



Bariatric Surgery Program

Weight Loss Surgery Program

www.crmchealth.org



**COOKEVILLE REGIONAL
MEDICAL CENTER**

It's the Way WeCARE

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Our Program

Cookeville Regional Medical Center offers a bariatric, or weight loss, surgery program to help those who have tried other weight loss techniques and need another option. Losing weight is sometimes not easy, and neither is keeping it off. We understand that challenge and want to help patients who need the surgical option to help them move forward to a more healthy and active life.

Choosing to have a weight loss or bariatric surgery is not a decision that should be taken lightly. It is important to be well educated about your surgical options and to understand the lifestyle changes required both before and after surgery. Most of all, you must be dedicated to a lifestyle change and lifetime follow-ups.

Team of Professionals

Key professionals involved with each patient undergoing weight loss surgery

*** During your initial doctors visit, a list of providers will be available.*

Internist or Primary Care Physician _____

Bariatric Surgeon _____

Bariatric Clinic Nurse _____

Psychiatrist or Psychologist _____

Registered Dietitian _____

Physical Therapist or Personal Trainer _____

Weight Loss Support Group Leader _____

Other _____

Where to Go

Bariatric Surgeon

Middle Tennessee
Surgical Specialists
203 N. Cedar Ave.
Cookeville, TN 38501

(931) 528-1992

Same Day Surgery Unit

1 Medical Center Blvd.
Cookeville, TN 38501

(931) 783-2190

Weight Loss Support Group

Offered every 3rd Monday of each month at 6:00pm
Education Center at CRMC
1 Medical Center Blvd., Cookeville, TN 38501

**Feel free to also join our Facebook page: Middle TN Surgical Specialist Bariatric Support Group*

Contact Middle Tennessee Surgical Specialist Office at **(931) 528-1992** for more information.

Are you a candidate?

Bariatric surgery may be recommended for obese patients unable to lose significant weight with diet, exercise and medications.

If you think you are a candidate for weight loss surgery, you are not alone.

Take a look at the following criteria:

- BMI > 35 with co-morbidities or > 40 without
- Healthy enough to undergo a major operation
- Failed attempts at medical weight loss
- Absence of drug and alcohol problems
- No uncontrolled psychological conditions

More than 70% of adults are overweight or obese. 7.7% are morbidly obese.

What is morbid obesity?

- > 200% of ideal weight or > 100 lb. overweight
- Body Mass Index (BMI) of > 40
- BMI > 35 with one or more severe co-morbid conditions

		HEIGHT								
		5'0"	5'2"	5'4"	5'6"	5'8"	5'10"	6'0"	6'2"	6'4"
WEIGHT	120	23	22	21	19	18	17	16	15	15
	130	25	24	22	21	20	19	18	17	16
	140	27	26	24	23	21	20	19	18	17
	150	29	27	26	24	23	22	20	19	18
	160	31	29	28	26	24	23	22	21	20
	170	33	31	29	27	26	24	23	22	21
	180	35	33	31	29	27	26	24	23	22
	190	37	35	33	31	29	27	26	24	23
	200	39	37	34	32	30	29	27	26	24
	210	41	38	36	34	32	30	29	27	26
	220	43	40	38	36	34	32	30	28	27
	230	45	42	40	37	35	33	31	30	28
	240	47	44	41	39	37	35	33	31	29
	250	49	46	43	40	38	36	34	32	30
	260	51	48	45	42	40	37	35	33	32
	270	53	49	46	44	41	39	37	35	33
	280	55	51	48	45	43	40	38	36	34
	290	57	53	50	47	44	42	39	37	35
	300	59	55	52	49	46	43	41	39	37
	310	61	57	53	50	47	44	42	40	38
320	62	59	55	52	49	46	43	41	39	
330	64	60	57	53	50	47	45	42	40	
340	66	62	58	55	52	49	46	44	41	
350	68	64	60	56	53	50	47	45	43	

-  Underweight
BMI: < 18.5
-  Healthy weight
BMI: 18.5 to 24.9
-  Overweight
BMI: 25 to 29.9
-  Class 1 obesity
BMI: 30 to 34.9
-  Class 2 obesity
BMI: 35 to 39.9
-  Class 3 severe obesity
BMI: ≥ 40

Meet Our Surgeons

Dr. Charles T. Huddleston, M.D.

Medical Degree:

James H. Quillen College of Medicine, East Tennessee State University, Johnson City, Tennessee.

Internship:

James H. Quillen College of Medicine, East Tennessee State University, Johnson City, Tennessee.

Residency:

General Surgery Residency, James H. Quillen College of Medicine, East Tennessee State University, Johnson City, Tennessee.

Certification:

American Board of Surgery: General Surgery

Professional Organizations: Fellow of the American College of Surgeons, American Society for Metabolic and Bariatric Surgery

Military:

Active member of the 278th Armored Cavalry Regiment, Tennessee Army National Guard, where he is currently serving as a field surgeon with the rank of Lieutenant Colonel.



Dr. Jeffrey H. McCarter, M.D.

Medical Degree:

James H. Quillen College of Medicine, East Tennessee State University, Johnson City, Tennessee.

Internship:

James H. Quillen College of Medicine, East Tennessee State University, Johnson City, Tennessee.

Residency:

General Surgery Residency, James H. Quillen College of Medicine, East Tennessee State University, Johnson City, Tennessee.

Certification:

American Board of Surgery: General Surgery

Professional Organizations:

Alpha Omega Alpha Honor Medical Society, Phi Kappa Phi Honor Society



What is Bariatric Surgery

The term bariatric refers to any medical treatment that is aimed at treating obesity and any potentially related illnesses; in this case the treatment is surgical in nature.

Bariatric surgery originated in the 1950s, though research and development has offered increasingly better options for patients. These include new procedures which employ laparoscopic techniques and are less invasive than traditional bariatric surgery. Any surgery option targeted at weight loss or treatment of illnesses related to obesity should be discussed fully with your surgeon as each of the different types of procedures available carry their own risks and potential benefits.

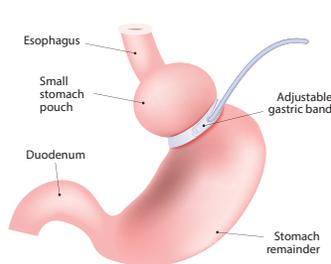
Goals of Weight Loss Surgery

The goal of surgery is to be able to lose 65-80 percent of your excessive body weight. Your surgeon can help you determine what a healthy weight would be for you.

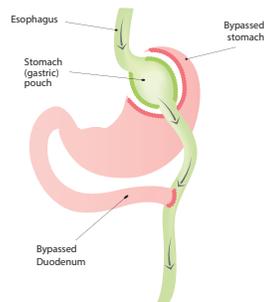
The rate at which weight is lost varies on an individual basis. It is important to follow the recommendations. We will encourage you to build a strong support system for yourself and to maintain a positive attitude throughout this process.

Throughout this process our team will be working with you to help you transition through all the necessary lifestyle changes, but ultimately YOU must take responsibility for your own weight loss journey. You may require adjustments to your food choices and your exercise routine, as well as psychological adjustments.

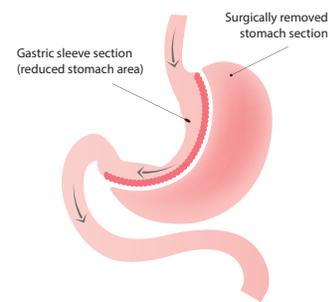
Types of Weight Loss Surgery



Adjustable Lap Band



Roux-en-Y (Gastric Bypass)



Sleeve Gastrectomy

Three main categories of bariatric surgery procedures:

- **Restrictive** (aimed at limiting the size of the stomach)
The purely restrictive procedures include the laparoscopic adjustable band (popularly known as the lap band) and the newer gastric sleeve.
- **Malabsorptive** (aimed at decreasing the absorption of fat and/or calories)
The purely malabsorptive surgeries have become unpopular due to a number of potential long term complications.
- **Combination Restrictive and Malabsorptive**
The combination approaches include a procedure called Roux-en-Y (or gastric bypass) and another called Biliopancreatic Diversion with Duodenal Switch (BPD-DS).

Chapter 1 - Get Informed

Due to its life-changing nature, making the decision to have surgery is only the first step; preparing is an intensive process. The surgery alters the amount of food you can eat and/or the amount that will be absorbed such that lifelong dietary changes must be implemented following surgery. As a result of the way this impacts your quality of life, your pre-surgery plan will include the following:

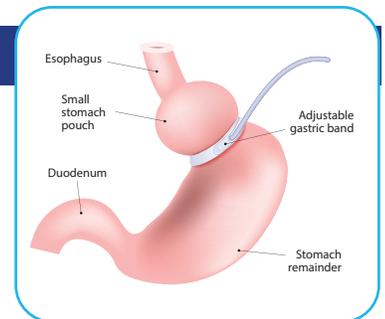
- attend seminar (these are free and very informative for prospective patients)
- a comprehensive psychiatric evaluation
- a thorough medical exam by your internist or primary care physician
- nutrition counseling by a registered dietitian
- six months in a physician supervised weight loss program (required by some insurances)
- participation in a weight loss support group

Making your choice

It will be important to consider what is required of you before and after surgery. The decision to undergo bariatric surgery should not be entered into lightly. Again, this is a life-altering procedure in many ways, and the more informed you are about the process, the better you will be to manage your expectations and outcomes after surgery. Your surgeon will discuss the options and assist you in determining which is best for you to meet your goals. The procedure that is best for you will be based on several considerations, such as age, health risk, amount of weight loss needed, lifestyle and eating behaviors.

ADJUSTABLE GASTRIC BAND

Gastric banding is a procedure that limits the amount of food you can eat at one time. During this procedure, the gastric band is placed around the stomach, dividing it into two parts: a small upper pouch and a lower stomach. The upper pouch holds about 4 ounces (1/2 cup) of food. This helps a person feel full sooner and for longer than usual. The restriction can be adjusted by adding to or removing saline solution from the band through a port that is subcutaneously placed.



Adjustable Lap Band

ADVANTAGES

- Limits the amount of food that can be eaten
- Surgery can be reversed
- No part of the stomach or digestive system is stapled, cut or removed. Food passes through the digestive tract in the usual order, allowing it to be fully absorbed into the body.

DISADVANTAGES

- Constipation
- Difficulty swallowing/Food trapping
- Esophageal dilation
- Gallstones
- Indigestion
- Nausea and Vomiting
- Bowel Function changes
- Acid Reflux

POTENTIAL RISKS

- Gastric perforation or tearing in the stomach wall may require an additional operation
- Band leak
- Blood clots
- Esophageal spasm
- GERD
- Port-site infection
- Inflammation of the esophagus or stomach
- Pneumonia
- Access port leakage or twisting may require an additional operation
- May not provide the necessary feeling of satisfaction of fullness
- Nausea and vomiting
- Outlet obstruction
- Pouch dilation
- Band migration, slippage

GASTRIC BYPASS (Roux-en-Y)

The gastric bypass surgical procedure limits the food and keeps it from being absorbed completely. The surgeon creates a stomach pouch that significantly reduces overall stomach size and the amount of food it can hold. The pouch is surgically attached to the middle of the small intestine thereby bypassing the rest of the stomach and the upper portion of the small intestine (duodenum). The smaller stomach size helps patients feel full more quickly, which reduces food intake. Bypassing part of the intestine limits calorie absorption. Gastric bypass also produces positive metabolic changes in many organs.

ADVANTAGES

- Limits the amount of food that can be eaten at a meal and reduces the desire to eat.
- Allows the body to adjust to its new, healthier set point.
- Average excess weight loss is generally higher than with gastric banding or sleeve gastrectomy.
- No postoperative adjustments are required.
- Proven to help resolve type 2 diabetes, high blood pressure, obstructive sleep apnea, and to help improve high cholesterol.

DISADVANTAGES

- Because the duodenum is bypassed, poor absorption of iron and calcium can result in the lowering of total body iron and a predisposition to iron deficiency anemia. Women should be aware of the potential for heightened bone calcium loss.
- Bypassing the duodenum has caused metabolic bone disease in some patients, resulting in bone pain, loss of height, humped back and fractures of the ribs and hip bones. All of the deficiencies mentioned above, however, can be managed through proper diet and vitamin supplements.
- Chronic anemia due to vitamin B12 deficiency can occur. This can usually be managed with vitamin B12 sublingual (tablet that dissolves under the tongue) or injections.
- When removing or bypassing the pylorus, a condition known as dumping syndrome can occur as the result of rapid emptying of stomach contents into the small intestine. This is sometimes triggered when too much sugar or large amounts of food are consumed. While generally not considered to be a serious risk to your health, the results can be unpleasant and can include nausea, weakness, sweating, fainting, and diarrhea after eating.
- In some cases, the effectiveness of the procedure may be reduced if the stomach pouch is stretched and/or if it is initially left larger than 15 cc to 30 cc. Rerouting of bile, pancreatic and other digestive juices beyond the stomach can cause intestinal irritation and ulcers. The lower stomach pouch and segments of the small intestine cannot be easily visualized using x-ray or endoscopy if problems such as ulcers, bleeding or malignancy should occur.

POTENTIAL RISKS

- Gastric perforation or tearing in the stomach wall may require an additional operation
- Blood clots
- Esophageal spasm
- GERD
- Port-site infection
- Inflammation of the esophagus or stomach
- Pneumonia
- Access port leakage or twisting may require an additional operation
- May not provide the necessary feeling of satisfaction of fullness
- Nausea and vomiting
- Outlet obstruction
- Pouch dilation

GASTRIC BYPASS (Roux-en-Y) *Continued*

Complications during surgery:

1. Injury to surrounding internal organs or to blood vessels that may result in excessive bleeding requiring organ repair or removal, blood transfusions, or return to the operating room.
2. Abnormal heart rhythms, heart attack, low oxygen levels and low blood pressure which require the need to stay on a ventilator or under observation in the Intensive Care Unit.
3. Need to perform open surgery because of unsuspected operative findings which could prohibit safe completion of the operation. This usually occurs when the liver is enlarged, adhesions or other unexpected findings.

Potential Complications that may occur within the first few days to weeks after surgery:

1. Internal Bleeding
2. Infection
3. Potential life-threatening blood clots that pass into the lung causing severe oxygen depletion and potential death.
4. Respiratory problems
5. Leaks from internal incision sites
6. Nausea, vomiting, and dehydration. After surgery, your stomach pouch will be swollen and stiff. Eating and drinking liquids may be difficult. The pouch will also be sensitive so foods or medications that irritate the lining of the pouch will cause nausea and vomiting.
7. Death

Potential complications that may occur months to years after surgery:

1. Malnutrition, especially if you do not take your prescribed vitamins and minerals daily for the rest of your life.
2. Iron and Calcium deficiencies
3. Hair loss from inadequate protein intake.
4. Severe and potentially fatal vitamin and protein deficiencies if left untreated.
5. Narrowing of the sites where the intestines are joined (stricture) that may require returning to the operating room.
6. Staple-line failure where the pouch was created.
7. Dangerous internal hernias in which the intestine can be trapped and blocked
8. Gastric “dumping” which can cause nausea, rapid heartbeat, flushing, fainting, and other unpleasant symptoms such as diarrhea after eating.

VERTICAL SLEEVE GASTRECTOMY

A sleeve gastrectomy is a procedure that limits the amount of food you can eat by reducing the size of your stomach. The surgeon creates a small stomach “sleeve” using a stapling device. This sleeve will typically hold 50 ml to 150 ml and is about the size of a banana. This procedure induces weight loss in part by restricting the amount of food and therefore calories that can be eaten and absorbed without bypassing the intestines.

ADVANTAGES

- Limits the amount of food that can be eaten at a meal.
- Decreases Ghrelin, the hunger hormone, in the stomach so you do not feel as hungry.
- Food passes through the digestive tract in the usual order, allowing vitamins and nutrients to be absorbed by the body; however, vitamin supplementation is still required due to limited food consumption.
- Shown to help resolve high blood pressure, obstructive sleep apnea, improve type 2 diabetes, and high cholesterol.
- Dumping syndrome is avoided or minimized because the pylorus is preserved.
- Minimizes the chance of an ulcer occurring.
- By avoiding the intestinal bypass, almost eliminates the chance of intestinal obstruction (blockage), marginal ulcers, anemia, osteoporosis, protein deficiency and vitamin deficiency.
- Can be done laparoscopically in patients, thereby providing all the advantages of minimally invasive surgery: fewer wound and lung problems, less pain, and faster recovery.

DISADVANTAGES

- Unknown long-term outcomes
- Permanent removal of stomach
- Less effective for heaviest patients
- More nausea and heartburn
- Stomach size can be stretched over time if diet not followed
- This procedure does involve stomach stapling and therefore leaks and other complications related to stapling may occur

POTENTIAL RISKS

- Deep vein thrombophlebitis
- Non-fatal pulmonary embolus
- Pneumonia
- Acute respiratory distress syndrome
- Splenectomy
- Gastric leak and fistula
- Postoperative bleeding
- Small bowel obstruction
- Nausea, vomiting, heartburn
- Death



VERTICAL SLEEVE GASTRECTOMY *Continued*

Complications during surgery:

1. Injury to surrounding internal organs or to blood vessels that may result in excessive bleeding requiring organ repair or removal, blood transfusions, or return to the operating room.
2. Abnormal heart rhythms, heart attack, low oxygen levels and low blood pressure which require the need to stay on a ventilator or under observation in the Intensive Care Unit.
3. Need to perform open surgery because of unsuspected operative findings which could prohibit safe completion of the operation. This usually occurs when the liver is enlarged, adhesions or other unexpected findings.

Potential Complications that may occur within the first few days to weeks after surgery:

1. Pulmonary embolism or blood clots that pass into the lung causing severe oxygen depletion and potential death.
2. Leakage of gastric or intestinal contents into the abdominal cavity from staple lines causing peritonitis, infections and need for return to the operating room for repair.
3. Nausea, vomiting, and dehydration: After surgery, your stomach pouch will be swollen and stiff. Eating and drinking liquids may be difficult. The pouch will also be sensitive so foods or medications that irritate the lining of the pouch will cause nausea and vomiting.
4. Heartburn: This can also result in reflux of stomach contents back up into the esophagus. This heartburn or reflux may last two to three months.
5. Stricture: The normal stomach is “J-shaped”. During the operation to create the stomach pouch, the surgeon must create the staple line to conform to the shape of the stomach. There is an area where the stomach makes a bend that is prone to narrowing. Several days to weeks after surgery, scar tissue can form and create a narrowed segment that can become tight and not allow food or liquids to pass. If a stricture develops, it may require endoscopy to dilate the stricture once or several times. If endoscopic dilation of the stricture is ineffective, more invasive measures may be taken to maintain adequate passage of meals.
6. Pneumonia: Rarely, reflux of stomach contents may pass into the trachea or windpipe. If enough food or liquid passes into the windpipe, it can pass down into the lungs and create pneumonia. The treatment for pneumonia is antibiotics and minimizing the underlying cause.
7. Small bowel obstruction from internal adhesions or scarring requiring return to the operating room for correction.

Potential complications that may occur months to years after surgery:

1. Pulmonary embolism or blood clots that pass into the lung causing severe oxygen depletion and potential death.
2. Ulcer formation in the stomach pouch.
3. Incisional hernia requiring repair of the abdominal wall with synthetic material.
4. Hair loss from inadequate protein intake.
5. Small bowel obstruction from internal adhesions or scarring requiring return to the operating room for correction.

Chapter 2 - Pre-operative Preparation

Prior to surgery you will be asked to complete a number of tasks to prepare for the surgery. Although some of these things may not be “required” in order to be approved for the surgery, all of these things are very important. You must commit yourself to this decision 100 percent.

SEMINAR

Attend the educational seminar presented by Dr. Charles Huddleston and Dr. Jeffrey McCarter at Cookeville Regional Medical Center’s education department. The hour-long session covers obesity, types of surgery options, criteria for the surgery, and expectations of the surgery.

PRIMARY CARE PHYSICIAN

Your primary care physician will play a large role in your post-operative care, so it is important that you keep him or her aware of your decision and aware of the change in diet and exercise as they occur. Medications and treatment that you are currently receiving may need to be altered after surgery; therefore, you will need to follow up with your primary care physician regularly.

A letter of recommendation from your primary care provider briefly outlining your medical conditions as well as recommending bariatric surgery.

You must complete a six month period of “supervised weight loss attempt” through your primary care provider’s office. This must be documented every month for six consecutive months. Your physician will provide a concise office note showing weight, vitals, and documentation of weight loss strategies.

Registered Dietitian

You must receive counseling from a registered dietitian about the nutrition changes required after bariatric surgery. Your surgeon will make the referral following your first visit.

Psychiatrist or licensed psychologist

You must receive a letter of clearance from a psychiatrist or licensed psychologist/counselor. Your surgeon will also make this referral.

History of Obesity

Your insurance may also require documentation of obesity for at least five years.

Insurance Process

At your Bariatric Surgeon visit, the Billing Specialist will meet with you to review your insurance requirements in order to attain approval for your surgery. Their expertise and experience will provide you with the education and guidance you need to expedite the approval process.

Pre-Operative Testing

Approximately two to four weeks prior to surgery, your surgeon will require you to complete your pre-admission testing. These tests help us determine if you are physically stable enough to undergo surgery, and are therefore very important.

Smoking Cessation

You must be nicotine free for a minimum of two months prior to having surgery. Failure to meet this requirement will lead to canceling surgery until you are compliant.

Exercise

Implement a supervised exercise program with a personal trainer or physical therapist.

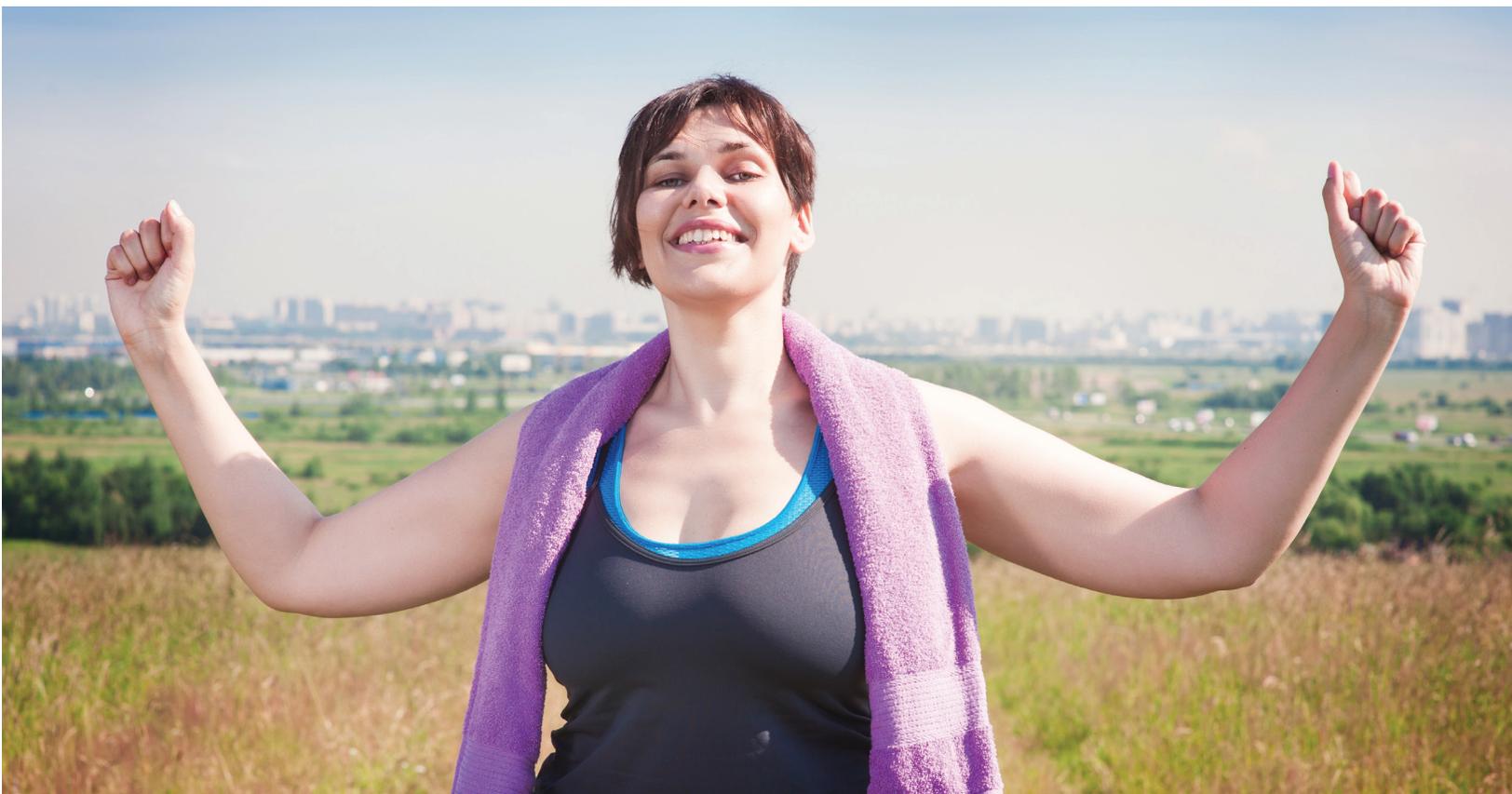
Support Group

Attending our Support Group after surgery is a valuable resource to having long-term success in weight loss. A Support Group is offered every third Monday of each month at 6 p.m. in the Education Center at Cookeville Regional Medical Center. Please contact Middle Tennessee Surgical Specialist office at (931) 528-1992 for more information.

Transitioning Your Diet

After you have made the decision to have a weight loss surgery there will be a period of time during which you are eagerly awaiting surgery approval. Often during this time patients will plan to eat as much of their favorite foods as possible and will sometimes continue to experience weight gain. This can be quite harmful for your body. Causing excess weight gain and /or dependency on a higher calorie intake for satisfaction will only cause you to feel more anguish during your pre-operative diet phase. Instead of engaging in this behavior, take these next few weeks to begin eating healthier. Do not think of this as a diet. Start practicing a healthier lifestyle to begin meeting your weight loss goals. The following guidelines will help you begin your journey.

- Decrease the number of times you eat out, and eliminate your intake of fast food.
- Start measuring your portions.
- Read food labels to identify serving sizes as well as calorie, protein, and carbohydrate content. Try to limit to only one serving of each food item at mealtimes.
- Use smaller plates.
- Do not feel you have to clean your plates. Stop eating when you are full.
- Take time to sit down at the table for each meal. Avoid working, watching TV, or multi-tasking while eating.
- Practice the 30-Rule. Make sure you chew your food well and put your utensils down on the table between bites.
- Eliminate your intake of empty calorie/ sweetened beverages (sweet tea, sodas, juice, alcohol etc.)
- Eliminate your intake of carbonated beverages.
- Become accustomed to taking a multivitamin every day.
- Start being active every day. Even if you cannot “exercise”, practice becoming more active in your daily routine. Aim for a minimum of 10 minutes of activity every day.



Pre-operative Guidelines

Following the pre-operative guidelines is an important component of a successful weight loss surgery. You must follow a clear liquid diet seven days prior to surgery. The purpose of this diet is to shrink the liver in order to allow good visualization of the stomach. If you do not adhere to this diet, we may be forced to postpone your surgery until after you have complied with the diet.

7 Days Prior to Surgery

Begin sugar-free, low calorie, low fat clear liquids seven days prior to your schedule surgery date.

The following foods are allowed on a clear liquid diet:

- Water
- Sugar-free fruit juices without pulp
- Sugar-free strained lemonade or fruit punch
- Broth, bouillon, bone broth
- Low Calorie sports drinks (Gatorade Zero, Propel, Powerade Zero)
- Sugar-free Jell-O
- Sugar-free popsicles (less than 25 calories each)
- Decaffeinated tea or coffee, without cream or sugar
- Low Carbohydrate, high protein supplements (this is the only Full liquid option allowed during the 7 day period, see list of appropriate products on the next page)

Discontinue any blood thinners (aspirin products, Plavix or Clopidogrel, Aggrenox, etc) seven days prior to your schedule surgery date. Make sure that this is OK with your primary care physician in case they want to start you on an alternative medication.

If you are taking diabetic medications or insulin, you should check with your primary care physician while on the liquid diet. Blood sugar levels usually drop during this time which may require you to discontinue or take less of your diabetic medications.

Evening Prior to Surgery

1. Drink plenty of fluid to stay hydrated. Proper hydration before surgery aides in your recovery.
2. Before Midnight: Consume (1) bottle of Pre-surgery nutrition drink, or water.
3. Shower thoroughly the night prior to surgery.
4. Do not take any medications the morning of your surgery!
5. Morning of Surgery: Consume (1) bottle of Pre-surgery nutrition drink (3) hours before your surgery. Consume it before leaving home!
6. Do not wear any make-up or jewelry to the hospital.
7. Remove contact lenses the evening prior to surgery.
8. Wear loose fitting clothing to the hospital.
9. Leave all valuables at home.

PRE-SURGERY - NUTRITION SUPPLEMENTS

You may have one bottle of pre-surgery nutrition drink the night before surgery, and one bottle of pre-surgery nutrition drink the morning of surgery (3 hours before your surgery). See Table.

Protein Supplement / Serving Size	Protein Grams	Calories & Carbohydrate	Amount needed daily / how to use	Where available for purchase
Pre-Surgery Ensure	0 grams protein	200 calories	Consume 1 bottle before midnight and 1 bottle the morning of surgery before coming to the hospital.	On-line or toll-free 800-227-5767
		50 grams CHO		

CLEAR LIQUID - PROTEIN SUPPLEMENTS

You may choose from the following approved protein supplements during the Clear Liquid Stage. See Table.

Protein Supplement / Serving Size	Protein Grams	Calories & Carbohydrate	Amount needed daily / how to use	Where available for purchase
Unjury Protein Powder/ 1 scoop	20 grams protein	80 calories 0 grams CHO	1 scoop with 4-6oz approved liquid or food option	On-line: www.unjury.com/reg/bariatric Or call toll-free: 1-800-517-5111
Syntrax Nectar Protein powder	23 grams protein	90 calories 0 grams CHO	Best when mixing 1 scoop in 4oz water.	On-line: www.bariatricadvantage.com Or call toll-free: 1-800-898-6888
100% Whey Protein powder	23 grams protein	120 calories 4 grams CHO	1 scoop in 4-6oz approved liquid or food option.	Local nutrition store or on-line
Isopure Zero Carb	40 grams protein	160 calories 0 grams CHO	20 oz Ready to drink	Local nutrition store or on-line
Isopure protein powder	25 grams protein	100 calories 0 grams CHO	1 scoop with 4-6oz approved liquid or food option	Local nutrition store or on-line
Genepro protein powder	30 grams protein	98 calories 1 gram CHO	1 scoop with 4-6oz approved liquid or food option	Local nutrition store or on-line
Protein2o	15 grams protein	60 calories 0 grams CHO	16.9oz ready to drink	Available on-line or Sam's Club
Seeq protein powder	22 grams protein	100 calories 1 gram CHO	1 scoop	Available on-line or Target
OATH protein powder	20 grams protein	100 calories 2 gram CHO	1 scoop	Available on-line or Target

FULL LIQUID - PROTEIN SUPPLEMENTS

You may choose from the following approved protein supplements during the Full Liquid Stage. See Table.

These full liquid options are allowed during the week leading up to surgery.

Protein Supplement / Serving Size	Protein Grams	Calories & Carbohydrate	Amount needed daily / how to use	Where available for purchase
Unjury Protein Powder	20 grams protein	90 calories 3 grams CHO	1 scoop into 8-12oz calorie-free liquid.	On-line: www.unjury.com/reg/bariatric Or call toll-free: 1-800-517-5111
Syntrax Nectar Protein powder	23 grams protein	100 calories 1 grams CHO	1 scoop in 4-6oz calorie free liquid.	On-line: www.bariatricadvantage.com Or call toll-free: 1-800-898-6888.
EAS AdvantEdge CarbControl shake	17 grams protein	100 calories 6 grams CHO	11oz Ready to drink	On-line: www.eas.com Local nutrition store or on-line
EAS Myoplex CarbControl shake	25 grams protein	150 calories 5 grams CHO	11oz Ready to drink	On-line: www.eas.com Local nutrition store or on-line
Premier Protein shake	30 grams protein	160 calories 5 grams CHO	11oz Ready to drink	www.premiernutrition.com , Sam's Club, Walmart, Local nutrition store or on-line
Muscle Milk Light	20 grams protein	100 calories 5 grams CHO	11oz Ready to drink	Local nutrition store or on-line
Myoplex Carb Control	25 grams protein	150 calories 5 grams CHO	11oz Ready to drink	Local nutrition store or on-line
Ensure Max	30 grams protein	150 calories 6 grams CHO	11oz Ready to drink	Local nutrition store, pharmacy or on-line
Boost Max	30 grams protein	160 calories 7 grams CHO	11oz Ready to drink	Local nutrition store, pharmacy or on-line
Owyn Protein Powder	30 grams protein	180 calories 5 grams CHO	2 scoops	Local nutrition store, pharmacy or on-line
Orgain Protein Shake	30 grams protein	160 calories 4 gram CHO	11oz Ready to drink	Local nutrition store, pharmacy or on-line
Fairlife Protein Shake	30 grams protein	150 calories 4 gram CHO	11oz Ready to drink	Local nutrition store, pharmacy or on-line

Chapter 3 - Surgery: What to Expect

On the morning of surgery, shower before coming to the hospital. Wear loose fitting clothing to the hospital. Leave your jewelry and other valuables at home. Contact lenses may not be worn; therefore, you will need to bring your glasses. If you wear dentures, you will be asked to remove them before surgery. If you use a CPAP machine, be sure to bring it with you. Bring your ID, insurance paperwork and pre-op paperwork the morning of your surgery.

You will need to arrive at the hospital as instructed by your surgeon. During this time, a nurse will check you in and then have you change into your hospital gown. You will sign consent for surgery. When it is time to be taken back for surgery you will be carried to the holding area by stretcher. Your family will be asked to wait in the waiting area.

Your surgery will take approximately one to two hours. Following your recovery time, you will either be discharged or transferred to a room on the surgical floor.

A family member will need to drive you home following discharge. If your drive home is longer than 30 minutes, we ask that you stop every 30 minutes and walk around your car. This will help decrease your risk of developing a blood clot. We prefer that you have someone stay with you at home for the first few days after surgery. It is important that you take some time to rest and allow your body to recover before trying to do too much. Be sure to follow specific activity guidelines provided by your surgeon.

During your hospital stay or first few days of recovery at home, you will follow specific diet guidelines:

- Day of Surgery: Following your surgery you will be allowed ice chips, small bites of sugar-free popsicles (less than 25 calories each), and sips of clear liquids.
- Post-op Day One/Two: Clear Liquid diet ONLY, take small sips throughout the day
- Post-op Day Three: Full Liquid diet

We do not expect complications after surgery. However, if you experience any of the following symptoms, you should call your surgeons office or seek medical attention immediately:

- Shortness of breath
- Pain or swelling in your legs
- Chest or shoulder pain
- Fever greater than 101 degrees
- Drainage from your incision sites
- Vomiting
- Any other unusual problems
- Abdominal pain

The following are signs and symptoms of infection in your incision sites.

If you experience any of these, you should call your surgeon immediately:

- Increased redness
- Drainage
- Fever greater than 101 degrees
- Red streaks
- Swelling of the area
- Increased tenderness

You will be discharged from the hospital with a prescription for pain medication. This medication should only be used if necessary. Pain medications can cause side effects. Unless your surgeon indicates otherwise, you will need to resume your regular medications after surgery. If you take several medications you will need to start with the smallest pill first and then work your way up in size, taking your time and drinking plenty of water. Medications larger than 1 cm round (the size of an over the counter Advil) may need to be taken in chewable or liquid form. If the medication is not available in these forms, check with your physician to see if it is safe to crush these medications. If any of your medications are not available in liquid or chewable form, and cannot be crushed, please notify your physician.



Preventing Complications after Your Operation

DEPARTMENT OF SURGERY



INCENTIVE SPIROMETER AND FLUTTER EXERCISES

- Deep breathing exercises will help keep your lungs healthy.
- Place the mouthpiece in your mouth and seal your lips around it.
 - Breathe in (inhale) slowly and deeply.
 - Remove the mouthpiece from your mouth and breathe out.

This breathing exercise needs to be done 10 times each hour while awake.



COUGH AND BREATHE DEEPLY

After surgery, taking deep breaths and coughing will help to clear your lungs.

This helps the lungs do the vital job of delivering oxygen to the tissues in your body.



ORAL CARE

In addition to brushing your teeth, use mouthwash twice daily to keep your mouth clean from germs.

You should brush your teeth and use mouthwash several days before your surgery and then continue after you are discharged from the hospital.



UNDERSTAND ICOUGH PRACTICES

It is important for you and your family to take an active part in your recovery from surgery.

We want your pain to be controlled to help you take deep breaths and cough, do breathing exercises, and make sure that you get out of bed, sit in a chair, and walk.



GET OUT OF BED AND WALK THE HALLWAY

Getting out of bed and walking at least three times per day will help your recovery after surgery and help prevent complications.

Walking will help clear secretions from your lungs and improve your circulation so that you may regain your strength.



HEAD OF BED ELEVATION

It is important to keep the head of your bed elevated 30-45 degrees. Being in an upright position after surgery will help your breathing.

Baseline _____

ICOUGH Checklist

INCENTIVE SPIROMETER AND FLUTTER EXERCISES

Repeat 10 times per hour.

AM																				
PM																				

COUGH AND BREATHE DEEPLY

Take deep breaths often.

ORAL CARE

Brush your teeth and use mouthwash twice daily.

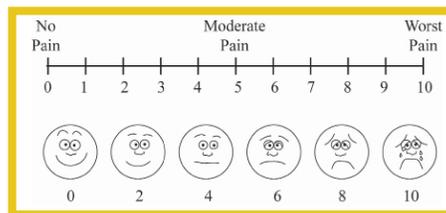
AM																				
PM																				

UNDERSTAND ICOUGH PRACTICES

Do you understand why you are using ICOUGH?

Yes: No: Not sure:

Rate your pain on the scale below:



GET OUT OF BED AND WALK THE HALLWAY

Walk at least 3 times per day.

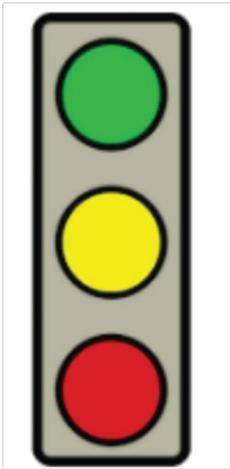
Morning																				
After-noon																				
Night																				

HEAD OF BED ELEVATION

Is the head of your bed elevated greater than 30 degrees?

Yes No

STOP Dehydration and Nausea Guidelines



Every Day Hydration Guidelines following Surgery:

- ✓ Maintain hydration by striving for 64oz non-carbonated, non-caffeinated fluids daily
- ✓ Experiment with the temperature of fluids to find the most soothing
- ✓ Your surgeon may instruct you to not drink through a straw
- ✓ Journal fluid intake every day
- ✓ Clear/light yellow urine output
- ✓ Frequent urine output
- ✓ Take anti-nausea medications as prescribed
- ✓ Take post-operative medications as prescribed
- ✓ Drinking fluids is important to help decrease pain and will keep your temperature down while healing
- ✓ Call provider if experiencing persistent nausea and lack of intake

Green is the goal zone

- ✓ Non-carbonated, non-caffeinated fluid intake is 48 ounces or more per day (your goal should be striving for at least 64oz daily)
- ✓ Warm, cold or room temperature fluid
- ✓ Light yellow urine output
- ✓ Frequency of urine output normal
- ✓ Occasional nausea but not daily

Yellow is the warning zone

- ✓ Non-carbonated, non-caffeinated fluid intake is between 30 and 47 ounces per day
- ✓ Warm, cold or room temperature fluid
- ✓ Dizzy, headache, muscle cramping, dry mouth/lips, heart palpitations (signs of dehydration)
- ✓ Yellow urine output
- ✓ Frequency of urine output decreased
- ✓ Nausea despite frequent anti-nausea medication
- ✓ Dry heaving, increased salivation, urge to vomit (signs of nausea)

Call Surgery Clinic at 931-528-1992 OR Surgeon on-call (if non business hours)

Red is the alert zone

- ✓ Non-carbonated, non-caffeinated fluid intake is less than 24 ounces per day
- ✓ Warm, cold or room temperature fluid
- ✓ Extreme thirst, confusion, rapid breathing, very dry skin (signs of severe dehydration)
- ✓ Dark yellow urine output
- ✓ Minimal urine output
- ✓ Uncontrolled nausea despite frequent anti-nausea medication
- ✓ Dry heaving, increased salivation, urge to vomit (signs of nausea)

Call Surgery clinic at 931-528-1992 OR Surgeon on-call (if non business hours)

Chapter 4 - Life After Weight Loss Surgery

The first few days after surgery will be an adjustment period. This is a time of healing and it will be very important to follow your surgeon's guidelines.

Nutrition

In order to allow time for your stomach to heal, your diet will be restricted for several months following surgery. It is important for you to advance through each new phase of your diet slowly, and as your body tolerates. The progression of the diet varies slightly depending on the surgery you choose.

You will have to learn to listen to your body when it gives you its signal of fullness. It may take your brain and your eyes some time to learn to visualize the amount of food you will be able to eat, so it is important for you to follow the guidelines of your dietitian and make the proper food choices.

Weeks 1-2 Post-Op:

It is very important to stay hydrated following surgery. Although you may not feel like drinking very much, it is important that you consume adequate fluids. A minimum of 32 ounces of water daily is required to maintain hydration immediately post-op. After you have begun the healing process, the recommendation is a minimum 64 ounces daily. Following surgery you should no longer take big gulps. Do NOT use straws! Keep a water bottle with you and sip frequently through the day. Drinking too much or too fast can cause nausea or regurgitation.

While on the Full Liquid phase, make sure you are getting at least 45-60gm of protein each day and 48-64 ounces of fluids. You may use low carbohydrate, high protein shakes to assist with the protein intake. It is vital that you follow the diet progression. Not following these guidelines increases your risk of post-surgical complications which

could lead to hospitalization and sometimes reoperation.

Weeks 2-4 Post-Op:

Pureed food is the consistency of applesauce. You will need a blender or a food processor in order to attain this consistency. Most meats and vegetables can easily be pureed. During this time you will need to continue supplementing your diet with a protein shake each day in addition to your puree meals. Consuming one or two spoonful of your pureed meal may allow you to have a fullness sensation. Take in very small amounts during your meals and small sips of your fluids throughout the day. Use a baby spoon if that helps.

The puree phase of your diet is essential to the healing process. Again, consuming inappropriate foods during this phase may cause serious complications. Treatment of complications may be the need to follow a liquid diet for a longer period of time or undergoing an additional surgical procedure.

Diet Progression

Day of Surgery: Ice chips, small bites of sugar-free popsicles (less than 25 calories each), and sips of clear liquids will be allowed on the actual date of surgery.

Post-op Day One/Two: Clear Liquid diet only, small sips.

Post-op Day Two/Three: Begin Full Liquid diet (along with sugar-free clear liquids for hydration).

Weeks 4 + Post-Op:

Following the two week pureed diet, you will gradually advance to the Soft Diet Phase. Soft foods are foods that are moist and tender to cut with your fork. You will consume three small meals each day and high protein snacks or supplements if needed between meals.

Weeks 8 + Post-Op:

You may now advance to a regular consistency diet. Advancing your diet may be trial and error in the beginning. Try new foods one at a time so that if something is not tolerated you are able to easily identify problem causing foods. Remember to cut your food into small pieces, and then chew each small piece thoroughly. Continue to practice the 30-Rule. Intolerance to meats and tough foods is normal at this time. If you do not tolerate something in the first attempt, wait a week or two before trying the food again.

Bariatric Surgery Diet Guidelines

The following are guidelines which will assist you in successful weight loss after bariatric surgery.

Eating Guidelines:

- Eat three meals a day. Discuss with your surgeon the need for additional snacks between meals.
- Chew food slowly and thoroughly. You should take at least 20 minutes to finish a meal. Chew each bite at least 20-30 times. Your food should be a paste consistency before you swallow. Cut food into small bites. Foods that are tough or chewy may not be tolerated.
- Eat small amounts. Your new stomach will not be able to hold much food. Stop when you feel full and do not overfill your pouch.
- Eat protein rich foods first. After surgery, your body will need adequate protein to help build, repair, and maintain muscle tissue and organs. Protein deficiency can occur overtime which can cause fatigue, hair loss, and muscle wasting. You should always eat high protein foods first such as lean meats, beans, and low fat dairy products.
- You may need to supplement with protein shakes or supplements to ensure that you are meeting your individual protein needs.
- Avoid foods high in sugar and fat. To be successful with your weight loss and to prevent weight gain, you must follow a balanced diet. Foods that are high in sugar and fat are considered “empty calories.”

Fluid Guidelines:

- Do not drink liquids with meals. Stop drinking fluids 30 minutes prior to your mealtime, do not drink while you eat, and wait 30 minutes after your meal is finished to resume fluid intake.
- Avoid carbonated drinks
- Avoid sweetened liquids
- Drink 48-64 ounce of non-carbonated, sugar-free fluids daily
- Avoid caffeine

Dumping Syndrome

Dumping Syndrome may be caused by eating too much sugar, too much food, or too fast. Symptoms include diarrhea, abdominal cramping, cold sweats and lightheadedness after eating. Use a sugar substitute or foods made with a sugar substitute instead of sweetened foods. Dilute fruit juice with water ($\frac{1}{2}$ fruit juice and $\frac{1}{2}$ water). Remember it is essential to sip your drinks slowly.

Weight Loss

The following may slow or stop weight loss:

- Drinking regular sweetened soft drinks, Kool-Aid, fruit punch and undiluted fruit juice in large amounts.
- Eating high calorie snacks such as cookies, candy, chips, cheese puffs, snack cakes, fried foods, ice cream, milkshakes, etc.
- Eating after you feel full. A few more bites at each meal can stretch out your new stomach pouch.
- Skipping your meals. Some people are tempted to only eat one to two times a day. This may slow your weight loss. It may also prevent or prolong healing and recovery.

Bariatric Diet Overview

Stage I

Bariatric Clear Liquids - Days 1-2 (following surgery)

- Clear liquids only
- Sugar-free liquids
- No carbonated beverages
- No caffeine
- No pepper
- Sips on fluids throughout the day
- Do not take large gulps
- Do not use straws

Stage II

Bariatric Full Liquids

Lap Band: Day 2-14

Sleeve Gastrectomy : Day 3-Day 8

Roux-en-Y: Day 3-14

- Includes milk based liquids as well as clear liquids
- All liquids must be sugar-free.
- No carbonated beverages
- Protein shakes, lowfat cream soups, milk-based products, include clear liquids
- Small frequent meals
- Small sips and stop when full

Day of surgery: Ice chips, sugar-free popsicles (less than 25 calories each), and small sips of clear liquids during the first 12-24 hours.

Stage III

Bariatric Pureed Diet

Lap Band: Day 14-28

Sleeve Gastrectomy: Day 8 - Day 21
(until 3 weeks post-op)

Roux -en-Y: Day 14-28

- Pureed foods or baby foods
- Sugar-free liquids
- Eat 4-6 times a day (protein first, then vegetables, then fruit)
- Drink at least 32 to 48 ounces of water or other sugar-free liquids a day
- Do not drink for 30 minutes before meals and wait 30 minutes after meals to drink

Stage IV

Bariatric Soft-Solid Diet

Lap Band: Week 5 post-op

Sleeve Gastrectomy: Week 4 post-op

Roux-en-Y: Week 5 post-op

- Soft, moist cooked foods
- No uncooked fruits or vegetables (until about 12-16 weeks post-op)
- Drink at least 48 ounces of water or other sugar-free liquids a day
- Do not over eat
- Avoid foods high in fat, calories, and sugar.



Stage I

BARIATRIC SURGERY: CLEAR LIQUID DIET

After your surgery, you will begin to take small sips of water and ice chips during the first 12-24 hours. The doctor will progress you to a bariatric clear liquid diet slowly. Do not gulp. Avoid drinking out of a straw as this may cause gas bubbles and discomfort.

CLEAR LIQUID DIET

This diet contains only fluids that are sugar-free and clear.

- Take very small sips of clear liquids and rest between them.
- Do not take large gulps.
- Sip liquids, 1 to 2 tablespoons at a time throughout the day about every 15 minutes;

This diet is not used for more than a few days because it is not nutritionally adequate. It may be most easily tolerated when you have nausea and vomiting. If you have frequent vomiting after you go home, you may be asked to go back to the sugar-free, clear liquid diet until you are feeling better.

CLEAR LIQUIDS

These are clear liquids that can be used after surgery

- Ice chips or water
- Sugar-free Jell-o
- Bouillon, clear broth, or bone broth
- Sugar-free popsicles (less than 25 calories each)
- Gatorade Zero or Powerade Zero
- Tea or coffee (decaf)
- Sugar-free drink mixes with water
- Sugar-free juices without pulp
- Low carbohydrate “clear” high protein supplements

Stage II

BARIATRIC SURGERY FULL LIQUID DIET

Once you are home from the hospital, you may progress to a full liquid diet. During this stage, you may have small frequent meals. Be sure to take small tiny sips and stop when you feel full or feel pressure.

Start slowly and gradually increasing your protein intake to at least 45-60 gm per day. Continue to increase to the goal set by your physician and/or dietitian.

Sip 2 to 3 oz of water at a time throughout the day.

Combined small feedings and water intake should provide at least 48-64 oz (6-8 cups) of liquid per day.

Begin a daily chewable multi-vitamin mineral supplement.

Examples of Full liquids: Sugar-free pudding, low-fat yogurt without fruit pieces, unsweetened blenderized cooked cereals, low-fat blenderized/strained soups, high protein/low carbohydrate nutrition supplements, low-fat milk (skim, 1%, Almond, Soy), diluted fruit or vegetable juices, water, decaffeinated tea, decaffeinated coffee.

SAMPLE DIET

7am	¼ to ½ cup blended plain oatmeal with protein powder
8am	½ cup diluted fruit juice
9am	½ cup water
10am	½ cup high protein/low carb nutrition supplement
11am	½ cup water
12am	½ cup blended low-fat soup
1pm	½ cup water
2pm	½ cup low-fat yogurt or sugar free pudding
3pm	½ cup water
4pm	½ cup high protein/low carb nutrition supplement
5pm	½ cup water
6pm	½ cup blended low-fat soup
7pm	½ cup water
8pm	½ cup high protein/low carb nutrition supplement
9pm	½ cup sugar-free Jello or sugar-free popsicle

Stage III

BARIATRIC SURGERY PUREED DIET

At day eight post-op (for sleeve gastrectomy) or day 14 post-op (for Roux-en-Y Bypass), if you are tolerating your full liquid diet well, you may progress to a pureed diet. All foods must be blended to a baby food, soft consistency. Foods should be low in fat and sugar. You must chew your foods very well and eat slowly. Do not drink with your meals. Wait 30 minutes before and 30 minutes after to resume fluids. Foods should be eaten in this order: high protein rich foods, then vegetables and lastly fruit.

GENERAL GUIDELINES:

- Your meals will be only liquid or pureed. They may include milk, vegetable or fruit juice. Sip liquid meals very slowly. Drink 4 to 6 ounces, or $\frac{1}{2}$ to $\frac{3}{4}$ cup, over 20 to 30 minutes.
- Drink at least 32 to 48 ounces of water or other sugar-free beverages each day. Drink only between meals. Do not drink for 15-30 minutes before meals and wait 30 minutes after meals.
- Eat three meals a day with supplements between meals as needed. The amount you will be able to eat at one time is very small. Choose one item from the meat or milk group at each meal. These foods are high in protein and should be eaten first. Protein helps your body heal from surgery.

TIPS ON HOW TO BLEND FOODS

- Cut food into small pieces
- Place food into blender or food processor.
- Add a liquid such as water, broth or milk.
- Blend or puree until smooth.
- Strain foods that do not get blended into a completely smooth consistency.
- Season foods to taste. You may want to avoid spicy foods (Tabasco sauce, pepper, cayenne, red pepper, etc.)

SAMPLE MENU *(blended, pureed diet)*

Average meal size is $\frac{1}{4}$ to $\frac{1}{2}$ cup (total food volume)

BREAKFAST

2 tablespoons cooked cream of wheat in $\frac{1}{4}$ cup skim milk

MID MORNING

$\frac{1}{2}$ cup protein drink

LUNCH

$\frac{1}{4}$ cup vegetable (blended or pureed)
 $\frac{1}{2}$ jar baby food chicken or $\frac{1}{4}$ cup blended chicken

MID AFTERNOON

$\frac{1}{4}$ cup blended low-fat cottage cheese
 $\frac{1}{4}$ cup blended fruit

DINNER

$\frac{1}{4}$ cup blended meat
 $\frac{1}{4}$ cup blended green beans
1 teaspoon margarine / butter

EVENING

$\frac{1}{2}$ cup sugar-free pudding
 $\frac{1}{4}$ cup blended fruit or
 $\frac{1}{2}$ cup high protein supplement

Stop eating when you feel full.

Between meals you may drink water or sugar-free drinks, sugar-free popsicles or sugar-free gelatin, diluted fruit juice, V-8 juice, or skim milk. You should consume 32 to 48 ounces of fluid a day. Stop drinking 30 minutes before a meals and resume 30 minutes after.

PLANNING MEALS

Use foods from these groups to plan your meals.

MILK GROUP

Choose 4 servings each day. These foods are good sources of protein and calcium.

- ½ cup skim or 1% low-fat milk
- ½ cup Lactaid milk, soy milk, or almond milk
- 2 tablespoons nonfat dry milk powder
- ½ cup lite yogurt (remove any pieces of fruit)
- ½ packet of Light Carnation Breakfast Essentials, or ½ cup low-fat/low carb/high protein nutrition drink.
- ½ cup sugar-free pudding

Check sugar content and look for calcium fortified.

MEAT GROUP

Choose 4 servings each day. These foods are good sources of protein, energy, B vitamins and iron.

- ½ small jar strained baby food meats (plain)
- ¼ cup blended low-fat cottage cheese
- 1 tablespoon smooth peanut butter
- ¼ cup water-packed tuna, blended to a smooth texture
- ¼ cup (1oz) cooked blended meat such as beef, fish, turkey, chicken, and pork

A small amount of fat-free gravy or broth may be added for flavor. Mixing blended meat with mashed potatoes or blended soups improves the taste.

VEGETABLE GROUP

Choose 1 to 2 servings each day. These foods are good sources of vitamins, minerals, and fiber and are low in calories.

- ½ cup vegetable juice such as tomato, carrot, and V-8 juice
- ¼ cup blended cooked vegetables such as carrots, green beans, greens, spinach, tomato sauce, vegetable soup, beets, zucchini

FRUIT GROUP

Choose 1 or 2 servings each day. These foods are good sources of vitamins, minerals, and fiber.

- ½ cup diluted, unsweetened fruit juice
- ¼ cup blended, unsweetened fruit or ½ jar strained baby food (Stage 1)
- Avoid strained fruit desserts and junior or toddler foods

Note: Full strength fruit juice may cause diarrhea. You may need to dilute juice by mixing half juice and half water.

STARCH GROUP

Choose 1 or 2 servings each day. These foods are good sources of energy, B vitamins and iron (if fortified).

- ½ cup lowfat soup, any kind, blended to smooth texture
- ½ cup cooked cereal (cream of wheat, oatmeal, cream of rice, grits). Blend until smooth.
- ¼ cup starch vegetables, blended (winter squash-mashed, potatoes-mashed, sweet potatoes-mashed)

FAT GROUP

Choose 2 servings each day

- 1 teaspoon regular margarine or oil
- 1 teaspoon margarine/butter
- 1 tablespoon low-fat mayonnaise or salad dressing
- 1 Tablespoon smooth nut butter

Stage IV

BARIATRIC SURGERY SOFT-SOLID DIET

Once you have tolerated two weeks of pureed foods, you may progress to your final dietary stage. Foods should be soft, but do not need to be blended or pureed. Always chew foods very well and eat slowly. Avoid foods high in fat, calories, or sugar. Use low-fat cooking methods with very little oil or fat. Remember your meal progress: high protein foods first, then vegetables, then fruit.

SAMPLE MENU

(soft diet)

BREAKFAST (200-250 cal)

1 Protein	1 scrambled egg
1 Starch	½ to 1 slice toast
1 Fat	1 teaspoon lite margarine

MID MORNING (100-150 cal)

1 Protein	4 oz protein drink or 1 oz cheese
1 Starch	6 crackers

LUNCH (150-200 cal)

1 Protein	1 oz. meat
1 Starch	1 slice bread
1 Vegetable	½ cup cooked

MID AFTERNOON (100-150 cal)

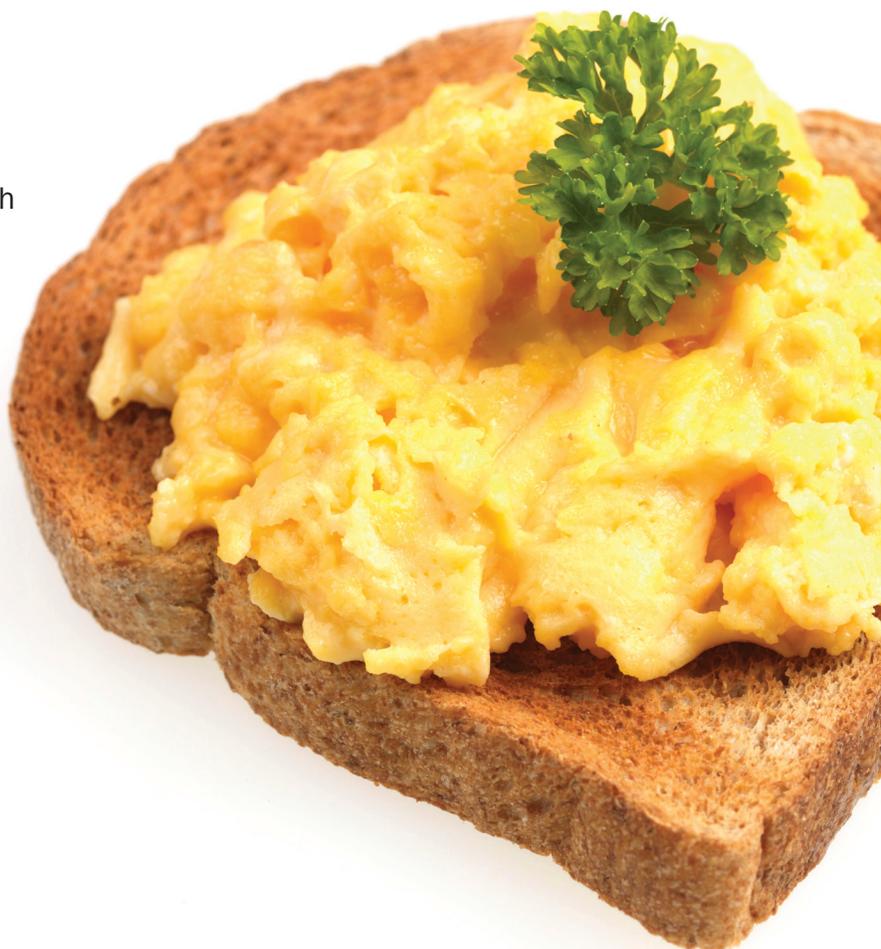
1 Protein	¼ cup low fat cottage cheese
1 Fruit	¼ cup canned peaches

DINNER (200-250 cal)

1 Protein	1-2 ounces tender chicken/fish
1 Vegetable	¼ cup cooked broccoli
1 Fat	1 teaspoon margarine/butter

General Guidelines

- Continue to eat three small meals and two to three healthy snacks a day. Eat slowly and chew thoroughly. Each bite should be smaller than a dime.
- Add one new food from the list each day. If you do not tolerate a food, wait one to two weeks before trying it again.
- Continue to drink at least 6 cups (48 oz) of water or low calorie liquids between meals each day.
- Take vitamins as prescribed by your doctor.



PLANNING MEALS

Use foods from these groups to plan your meals.

PROTEIN GROUP

Choose six of these a day. These foods are good sources of protein, B vitamins, and Iron.

- 1 egg or ¼ cup egg substitute
- 1 ounce (¼ cup) tender cooked, moistened meat (beef, fish, turkey, chicken, pork)
- 1 Tablespoon smooth peanut butter
- 1 ounce low-fat luncheon meat
- 1 ounce low-fat cheese
- ¼ cup low-fat cottage cheese
- ½ cup cooked, dried beans

Note: Red meats may be difficult to tolerate.

Always cut meats into small bites. You may add low-fat gravy, sauce or marinade to moisten.

Chew thoroughly.

MILK GROUP

Choose four or more of these a day. These foods are good sources of protein and calcium.

- ½ cup skim or 1% milk or soy or almond milk
- 2 Tablespoons nonfat dry milk powder
- ½ cup lite yogurt
- ½ cup sugar-free instant breakfast drink or ½ can high protein drink
- ½ packet of Light Carnation Breakfast Essentials, or ½ cup commercial diabetic formula, or ½ cup low-fat/low carb/high protein nutrition drink.

VEGETABLE GROUP

Canned or cooked

Choose two of these a day. These foods are good sources of vitamins, minerals, and fiber and are low in calories.

- ½ cup vegetable juice
- ¼ to ½ cup cooked
Examples: Asparagus tips, Carrots, Tomatoes, Beets, Cauliflower, Peppers, Broccoli, Spinach, Zucchini, Brussels sprouts, Eggplant, Squash, Cabbage, Green Beans, Greens

FRUIT GROUP

Canned or cooked

Choose two of these a day. These foods are good sources of vitamins, minerals, and fiber.

- ½ cup diluted, unsweetened fruit juice
- ½ cup cooked or canned fruit

Note: Full strength fruit juice may cause diarrhea. You may need to dilute juice by mixing half juice and half water.

STARCH GROUP

Choose three to four of these a day. These foods are a good source of energy, B vitamins, and iron, if fortified. Begin to use whole grain or whole wheat products

- 1 cup of lowfat soup, any kind
- 6 saltine crackers
- ½ cup cooked whole wheat pasta or macaroni
- ½ cup cooked cereal
Example: Cream of Rice, Grits, Cream of Wheat, Oatmeal
- ¾ cup unsweetened dry cereal
Example: Bran flakes, Puffed Wheat, Cheerios, Rice Krispies, Corn Flakes, Wheat Chex, Puffed Rice, Wheaties
- 1/3 cup cooked starch vegetables
Example: Peas, Winter Squash, Potatoes (any kind) Yams
- Toast is easier to digest than soft bread. You may only be able to eat ¼ to ½ a slice at first. Rice and pasta are difficult for some people and must be very moist. Avoid white flour and white flour products.

FAT GROUP

Choose three of these a day. These foods are low in vitamins and minerals and high in calories.

- 1 teaspoon margarine or oil or butter.
- 1 teaspoon mayonnaise or 1 Tablespoon low-fat mayonnaise or salad dressing
- 1 Tablespoon oil varieties salad dressing
- 1 Tablespoon smooth nut butter

Once you are tolerating soft foods well, you may slowly progress to a bariatric regular diet. Introduce new textures carefully. You must chew thoroughly and eat slow. Skins, seeds, nuts, and tough chewy meats should not be consumed until you are tolerating your diet well. Wait 12-16 weeks before introducing these food items. You will eventually be able to tolerate a variety of food groups.

Nutrition Plan for Long-Term Success

Protein is important for everyone, but it is very important for those who have had bariatric surgery for proper healing. It is also important for keeping muscle mass during weight loss. Too little protein in your diet results in poor healing, hair loss, and low energy.

What Should I Be Eating to Avoid Weight Regain?

- The first thing you should consume at mealtimes is the Protein Source. Protein is important for proper healing.
- Next, focus on fruits and vegetables – approximately one to two of each per day.

Healthy Protein Sources

Have one of these at each meal and snack

- Beans – Low fat refried, black, navy, white, kidney, pintos, lentils
- Fish – Salmon, Whitefish, Mahi Mahi, Grouper, Tuna, Cod
- Shellfish - Crab, lobster, scallops, shrimp
- Chicken – No skin, not fried, preferably baked or grilled, sometimes the dark meat is more tolerable.
- Beef – sometimes takes up to one year to tolerate. Remember to chew 30 times. Ground beef is better tolerated if it is in a sauce recipe
- Pork – may also take time to tolerate. Remember to chew well. Ham is generally better tolerated. Bacon and sausage are generally not well tolerated and high in fat and calories.
- Turkey – dark meat is better tolerated.
- Eggs – very good source of protein.
- Tofu, Soy – these are very healthy protein sources.
- Dairy Products – low fat and low carb are best choices.

Healthy Vegetable Sources

- Artichoke and Artichoke, Asparagus, Beans, Beets, Carrots, Cucumbers, Eggplant, Greens, Mushrooms, Onions, Peas, peppers, Radishes, Summer Squash, Tomato, Tomato/Vegetable Juices, Turnips, Water Chestnuts, Zucchini are generally well tolerated.
- Broccoli, Brussel Sprouts, Cabbage, Cauliflower, Celery, Okra, and Salad Green (endive, lettuce, romaine, spinach) are sometimes more difficult to tolerate because they are more fibrous and hard to digest.
- Cook your vegetables well to make them more tolerable.

- You do need a little healthy fat in your diet as well.
- Consume a minimum of 60 grams protein per day.
- Consume 1/2 cup to 1 cup total volume at mealtimes.
- Begin with Protein, followed by vegetable, then fruit.

Healthy Fruit Sources

- Unsweetened Applesauce
- Canned Fruit (unsweetened, in their own juice)
- Cooked fruits (without added fat)
- Note: Fresh fruits and fresh vegetables should be added back slowly. They are sometimes more difficult to tolerate because they are more fibrous and hard to digest if not chewed thoroughly.

Healthy Complex Carbohydrates Sources

- Oatmeal
- Sweet Potatoes – These are always better than a baked potato as they have more fiber.
- Hummus – a great-tasting, healthy dip for veggies.
- Limit white breads, pasta, rice and white potatoes until your goal weight is achieved.

Healthy Fat Sources

- The healthiest oils are Canola, Safflower, Sunflower, Corn, and Olive Oils.
- The healthier choices of butters and/or margarines are Take Control, Promise, and Benecol, Smart Squeeze.
- Other healthy fats includes avocados, olives, peanut butter, Mayonnaise (light or fat-free) and Salad Dressings (light or fat-free and vinaigrettes are best choices).
- Molly McButter, Butter Buds, Pam spray, fat-free Parkay Butter spray.

Do Not Forget the “30 Rule”

- Chew your food 30 times
- No beverages with meals (stop drinking 30 minutes before mealtimes, limit fluid intake at mealtimes for optimal food consumption, wait 30 minutes after your meal is finished to resume fluid intake).
- Take 30 minutes to eat your meal

Medications

Unless your physician directs you otherwise, you will need to resume your medications after surgery. Chewable or liquid medications are preferred when available. If you take several medications that are not chewable or liquid in form you will need to start with the smallest pill first, then work up in size, taking our time and drinking plenty of water.

Be aware that because of the malabsorptive tendency of surgery, oral contraceptives may become less effective. You should use two forms of reliable birth control until your weight stabilizes (approximately 18 months after surgery). As the excess weight is lost, hormone levels return to a more normal state fairly rapidly, and those who were previously unable to conceive may now be fertile.

Non-steroidal, anti-inflammatory drugs, and products containing aspirin should be avoided after surgery. These products can irritate potentially leading to ulcer formations.

Vitamin Supplementation after Bariatric Surgery

- **Multivitamin: (Chewable, Liquid, or Capsule only)**

Avoid gummy type vitamins—they do not have all the nutrients your body needs. *Follow the dosage instructions on the label. (examples: Flintstone Complete with Iron, Centrum Children’s Complete with Iron, Centrum Adult Chewable Vitamin, Centrum Liquid, CVS Spectravite Chewable or Liquid, Walgreen’s Complete Multivitamin Liquid, Optisource Bariatric, Bariatric Advantage).

- **Calcium Citrate with Vitamin D: (Chewable, Liquid, or Capsule only)**

You will need a minimum of 1200 mg per day. It is best to purchase in the amount of 400-600mg. For better absorption, the doses should be spread out during the day and taken at least two hours apart. It is also best to take your Calcium supplement with meals. The amount of Vitamin D needed daily is 3000 IU.

- **Vitamin B-12: (sublingual, capsule, or liquid)**

You will need 350-500 micrograms (mcg) per day, or you may choose to check with your doctor about receiving a monthly injection. DO NOT buy the time release. You can take this vitamin at any-time during the day.

- **Iron: (chewable, capsule, or liquid)**

Men: 18 mg per day/ Women: 29 mg per day (There may be enough iron in your Multivitamin, so check your Multivitamin label & supplement only if needed). It is best to take iron two hours apart from any dairy products, calcium, coffee or tea for maximum absorption.

Sample Schedule for Daily Vitamin Supplementation

Breakfast

Multivitamin with Iron + Sublingual (under the tongue) B12

Snack

Calcium + Vitamin D

Lunch

None

Snack

Calcium + Vitamin D

Dinner

Multivitamin with Iron

Primary Care Physician Follow-Up

You will need to make an appointment with your primary care physician within the first few weeks after surgery so that he/she can monitor your medications. If possible, ask your doctor to prescribe chewable, liquid, or capsules when available. You may be able to swallow some small pills, but large pills and tablet may be hard to tolerate. Do not crush or chew a medications unless you are instructed to do so by your doctor. Following up with your primary care physician is important after surgery. Diabetes, hypertension, cholesterol, triglycerides, sleep apnea, etc. will improve significantly after weight loss. As these improve, adjustments may be required to your current medications.

Returning to Work

Most patients are able to return to work within two to three weeks after laparoscopic surgery, and four to six weeks after an open procedure. This will vary dependent upon your medical history, and complications associated with surgery, and the type of work you do.

Exercise and Activity

You may advance your activity as tolerated after surgery. Walking can be done as soon as you return home, and we will ask that you walk as much as you are able. Avoid sitting or standing in the same position for long periods of time will reduce the risk of developing blood clots.

Surgical Follow-Up

It is very important that you follow up with your surgeon as schedule.

- 2 weeks post-op
- 6 weeks post-op
- 6 months post-op
- 12 months post-op
- 18 months post-op
- Annually thereafter

*Healthful Hint: *May be a good idea to schedule your follow-up annually around your birth date!**

Post-Operative Checklist for Follow-up Visits

- monitor progress with weight loss and evidence of complications at each visit
- SMA-21, CBC/plt with each visit (and iron at baseline and after as needed)
- avoid nonsteroidal anti-inflammatory drugs (ibuprofen, motrin, etc)
- adjust postoperative medications
- consider gout and gallstone prevention in appropriate patients
- need for antihypertensive therapy with each visit
- lipid evaluation every 6–12 months based on risk and therapy
- monitor adherence with physical activity recommendations
- evaluate need for support groups
- bone density (DXA) at two years
- 24-hour urinary calcium excretion at six months and then annually
- B12 (annually; MMA and Hcy optional; then every three to six months if supplemented)
- folic acid (RBC folic acid optional), iron studies, 25-vitamin D, iPTH
- vitamin A (initially and every 6–12 months thereafter)
- copper, zinc, and selenium evaluation with specific findings
- thiamine evaluation with specific findings
- consider eventual body contouring surgery

Chapter 5 - Common Occurrences After Surgery

The first few weeks after surgery are a time of healing. It is important that you are aware of the differences between normal reactions to surgery and the signs and symptoms of potential complications. Soreness at the incision site, gas, and difficulty ingesting liquids can all be normal side effects of surgery. If you experience severe abdominal pain, sleep disturbances, respiratory symptoms, chronic cough, recent onset of asthma, recurrent or prolonged bronchitis, pneumonia, or persistent regurgitation of liquids, you should notify your surgeon as soon as possible.

Gas Pain

Gas is used to expand your abdomen during surgery. After surgery you may experience a sharp, stabbing or dull pain in your shoulder area as this gas is released from the body. Walking around may help alleviate some of the discomfort caused by gas.

Regurgitation

Regurgitation sometimes occurs after surgery because of over eating, intolerance to certain foods, or as a result of eating or drinking too quickly. It is important that you try to prevent recurrent regurgitation, because regurgitation can stretch the new pouch.

It is important that you understand the difference between regurgitation, productive burping, and vomiting. Regurgitation is the expulsion of undigested material from the mouth or esophagus. Productive burping is when a small amount of food resurfaces when burping, and is most commonly a result of eating too much too quickly. Vomiting is the forceful expulsion of stomach content through the mouth.

If you experience any vomiting or food intolerance you should

return to your liquid diet for 48 hours, then advance back to soft foods as your body tolerates. If vomiting does not resolve after returning to your liquid diet, you should contact your surgeon immediately.

Mucus

You may also notice that you experience an increase in mucus production after surgery. This mucus may prevent you from being able to tolerate solid foods. If you find that you have difficulty with this, try sipping on a hot beverage first thing in the morning. Also, you may have a small glass of water approximately ten minutes before your meals which will help work the mucus through the small pouch.

Nausea

Nausea can be caused by overeating, improperly chewing your foods, or because of increased sensitivity to odors after surgery. If the nausea persists more than a few days, contact your surgeon's office for further directions. Mucus can sometimes cause nausea.

Decreased Energy

It is normal to feel tired or depleted after any surgical

procedure. Consuming adequate protein and water, supplementing with your multivitamin, and getting adequate rest will help you rebuild your stamina.

Numbness

Nerves to the skin may sometimes be cut during surgery. It is normal to experience numbness at the incision site. Sensation at those areas will gradually return over time.

Hair Loss

Often weight loss surgery patients will begin to experience mild to moderate hair loss within their first two to three months after surgery. The cause of the hair loss may be related to decreased protein intake, possible vitamin deficiencies, and your body's reaction to anesthesia. The amount of hair lost is not usually severe, and will most likely subside after three to four months. It is very important that you consume adequate protein and take your vitamins as prescribed by your surgeon.

Scars

It is normal for your scars to be dark pink or red, due to the fact that blood vessels are still working in the healing process. It can take up to one year for the scar to heal completely. You may treat the scar by rubbing Vitamin E or an over the counter cream to reduce the appearance.

Lactose Intolerance

Patients undergoing weight loss surgery sometimes experience lactose intolerance. Lactose intolerance is the inability to digest significant amounts of lactose, the predominant sugar in milk. This inability results from a shortage of lactase, the enzyme normally produced by the cells lining the small intestine. Lactase breaks down milk sugar into simpler forms that can be absorbed into the bloodstream. Without enough lactase to digest the amount of lactose consumed, symptoms including nausea, cramps, bloating, gas, and diarrhea may occur approximately 30 minutes to two hours after eating or drinking foods containing lactose. The severity of symptoms varies depending on the amount of lactose each individual can tolerate. Almond milk, Soy milk and soy cheese may be tolerated. Lactaid tablets may help with symptoms.

Weight Loss

It is more important for you to allow time for your body to heal after surgery than to worry about rapid weight loss during the healing period. Focus on following the guidelines you were provided to ensure adequate nutrition, hydration, and vitamin/mineral supplementation. Remember to stay off scale as much as possible. Make notice of your success in other ways.

Emotional Adjustments

The first few months after surgery are filled with change. Your diet, your activity, your body, your lifestyle, and other things will be changing. Although this is a normal part of the process, it can be overwhelming at times. In fact, almost all weight loss surgery patients ask themselves at least once, "what in the world have I done?" Remember to stay focused on the reasons why you decided to have surgery. A positive attitude makes a big difference.

Most of us have addictions to food. After surgery, as you transition through this time of change and adjustments you may be faced with breaking this addiction time and time again. For years, you may have used food improperly to help you through difficult times. You may have experienced the following: Stress related eating, eating for sadness, for happiness, for celebration, for holidays etc. Remember to focus on your health. Always try to make good choices, and reflect on the journey ahead. Staying focused on our goals is the only way you will be able to get through the ups and downs along your weight loss journey.

Lean on the support system you have built around you during difficult times. Do not be afraid to ask for support from your comprehensive medical team.

Excess Skin

Unfortunately for most weight loss surgery patients, their skin has lost its elasticity and therefore may not tighten as they lose weight. The degree of excess skin varies on an individual basis. Most commonly patient will have excess skin in the abdominal area, the upper arms, thighs, and breast. After reaching and maintaining goal weight for six to 12 months, some patients choose to undergo plastic surgery to remove the excess skin. This can be a costly procedure and is rarely covered by insurance. After you have reached your goal weight, speak to your surgeon for more information and a referral to a qualified plastic surgeon.

Chapter 6 - Life After Surgery

The result of weight loss surgery will require consuming only small portions of food. In order to allow time for your stomach to heal, your diet will be restricted for several weeks following surgery. It is important for you to advance through each phase of your diet slowly. You will have to learn to listen to your body when it gives you the signal of fullness. It may take your brain and your eyes time to learn to visualize the amount of food you will be able to eat, so it is very important that you follow the guidelines of your physician and dietitian. The key to success is to be satisfied with your food intake and experience reduced cravings for larger quantities of food at meals. This is an individual

learning process for each patient. It will take several months before you can tolerate most types of foods, especially meats. There may be foods that do not appeal to you after surgery due to taste changes, and there may be foods that you never liked before that now sound very appealing. This varies on an individual basis. There is no painless way to lose weight. You will need to be compliant with the lifestyle changes required in order to achieve success. If you overeat or consume the wrong foods, you can stretch your stomach “pouch” out eventually resulting in increased calorie consumption and weight gain.

Long Term Nutrition Guidelines

The following guidelines will help you reach your weight loss goals, while maintaining adequate nutrition.

Eat three to four small meals each day; limit snacking

Most patients find that they are able to tolerate a very small amount of food at each meal, and therefore need to eat every three to four hours in order to meet their nutritional needs. You may find that having three small meals throughout the day, and supplementing with 4 oz protein shake or small snack will help you prevent hunger while consuming adequate protein.

Consume 1/2 to 1 cup of food total at each meal, starting with protein first.

Try to consume a minimum of 60 gm of protein each day.

It may be difficult at first to consume adequate protein. It is important that you follow a food progression that allows you to consume protein first, then vegetables, and then fruit so that if you are not able to consume an entire meal, you are at the very least striving to consume adequate protein. It is important that you consume something high in protein at each and every meal. Protein helps prevent muscle loss and promotes healing. Be sure to stop eating when you are full. Overeating can stretch the size of your stomach pouch, cause nausea and vomiting, and prevent weight loss.

Avoid foods that are high in simple carbohydrates

These include ice cream, potato chips, pasta, rice, bread, and potatoes. These foods WILL significantly slow your weight loss. Foods that are high in carbohydrate are often low in protein. These foods are quickly broken down by the body, and therefore do not leave you with a sensation of fullness. These are also foods that will most likely trigger dumping syndrome. Carbohydrates; however, do play an important role in proper function of our body systems. Your carbohydrate intake should come from complex sources such as beans, vegetables, fruits, and whole grains.

Do Not Forget the “30 Rule”

- Chew your food 30 times
- No beverages with meals (stop drinking 30 minutes before mealtimes, limit fluid intake at mealtimes for optimal food consumption, wait 30 minutes after your meal is finished to resume fluid intake).
- Take 30 minutes to eat your meal

Remove Distractions!

It is imperative that you learn to focus on your food while eating. Remove all distractions during meal times such as television, computers, work, etc. Eating while distracted can lead to overeating, or inadequate chewing of food, both of which can cause discomfort. Food can only pass if it has first been chewed well. Food that is too large to pass will often end up being regurgitated. Consuming liquids during meals can allow the solid protein dense food to be pushed through the pouch too quickly, preventing satiety and fullness, and possibly promoting vomiting.

Consume a minimum of 64 ounces of water each day

Adequate hydration is another key component of weight loss success. Water functions in many important body processes such as waste removal and temperature regulation. During times of activity, you will need to increase your consumption of fluids in order to offset the loss of water as perspiration. Water can also help with appetite control.

Avoid drinking high calorie liquids such as whole milk, sweetened juices, alcohol, sweet tea, and sports drinks.

Liquids pass through the digestive tract very quickly and without providing any sensation of fullness, therefore liquid calories should be avoided. Liquid calories can also significantly slow our weight loss efforts.

Eliminate all carbonated beverages

Carbonated beverages are not well tolerated by most patients. If you choose to continue drinking carbonated beverages, you should allow them to first “go flat”, and then sip them slowly.

Limit intake of alcohol

Consumption of alcohol is not recommended for the first six months after surgery, as it can be quite irritating. Use caution when consuming alcohol any time after surgery, as the effects of alcohol will impact you differently. Alcohol empties immediately from the pouch into the intestines, so effects are more rapid, and can be more intense, even with only a small amount of alcohol consumed. Remember alcohol contains a high level of empty calories, and mixed drinks and beer typically high in sugar and carbohydrates.

Avoiding Weight Re-Gain

- Avoid falling into the trap of thinking that since you are eating a small amount of food, it does not matter what type of food you are eating. Resuming a diet high in fat and calories on a routine basis, even in small amounts will lead to weight re-gain.
- Exercise –DAILY. Often patients can lose a significant amount of weight with diet changes alone during the first few months after surgery. However, the research shows that the best way to maintain a weight loss is with regular exercise.
- Maintain yearly follow up with your surgeon. This may help hold yourself accountable to your plan.
- Maintain an adequate support system. Weight loss surgery is a lifelong, lifestyle change. You will need emotional support throughout every step of the weight loss journey, and the best support often comes from patients who are going through the same things as you.

Tips for Plateau Busters

- Evaluate your current diet. Are you following your surgeon’s guidelines for protein, carbohydrate, and fluid intake?
- Keep a food journal for 5-14 days, recording everything you eat or drink throughout the day.
- Increase your physical activity.
- Change up the types of activity you are doing. Incorporate strengthening and toning exercises into your cardio routine.

Exercise

Starting an exercise program can be a difficult, but remember your main goal is to improve your health and burn calories. Start with what YOU can do. Do not overdo in the beginning. Choose activities you enjoy, such as walking, swimming, biking, dancing, or other activity that involves family and friends. If you need a variety of activities to stay motivated, mix up a combination of activities that appeal to you.

Physical activity can be accumulated through a variety of activities, not just running or going to the gym. Remember to keep your mind open and find ways to increase your body movement. You can work around your physical limitations. A bad knee or lower back does not mean that you cannot exercise, it just means you have to find an activity that does not cause you discomfort in those areas.

Examples of exercise/physical activity

- Walking or jogging
- Biking
- Elliptical Trainer
- Swimming or water activity
- Lifting weights/strength training
- Dancing
- Boxing
- Movements in place such as marching or half jacks
- Sports activities
- Parking farther away

Websites for exercise:

<http://www.acsm.org>

<https://sparkamerica.com>

<https://www.heart.org>

The following recommendations are for long term exercise goals. Most people may not be able to reach these goals within the first few months after surgery, but you can work to build up to them.

These are the recommendations of the American Heart Association and American College of Sports Medicine.

- Get at least 150 minutes per week (2 hours and 30 minutes) of moderate-intensity aerobic activity or 75 minutes (1 hour and 15 minutes) per week of vigorous aerobic activity, or a combination of both, preferably spread throughout the week.
- Add moderate- to high-intensity muscle-strengthening activity (such as resistance or weights) on at least 2 days per week.
- Spend less time sitting. Even light-intensity activity can offset some of the risks of being sedentary.
- Gain even more benefits by being active at least 300 minutes (5 hours) per week.
- Increase amount and intensity gradually over time.

Moderate-intensity physical activity means working hard enough to raise your heart rate and break a sweat, yet still being able to carry on a conversation. The 30 minute recommendation is for the average healthy adult to maintain health and reduce the risk for chronic disease.

Vigorous intensity activities will push your body a little further. They will require a higher amount of effort. You will probably get warm and begin to sweat. You will not be able to talk much without getting out of breath.

You are not expected to start with the above recommendations. The above recommendations should be long term goals that you have for your exercise routine.

Tips for Meeting Recommendations

- Do it in short sessions. Research shows that moderate-intensity can be accumulated throughout the day in 10 minute bouts.
- Mix it up. Combinations of moderate and vigorous intensity physical activity can be used to meet the guidelines.
- Set your schedule.
- The gym is not a necessity.
- Make it a family affair.

10 Reasons Why Patients Regain Their Weight

1. Failure to follow-up.
2. Returning to old habits or lack of portion control.
3. Lack of exercise.
4. Not eating enough protein or drinking enough fluids.
5. Sticking to the same meal plan you followed before.
6. Not attending support group meetings.
7. Empty liquids calories.
8. Not monitoring chronic medication that could contribute to weight gain.
9. Underlying depression that is not treated properly.
10. Nutritional deficiencies.



Frequently Asked Questions

Should I continue medication after surgery?

Contact your prescribing physician.

Why must I crush my medications?

Pills may become lodged in your “pouch” and cause irritation and possible ulceration. The absorption of medications often changes after surgery, so crushing your medicine gives your body the best chance of absorption.

How long will I need to crush my medications?

Until your physician instructs you to stop. This may be for the rest of your life.

TO DO

Your primary care physician will play a large role in your post-operative care, so it is important that you keep them aware of the changes in your diet and exercise as they occur. Medications and treatments that you are currently receiving may need to be altered after surgery; therefore, you will need to follow-up with them regularly.

SUPPORT GROUP MEETINGS

Monthly support group meetings are held in the
CRMC Education Center Room 2 every 3rd Monday of each month at 6:00 p.m.
Please RSVP your attendance to (931) 528-1992.

Resources

Bariatric Advantage:	www.bariatricadvantage.com
Celebrate Vitamins:	www.celebratevitamins.com
Bariatric Choice:	www.bariatricchoice.com
Bariatric Eating:	www.bariatriceating.com
Spark America:	https://sparkamerica.com
The Bariatric Skinny:	www.bariatricskinny.com
Obesity Help:	www.obesityhelp.com
Fit Day:	www.fitday.com
Calorie King:	www.calorieking.com
My Fitness Pal:	www.myfitnesspal.com
My Plate:	www.choosemyplate.gov

Source for free recipes and support
Source for free recipes and support
Source for free recipes and support
Source of support and discussion board
Food journaling and nutrition information
Food journaling and nutrition information
Food journaling and nutrition information
Food journaling and nutrition information

Bariatric Help!

We want to know!

QUESTIONS/CONCERNS OR IF YOU EXPERIENCE ANY OF THE FOLLOWING:

- Abdominal Pain
- Fever
- Fatigue
- Nausea/Vomiting
- Dehydration
- Diarrhea
- Wound Issue

CALL (931) 528-1992

EMERGENCY - CALL 911

Go to Cookeville Regional Medical Center or to the nearest emergency room.

IF YOU ARE NOT SURE

Call the on-call surgeon at (931) 528-2541.
During non-office hours you will be directed to the answering service who will connect you with the on-call surgeon.

NON-URGENT

Call your bariatric surgery office during regular business hours to schedule an appointment or to be seen that day.

Middle Tennessee Surgical Specialist

203 N. Cedar Avenue • Cookeville, TN 38501

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