How to sustain health and weight loss for life

The ultimate goal of weight loss surgery for obesity is to improve your health. In order for this to be a long-lasting treatment for obesity, it's important surgery is seen as a tool rather than a cure.

The operation helps in treatment, but the underlying process that can lead one to eat too much will always be there. Without the commitment to changing your lifestyle, any surgical intervention can be overcome — and weight gain and health problems will happen once again.

There are several important principles that patients must follow for the rest of their lives ensure their success:

- Eat three regular meals per day at regularly scheduled times.
- Make sure that you drink plenty of water.
- Take your vitamins and minerals as directed each day.
- Avoid drinking liquids during your meals, and for a half-hour after eating meals. Liquids with meals will decrease the amount of time food remains in the pouch or sleeve, and therefore, decreases the length of time one feels full.
- Don't drink sweetened, carbonated, or caffeinated beverages.

- Avoid aspirin, non-steroid anti-inflammatory drugs, alcohol, and tobacco. These products will put you at risk for inflammation of the gastric pouch or sleeve and esophagus, and at an increased risk for alcohol use disorder.
- Get regular exercise to achieve and maintain weight loss.

# Nutrition: How do I eat after surgery?

Surgery changes the size of your stomach; it'll be much smaller than before. The pouch (reservoir) will be about the size of an egg (bypass) or a banana (sleeve). Because of this small size, it'll be uncomfortable to eat a lot at one time. You must also eat food and drink liquids separately. It's important to drink plenty of fluids throughout the day, as the amount you can drink at any one time will be limited. Drinking fluids hourly is encouraged. It's also important to eat proteins at the beginning of each meal to help maintain lean muscle mass.

Nutritional information provided by a registered dietitian will also be available to you before and after surgery. It's extremely important this aspect of the program is followed for long-term success.

Due to the changes made in your stomach and small intestine, your body will not absorb vitamins and minerals as beforehand. Therefore, you will need check your vitamin levels with blood tests and take certain vitamin and mineral supplements daily for LIFE. These include:

- Multivitamin and mineral supplements
- Calcium
- Iron

# **Exercise: The key to long term success**

It's important after you recover from the acute phase of surgery to start an exercise program. This may seem difficult at first. However, it's important to do this during your weight loss — as it will both speed up your weight loss and form new lifelong habits. You'll be scheduled to see a physical therapist before and after surgery to help you with any barriers to exercise.

Benefits of exercise in the postoperative period include:

- 1. Decreased appetite
- Preservation of lean muscle mass and burning of fat
- 3. Strengthening of your heart
- 4. Improved coordination
- 5. Increased number of calories burned daily

An exercise program also greatly improves your energy level, stamina, and sense of accomplishment. As you continue to lose weight, you'll be capable of doing more and more things. This variety will also improve your psychological wellbeing.

Your postoperative exercise regimen can be accomplished in many ways: joining a health club, walking with friends, swimming and biking, to name a few. There's an unlimited number of activities you can choose that will help in your goal to lose weight and get healthy. Pick some that work with your lifestyle and choose others as you gain strength and mobility.

### Frequently asked questions

### What happens to my excess skin?

Most of your fat is stored in the tissue directly beneath the skin. When the fat is gone, the skin will eventually sag. Your skin will shrink to a certain extent, but not as rapidly as the fat is lost. Six to twelve months after surgery you may see sagging skin. Younger patients may have more elastic skin and may not sag as much as older patients. Some patients may wish to have excessive skin surgically

removed by a plastic surgeon, but this

should be done 18 to 24 months following their surgery when their weight loss has stabilized.

# What is dumping syndrome?

Dumping syndrome is experienced to a certain degree by all patients who have a very small gastric reservoir. Dumping is

associated mostly with eating sweets and carbohydrates. These foods are characteristically "hyperosmolar" — foods that have a high concentration of sugar relative to other foods. As such, they stimulate the gastric reservoir to empty more quickly. This causes these highly concentrated foods to be "dumped" into the small intestine.

When this type of food enters the small intestine, it causes the small intestine to move the food very rapidly along this section of the bowel. It also causes the release of hormones that give the patient a sense of dizziness, nausea, fatigue, sweating, and profuse diarrhea. Patients usually describe this as a very unpleasant feeling. While generally harmless, the unpleasant experience of dumping may decrease your choice to consume hyperosmolar

foods. Due to the unpleasant feelings associated with dumping syndrome, the brain soon learns to avoid these types of foods. This "aversion" to sweets also has additional benefits and helps in increasing the rate of weight loss.

### When can I get pregnant?

It's important not to get pregnant immediately before surgery — or during the period of rapid weight loss following surgery. This would include up to 18 months after surgery. Due to the rapid weight loss that's occurring, certain nutritional deficiencies may occur which would put the developing baby at risk for malnutrition and birth defects.

Therefore, people who may become pregnant who are undergoing weight loss surgery should use *two* methods of birth control before surgery — and for 18 months after surgery. After weight loss has stabilized and your nutritional status is confirmed, there's no restriction on pregnancy. Studies have found that getting pregnant 18 months after surgery is safer than it is before surgery.

# Will I lose my hair after bariatric surgery?

Some hair loss is common between three and six months following surgery. The reasons for this are not totally understood. Even if you take all recommended supplements, hair loss will be noticed until the follicles come back. Hair loss is almost always temporary. Adequate intake of protein, vitamins and minerals will help to ensure hair re-growth, and avoid longer term thinning.

### Will I have increased gas?

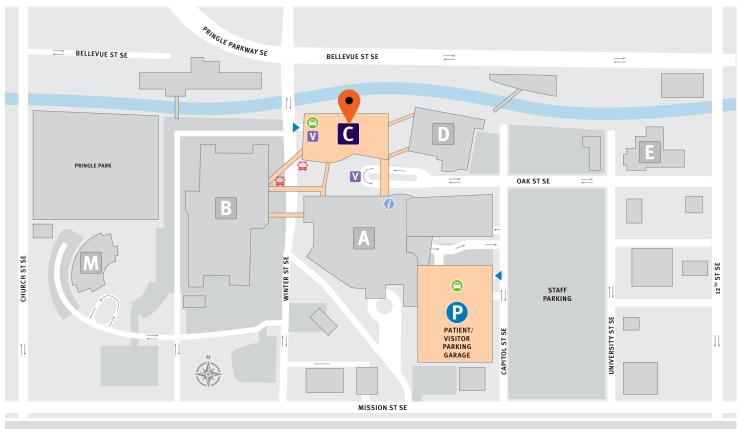
Some patients are air swallowers. Air is 80% nitrogen and is not absorbed by the GI tract. Because there's no gastric reservoir and associated belching to relieve this swallowed air, it must pass all the way through the digestive system. Once passed through the digestive system, this swallowed air is expelled as flatulence. This can make the symptoms of irritable bowel syndrome worse as well. This can be "un-learned" by the GI tract to some extent over time.

# It's not about the weight you lose, but the life you gain.



# Notes

Notes









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