



CARILION WEIGHT LOSS SPECIALISTS

Your Guide to Weight Loss Surgery



Welcome

Dear Patient,

Congratulations on your “decision of a lifetime!” We have developed Your Guide to Weight Loss Surgery to help support you through this exciting time. All procedures are performed with minimally invasive techniques by our advanced laparoscopic surgeons.

This guide is your reference for all of the steps in your journey. This guide covers pre-operative and post-operative care, as well as important **dietary and lifestyle changes that are required.**

We appreciate the opportunity to care for you at the Carilion Weight Loss Center. We look forward to seeing and working with you soon.

Sincerely,

David Salzberg, M.D., F.A.C.S.
Director, Carilion Bariatric and Metabolic Surgery
Fellow American Society of Metabolic & Bariatric Surgeons



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Table of Contents

Important Contact information.....	4
Your Decision	5
Once You Decide	5
Step-by-Step Guide	6-8
Explanation of Steps	7-8
Description of Laparoscopic Surgical Procedures	9
Follow-Up Appointment Schedules	10
Benefits and Risks of Bariatric Surgery	11
Possible Complications.....	11-12
Before Surgery	13-14
What To Bring to the Hospital	13
Hospital Information: Carilion 10 Mountain	13
One Month Before	14
Two Weeks Before Surgery	14
Pre-Operative Preparation	14
Before Surgery Nutrition	15-17
Whole Foods and Protein Supplement Diet.....	15
Starchy / Non-Starchy Vegetables List	16
Portion Sizes	17
Shopping List for Bariatric Surgery Patients	18
Vitamins and Bariatric Surgery	19
Before Surgery Instructions	20
The Day Before Surgery	20
The Day of Surgery.....	20
Morning of Surgery	21
After Surgery Instructions	22-23
Discharge Instructions	24
Emergencies	25
Follow-Up.....	26
Medications You CANNOT Use After Bariatric Surgery.....	27
Recovery after Bariatric Surgery	28-35
Medications.....	29
Troubleshooting: What To Do if Food Gets “Stuck”	29-30
Chewing Food.....	30
Nausea and Vomiting	30-31

Frothing.....	31
Gas Pains	31
Hair Loss.....	32
Bowel Habits.....	32
Constipation.....	32
Diarrhea	32
Incision Care.....	33
Bathing	33
Sleeping.....	33
Headaches.....	33
Returning to Work.....	33
Breathing Exercises (Incentive Spirometer).....	34
Activity	34
Exercise	34
Pregnancy/Birth Control After Surgery.....	35
Diversion Activities.....	35
Dumping Syndrome	35
Support Groups.....	36
The Internet	36
After Surgery Nutrition.....	37-47
Stages	37-38
Liquid Stage	38
Pureed Stage.....	39-40
Soft Stage	41
Regular Diet Stage	42
How To Be Successful	42-43
Guidelines for Food Selection: Regular Diet.....	44-45
Foods NOT Recommended After Surgery	46
Protein Examples	47

Important Contact Information

MyChart is a fast and secure way to communicate with your team.

Carilion Surgical Weight Loss Center

3 Riverside Circle, Roanoke, VA 24016

540-224-5170

After hours, call 540-981-7000 and identify yourself as a bariatric patient.
weightloss@carilionclinic.org

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Your Decision

Your decision to move forward with the weight loss surgery option is the first step in a lifelong commitment. As a successful patient in this program, you will enjoy the benefits of not only weight loss, but also significant reductions in weight-related medical problems.

It is important to understand that weight loss surgery is merely a stepping stone in your journey to a healthier you. It is a lifestyle change. It requires constant attention to your diet and exercise routines, and can never be given up.

Because of this, the bariatric center will provide ongoing support for as long as you need it. Our doors are always open to you and your needs. Support groups meet each month. Potential patients, family members and those who have had the surgery are always welcome. Our measure of success is not only weight loss, but the long-term resolution of weight-related medical problems.

Once You Decide

Once you have made the decision to proceed with surgery, you should do the following:

- **IF YOU SMOKE, STOP SMOKING!! It is a requirement to be at least 2 months nicotine/cannabis free before surgery.**
- Begin a high-protein, low-carbohydrate diet.
- Stop all carbonated beverages. This is a LIFETIME commitment.
- Stop all beverages that contain caffeine. This is for the first 3 months.
- Begin a routine exercise program. Consult your primary care physician first.
- Begin cutting food into small pieces (pinky nail size) and practice chewing very well.
- Join the support group and begin coming to monthly support meetings.
- Have your physician convert all extended/time-released medications to non-extended, non-time-released.

Step-by-Step Guide To Surgery

TIMELINE

- step 1:** Verify your insurance covers bariatric surgery
- step 2:** Attend patient information session or watch online videos
- step 3:** Go to initial bariatric consult appointment and develop a plan of care
- step 4:** Begin series of appointments to include medical clearance and evaluation
- step 5:** We will confirm insurance AUTHORIZATION and surgery date
- step 6:** Begin low-calorie, low-carbohydrate pre-op diet 2 weeks before date of surgery
- step 7:** Pre-operative surgeon visit about 2 weeks before date of surgery
- step 8:** **SURGERY**
- step 9:** Follow-up timeline (seen on page 9)



Step-by-Step Guide To Surgery

steps 1 & 2: Seminar and Insurance Verification

By this time, you should have attended a weight-loss seminar for bariatric surgery. It is vital that you call your insurance company yourself to confirm that your policy contains bariatric surgery coverage.

- **Laparoscopic Roux-en-Y (roo-en-why) gastric bypass:** CPT code 43644
- **Laparoscopic sleeve gastrectomy:** CPT code 43775
- **Laparoscopic biliopancreatic diversion with duodenal switch:** CPT code 43845

Once the above has been confirmed, we will arrange for your first office visit. Each insurance company's requirements are different; therefore, they may have distinct waiting periods for weight loss. In general, they require:

- 3, 6 or 12 month weight-loss trial periods
- Several months of documented weight-loss history Documentation of failed attempts at weight loss
- Documentation of any weight-loss medications you may have taken

steps 3 & 4: First Visit and Medical Clearance

Once your insurance has been confirmed, we will arrange for your first surgical evaluation. This will take approximately one hour, during which you will meet with the surgeon or NP. We will then create an individualized plan of what is needed to ensure a safe surgery. You will be given a checklist and we will monitor your progress of completion in preparation for surgery.

step 5: Final Insurance Approval and Surgery Date

Once your pre-surgical workup is complete, we will send your packet to your insurer for final approval. This typically takes around 4-6 weeks. Once insurance approval is received, you will then be called by the surgery scheduler to choose your surgery date from what is available.

steps 6 & 7: Pre-Op Visit and Diet Change

On the day of your pre-op visit with your surgeon you will have the opportunity to review your procedure and ask any questions you may have. You will also visit with the dietician to help with your low calorie, low carbohydrate diet - which you will be on for about two weeks before your date of surgery.

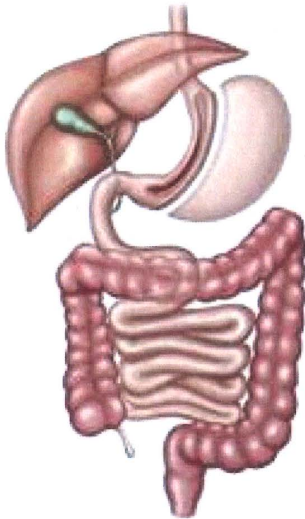
steps 8 & 9: Surgery and Follow-Up

Refer to page 9 for a guide on follow-up appointments.

Refer to page 34 for information on our support group.

Surgery Options

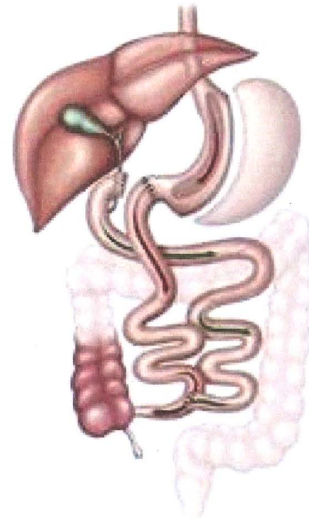
Gastric Sleeve



Gastric Bypass



Duodenal Switch



Gastric Sleeve	Gastric Bypass	Duodenal Switch
Restrictive (smaller stomach)	Restrictive AND malabsorptive (smaller stomach and the body absorbs less calories and vitamins)	Restrictive AND malabsorptive (smaller stomach and the body absorbs even less calories and vitamins)
Does NOT change the way your body absorbs calories and vitamins - will still need to take a daily vitamin supplement for the rest of your life	Some malabsorption – will need to take daily vitamin supplements for the rest of your life	More malabsorption than gastric bypass – higher risk of low vitamin levels and needing to take more vitamins for the rest of your life
Can sometimes make heartburn/reflux worse	Best for treatment of heartburn/reflux	Can sometimes make heartburn/reflux worse
Usually 1-2 hour operation	Usually 2-3 hour operation	Usually 2-3 hour operation
Usually 1 night hospital stay	Usually 1-2 night hospital stay	Usually 1-2 night hospital stay

Follow-Up Schedule for After Surgery

Time	Appointment
2 weeks	Surgeon or NP, dietitian, labs
4 weeks	Surgeon or NP, dietitian, labs
3 months	Surgeon or NP, dietitian, labs
6 months	Surgeon or NP, dietitian*, labs
9 months	Surgeon or NP, dietitian
12 months	Surgeon or NP, dietitian, labs
Yearly / as needed	Surgeon or NP, dietitian, labs

* Required one-on-one consultations with registered dietitian for consult, halfway point prior to surgery (if you did not attend class), and 6 months after surgery.

Charge for visits total <\$100.00

Benefits and Risks of Bariatric Surgery

Everyone feels better physically and emotionally when his or her weight is under control. In addition, high blood pressure, sleep apnea, reflux, diabetes, cholesterol problems and other health problems have been demonstrated to be cured and/or easier to control with less medication if significant weight control is achieved.

It is important to understand that weight loss should be gradual, sustained and accompanied by careful attention to proper nutrition during this period.

Bariatric surgery is major surgery. Patients who undergo any operation take on a certain amount of surgical risk. An obese patient's risk for complication following major surgery is increased when compared to non-obese patients undergoing similar surgery. The occurrence of various complications after bariatric surgery is recognized and anticipated. Complications can be minimized, but they cannot always be avoided.

Below is a partial list of the complications you must consider when thinking about proceeding with surgery. These complications will be listed on an operative consent form and will be reviewed with you prior to surgery.

Possible Complications

1. **Cardiovascular problems** (especially with unidentified pre-existing heart disease): heart attack, stroke, death
2. **Respiratory problems:** pneumonia, inability to clear secretions from lungs, aspiration (going down wrong pipe) of stomach contents, asthma, need for respiratory support for under ventilation or possible tracheostomy (surgery to create an opening into the windpipe), pulmonary embolus (blood clots traveling to the lungs)
3. **Wound problems:** infection in wound (less than five percent), hernia development (one percent for laparoscopic)
4. **Circulation problems:** phlebitis in leg veins (blood clots in legs), pulmonary embolus (blood clots traveling to the lungs)

5. **Stomach/intestinal problems:** leak from stomach or intestinal surgical sites requiring additional surgery, intestinal blockage (one to two percent), stomal stenosis (narrowing of the connection between stomach and intestine) from scarring (ten percent), dumping syndrome (cramping, bloating, diarrhea after eating)
6. **Nutritional problems:** vitamin and mineral deficiencies, hair loss, bone weakening, gallstones or kidney stones
7. **Injury to nearby organs:** spleen-splenectomy, significant liver-bleeding (both less than one percent), or potential for transfusions (less than five percent).
8. **Death:** less than 1% risk

All percentages used are national averages.

In Preparation for Your Weight Loss (Bariatric) Surgery



-NO SMOKING or nicotine in any form for at least 2 months

-Wean off all caffeine

-Stop carbonated drinks

STOP ALL STEROIDS

If you are on steroids, contact your primary care provider (PCP) first to see if this is clinically indicated for you. **This surgery requires patients to stop all steroids for 30 days before surgery. The bariatric physician can consult with your doctor and discuss.**

Before Surgery

This section will outline for you and your family the daily routine of our surgeries. Your hospital stay will be two to three days on average. If a change in the following daily routine is needed, your provider and nursing staff will inform you.

What To Bring to the Hospital

It is not necessary to bring anything with you for your hospital stay unless you choose to. You do not need money for the phone or television, as these are part of your room accommodations. The hospital will provide basic toiletry items such as toothbrush, toothpaste, soap and comb. However, you may find it more pleasing to have some of your own personal items. In addition, you are welcome to bring the following if you desire:

- Shampoo (you will be able to shower the day after surgery)
- Deodorant
- Chapstick
- Robe and slippers for walking (spacious hospital gowns are provided)
- Underwear
- Loosely fitting clothes for discharge day
- CPAP or BIPAP (if applicable)

Hospital Information: Carilion 10 Mountain

Visiting hours: 8 a.m. - 8 p.m.

Telephone service: Each patient room has a private phone line, which can dial out locally by first dialing the number 9. There is no charge for local phone service. To place a long-distance call, you will need to use a calling card or charge the call to your home phone number through the operator (dial 9, then 0) after you are admitted to your room.

Mountain View

Café hours: Hours: Monday through Friday, 6 a.m. - 10 p.m.
Saturday and Sunday, 6 a.m. - 8 p.m.
Breakfast: 6 - 10 a.m.
Lunch: 11 a.m. - 2 p.m.
Dinner: 4:30 - 8 p.m.

One Month Before Surgery

Do not take cortisone injections, estrogen replacement therapy or any herbal supplements because these medications can cause increased clotting after surgery. No Depo-Provera shots three months before or one month after surgery (and approval by surgeon) due to increased clotting risk. If you are unsure about which medications to stop, ask your surgeon.

Two Weeks Before Surgery

Do not take aspirin, ibuprofen or other arthritis medications at minimum for two weeks before surgery, because these medications can cause stomach irritation and/or more bleeding after surgery. If you are unsure about which medications to stop, contact your surgeon (**see Medications You Cannot Use After Bariatric Surgery on page 27**).

Pre-Operative Preparation

Preparation for bariatric surgery includes several steps to optimize your health ahead of an operation.

Careful attention to personal hygiene can help reduce the risk of infections after surgery. Daily bathing for several days before surgery with an antibacterial soap will be helpful. Careful attention should be given to cleansing the abdominal area (from breasts to groin), making sure to clean well between folds of skin. Good oral hygiene with careful brushing and flossing of teeth will be beneficial as well.

Establishment of an exercise and dietary program before surgery is important! Even a small amount of weight loss before surgery makes surgical exposure of the stomach easier and safer. In addition, establishment of proper exercise and eating habits pre-operatively will be easier to continue in the post-operative phase.

Although blood transfusions are not generally needed with bariatric surgery, collection and storage of your own blood, or that from family/friends, can be arranged if that is desired. Detailed instructions regarding other pre-operative preparation will be given to you as surgery is scheduled.

Before Surgery Nutrition

As you prepare for Bariatric Surgery it is time to start establishing some eating habits that will assist you with pre-surgery weight loss and new eating habits that will need to become a part of your healthy lifestyle after surgery.

- Eat three meals daily with protein at each meal
- Limit snacks to 1-3 daily and keep calories to 100 calories or less
- Drink 64 ounces of water daily
- Take small bites and chew 20-30 times with each bite
- Start some simple exercise, do what you can to be more active

Foods to change in the diet

- More fresh fruits and non-starchy vegetables
- Lean meats
- Cut back on starches, grains, rice, crackers, starchy snacks
- Start cutting back on dairy products and especially those that contain sugar such as yogurt, pudding, and ice cream
- For sweet items, you may want to start using artificial sweeteners

Foods to cut out of your diet

- Caffeine – get off caffeine before surgery to limit caffeine withdrawals.
- Stop drinking carbonated beverages
- Sweets such as cookies, cakes, pies, ice cream, candy, honey, syrups, and sugary drinks such as sweet tea, regular soda, regular lemonade, rich coffee drinks, and milkshakes
- Fried foods
- Processed foods such as hot dogs, chicken tenders, snack foods, and breakfast bars

Two weeks before surgery, you need to begin a Pre-operative diet (liver shrinking diet). When you receive your letter for your surgery date, the diet start date will be on that letter.

- High protein shakes (20 grams of protein and no more than 5 grams of carbohydrate and 5 grams of fat). This will be two of your meals
- One meal per day (either lunch or dinner) will be a frozen meal which is 300 calories or less
- You may have salads with a little dressing
- Snacks like light string cheese, boiled egg, plain yogurt (100 calories or less) no more than 2-3 times per day

Starchy Vegetables

Potatoes Corn Peas Dried Beans and peas Baked beans Sweet potatoes Lima beans

Non-Starchy Vegetables

One non-starchy vegetable choice (1/2 cup cooked or 1 cup raw) has 5 grams of carbohydrate, 2 grams of protein, 0 grams of fat, and 25 calories

Amaranth leaves (Chinese spinach)	Hearts of palm
Artichoke	Jicama
Artichoke hearts (no oil)	Kale
Asparagus	Kohlrabi
Baby corn	Leeks
Bamboo shoots	Mixed vegetables (without starchy vegetables, legumes, or pasta)
Bean sprouts (alfalfa, mung, soybean)	Mushrooms, all kinds, fresh
Beans (green, wax, Italian, yard-long beans)	Okra
Beets	Onions
Broccoli	Pea pods
Broccoli slaw, packaged, no dressing	Peppers (all varieties)
Brussel's sprouts	Radishes
Cabbage (green, red, bok choy, Chinese)	Rutabaga
Carrots	Sauerkraut, drained and rinsed
Cauliflower	Spinach
Celery	Squash, summer varieties (yellow, pattypan, crookneck, zucchini)
Chayote	Sugar snap peas
Coleslaw, packaged, no dressing	Swiss chard
Cucumber	Tomato
Daikon	Tomatoes, canned
Eggplant	Tomato sauce (unsweetened)
Fennel	Tomato/vegetable juice
Gourds (bitter, bottle, luffa, bitter melon)	Turnips
Green onions or scallions	Water chestnuts
Greens (collard, dandelion, mustard, purslane, turnip)	

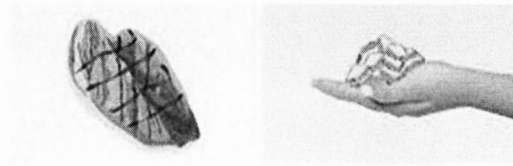
Note salad greens (such as arugula, chicory, endive, escarole, lettuce, radicchio, romaine, and watercress) are on the Free Foods list.

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Portion Sizes

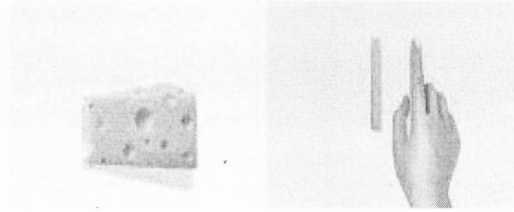
Meat, Poultry, | Full Palm Fish of Hand

3 ounces 120-250 calories



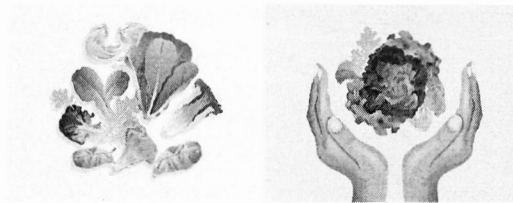
Cheese | 1 Index Finger

1 ½ ounces 150-165 calories



Leafy Greens | Two Hands

2-3 cups 15-20 calories



Fresh Fruit | Fist

1 medium piece 80-105 calories



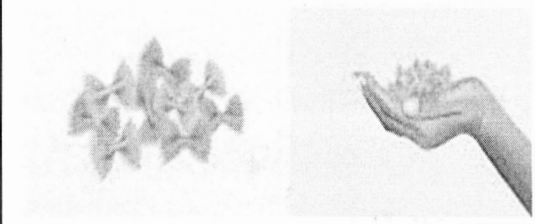
Non-Starchy Vegetables | Full Hand

1 cup 20-40 calories



Cereals/Grains | Full Hand

1 cup 180-220 calories



Shopping List for Bariatric Surgery Patients

Shopping List for Bariatric Surgery Patients

On the following pages, you will find a list of foods that you might find helpful to have at home after your surgery, protein supplement guidelines, vitamin supplement information and over-the-counter medications. Avoid shopping for pureed and soft foods until after your surgery, because it is very likely that your tastes will change.

Liquids	Liquids
Water Protein shakes (enough to consume 2-3 servings per day) Sugar-free Popsicles without chunks or pulp, clear not creamy Sugar-free Jell-O Clear, fat free broth Decaffeinated tea or coffee Sugar-free zero-calorie beverages	Non-fat or 1% milk Low carb milk Lactaid milk Soy milk
Pureed Food	Soft Foods
Baby food with no added corn syrup Tuna or chicken canned in water Plain, non-fat yogurt V8 and tomato juice Egg Beaters Low-fat string cheese Low-fat cottage cheese Vegetables - canned, fresh, frozen	All foods from previous stages Soft, cooked vegetables (avoid asparagus and celery) Eggs Fat-free soups with soft vegetables or meats Moist, tender fish or poultry (ground, chopped or cut into small cubes)

*Always check the label of the protein supplements you consume. Make sure your supplement is made with **whey** protein and has at least **20 grams of protein, less than 5 grams of carbohydrates and less than 5 grams of fat** per serving. Avoid Boost, Ensure, protein “bullets” and protein “shots.”

Vitamins and Bariatric Surgery

Vitamins and Bariatric Surgery

All supplements can be taken whole or can be chewable.

Multivitamin

Your multivitamin must be a “complete” formula that contains at least **Vitamins A, D, E; 400 mcg of folic acid; 18 mg iron; zinc, selenium, copper**. Avoid children’s “incomplete” formulas because these usually do not contain thiamine. If you choose to take a children’s chewable multivitamin, you must take the adult dose twice a day. If you take a multivitamin created specifically for bariatric surgery patients, follow the dosing instructions. Avoid men’s, “silver” or women’s 55+ multivitamins because these do not contain iron.

Calcium

There are two forms of calcium, and your new stomach can only absorb the form known as **calcium citrate**. Choose a calcium supplement that comes with at least 400-800 IU of vitamin D. Your body can only absorb 500 mg of calcium at a time, so divide your supplement doses throughout the day. Take your calcium supplement separate from your multivitamin and iron supplements.

Vitamin B12

Vitamin B12 can no longer be absorbed by your stomach, so you must take a form that is dissolved before it reaches your stomach, such as sublingual (under the tongue) or liquid. You will need **500 mcg** per day. Vitamin B12 may be taken at the same time as your multivitamin.

Iron

Choose an iron supplement that is made from **ferrous fumarate or ferrous gluconate** and that is made with vitamin C, for the best absorption. Avoid taking your iron with meals or with tea, and separate iron from calcium by at least 2 hours. A good time to take your iron supplement is just before bed. You will be told if you need an iron supplement based on your labs.

Start vitamin supplements as recommended:

A complete multivitamin one serving TWO times a day

Calcium citrate 600mg one serving TWO times a day (taken two hours separate from iron or multivitamins)

Vitamin B12 500mcg one serving once a day

Routine may change depending on lab results

Before Surgery Instructions

The Day Before Surgery

- No insulin or diabetic medications after 12 midnight. (Unless instructed otherwise by your provider.)
- Wash with hibiclens or an antibacterial soap.
- **NOTHING BY MOUTH AFTER MIDNIGHT. NO GUM, NO MINTS, NO WATER - NOTHING**
- Remove all fingernail polish, as well as gel or acrylic nails.

The Day of Surgery

- Wash once more with hibiclens or an antibacterial soap.
- You may brush your teeth and gargle, but do not swallow anything.
- **CONTINUE TO NOT EAT OR DRINK ANYTHING.** You will be told which medications you may take.
- **You must take all scheduled heart, blood pressure and beta-blocker medications the morning of surgery with sips of water only, or surgery may be cancelled.**
- **No makeup, body lotion, body powder or perfumes may be used due to the high risk of infection.**

Morning of Surgery

You will report to the Carilion Roanoke Memorial Hospital (CRMH) pavilion entrance on the side of the hospital at the time you have been assigned the morning of surgery. **You should bring any forms, and your personal belongings at this time. All valuable items should be given to family members. Do not wear ANY jewelry to the hospital.**

You will then report to registration where a nurse will check you in. After changing into your gown, you may have an intravenous (IV) catheter inserted in your arm. You will be given antibiotics (to prevent infection) and Heparin or Lovenox (to prevent blood clots). A nurse will review your history and answer any questions you might have. You will be visited by the anesthesiologist and surgeon, and any remaining questions will be answered. One or two family members may stay with you until you leave for the surgical area, about 15 minutes prior to the operation.

When you go to the surgical suite, your family will be taken to the waiting room located outside surgery. There are restrooms, phones and televisions available. General anesthesia will be used. The laparoscopic approach usually takes two to three hours in the operating room. Once in the surgery suite, anesthesia will put you to sleep, and then your surgery will begin.

Immediately after your operation, your surgeon will come to the waiting room to talk with your family or significant others. During the surgery, a nurse will keep your family informed of progress.

After Surgery Instructions

After your surgery, you will awake in the Post-Anesthesia Care Unit (PACU) located in the surgical area. A nurse will monitor your heart rate, blood pressure and oxygen saturation. If needed, your nurse will give you pain and nausea medication that is injected directly into your IV line. Every effort will be made to make you as comfortable as possible.

You will have oxygen either by mask or nasal cannula (nasal tube). You will have air stockings on your feet or legs that will inflate and deflate at alternate times to prevent blood clots.

From the PACU, you will be taken to your room. Your nurse will orient you to the room and ask you to begin your breathing exercises using the incentive spirometer (a plastic breathing exercise device) 10 times every hour while awake. Bring Chapstick to use. You will be assisted into a chair within a few hours after surgery, possibly walking if you feel up to it. The nurse may perform finger sticks to check your glucose (sugar) levels if diabetic.

After Surgery

X-ray and labs (blood work) may be obtained.

Continue to cough and breathe deeply, using a pillow to splint your abdomen. Although it will be uncomfortable when you cough, you cannot hurt your surgical sites by deep breathing and coughing. You will continue using your incentive spirometer 10 times per hour, every hour.

You must walk a minimum of four times each day.

You will receive injections of a medication called Lovenox to prevent blood clots. The injections are given with a very small needle, usually in the abdominal area.

You will be allowed to start clear liquids in the form of shot glasses filled with Crystal Light or water once per hour. Regular medications will be restarted.

Generally, narcotic pain medication is not needed after this surgery.

If you are tolerating clear liquids and have no nausea, vomiting or fever, you will be discharged. The surgeon and residents will address your medications when you are discharged from the hospital. Please ask for any clarification of medications and dosages as needed.

Discharge Instructions

BATHING	You may shower. Your incisions may get wet when you shower, but otherwise keep them dry. No tub baths, swimming or hot-tub use for at least four weeks.
DRESSINGS	Your wounds will be covered with a substance called Dermabond, which is a liquid dressing that dries hard and waterproof. Do not attempt to pull the Dermabond off. It will fall off bit by bit over the next few weeks
ACTIVITY	You may resume usual self-care. You may drive in 5-7 days after surgery. No lifting, pushing, pulling or tugging over 10 pounds for three to four weeks. Walking every day and using incentive spirometry at least four times a day (for the next few days) is very important. Only get into bed when it's bedtime.
DIET	You may begin your protein and vitamin supplements the day you get home. Alternate between one- to two-ounce sips of water and protein supplements throughout the day.
MEDICATIONS	Gas-X as needed. Continue multivitamins and supplements as directed.

IMPORTANT:

NO ANTI-INFLAMMATORY DRUGS
(SUCH AS ALEVE OR IBUPROFEN).
NO STEROIDS.
NO SMOKING.

Emergencies

When To Call 911:

- **New onset of shortness of breath or difficulty breathing is an emergency. CALL 911.**
- **Chest pain: dull or sharp, front or back, is an emergency. CALL 911.**

When To Call Your Surgeon:

- BLEEDING from incision(s)
- SIGNS OF INFECTION:
 - temperature of 102 degrees or above
 - redness and swelling at incision site(s)
 - Pus-like or foul-smelling drainage
- Separating or opening of healed incision
- Nausea or vomiting that is not relieved by medications or that prevents fluid intake for a day
- Pain that is not relieved by medication prescribed by surgeon
- Sudden new onset calf or leg pain and swelling



Follow-Up

A bariatric program representative will be available to you **at all times** for problems.

On-Call Bariatric Surgeon 540-981-7000
Daily: 5 p.m. – 8 a.m.

Carilion Weight Loss Center 540-224-5170
Monday – Friday: 8 a.m. – 5 p.m.

Make your first appointment with OUR CLINIC for TWO WEEKS after discharge from hospital if no follow-up appointment is given to you at discharge.

Make appointments with your cardiologist, endocrinologist and / or primary care physician within the first 1-2 weeks after discharge to monitor heart rate, blood pressure and diabetes medications.

Record your blood pressure daily if you were on more than one blood pressure pill before surgery. Continue to record your blood sugars if you did so before surgery.

Notify your primary care provider if you have 3 or more abnormal readings.

Medications You CANNOT Use After Bariatric Surgery

These medications, called non-steroidal anti-inflammatory drugs or **“NSAIDS”**, can cause severe ulcers in the stomach and bleeding. We ask that you **DO NOT take this class of medications – ideally for life** (unless an emergency). There are many NSAIDS available over the counter and by prescription. The following is a list of the most common but does not include all available. Because other healthcare providers may not be aware that you cannot take this class of drugs, we ask that you remind him/her when a new medication for pain or inflammation is prescribed.

Aspirin	Maprin
Advil	Measurin
Aleve	Mediprin
Alka Seltzer	Meclomen
Anaprox or Anacin	Midol
Ascriptin	Mobic
Aspergum	Motrin
Bextra	Nabumetone (Relafen)
Bufferin	Naproxen (Naprosyn)
Buffinol	Norwich tablets
BC Powder/Goody's Powder	Norgesic
Cataflam	Nuprin or Nalfon
Celecoxib (Celebrex)	Orudis
Clinoril	Oxaprozin (Daypro)
Coricidin	Pamprin
Cortisone	Pepto Bismol (any type)
Diflunisal (Dolobid)	Persantine
Diclofenac (Voltaren)	Piroxicam (Feldene)
Dipyridamole or Daypro	Ponstel
Discid	Prednisone
Doan's Pills	Relafen
Dolobid/Dolobin	Rimadyl
Easprin	Salsalate (Amigesic)
Ectotrin	Salflex
Empirin	Solumedrol
Etodolac (Lodine)	Sulindac (Clinoril)
Excedrin (any type)	Ticlid
Feldene	Tolmetin (Tolectin)
Fioinol	Toradol
Fiorinal/Fiorocet	Trendar
Halfrin	Trigesic
Ibuprofen (Motrin)	Ursinus
Indomethacin (Indocin) or Inlyay Tabs	Vanquish
Ketorolac (Toradol)	Vioxx
Ketoprofen (Orudis)	Wesprin Buffered
Lodine	Zorpin
Magnaprin	

Additionally, other things that can cause ulcers or stomach irritation after bariatric surgery include but are not limited to:

- Steroids (of any form)
- Nicotine (of any kind - cigarettes, vape, patch, gum, dip, etc.)

Recovery After Bariatric Surgery

You have completed your hospital stay following your weight loss surgery. You now join the thousands of people who live healthier, happier lives following surgical treatment of their morbid obesity. Although this surgery is designed to promote lasting weight loss, **you are still in control of your success**. You must choose the behaviors that will enhance your surgery. The instructions and information that follow in this booklet will help you navigate the path to successful, health-enhancing weight loss.

As you leave the hospital, remember that your surgical program is not complete. Further participation includes routine follow-up visits with your surgeon and other program providers, attention to informational mailings, responses to phone calls and questionnaires and attendance at **support group meetings (meetings are held on the first Monday of each month from 7 – 8 p.m. at the Rehabilitation Center Auditorium, and the third Monday of each month at 3 Riverside, conference room 4A, from 11 a.m. – noon)**.

Certainly, if you have questions in between visits, you may call the surgeon's office. Remember, small problems can usually be resolved easily. If you wait until the problem becomes major, it is more likely to require more extensive medical intervention.

PLEASE REMEMBER

As an advisory, please be aware that:

- **Sudden shortness of breath and chest or leg pain should not be ignored when you are home, as this may indicate the formation of a blood clot and is a MEDICAL EMERGENCY!**
- **Chest pain/shortness of breath may also be a sign of a heart attack or pneumonia.**
- **In the unlikely event of sudden new onset pain development in your legs or chest please call 911.**

Medications

Medications can be taken whole or may be crushed. It is highly recommended that you make an appointment with your primary care provider (PCP) before surgery to have them review your medications. Please be aware many common medications are time-released and cannot be crushed. Also, please check with your PCP before restarting medications for diabetes, as your requirements may be much different than they were before your surgery.

If a physician prescribes a new medication, it is important to inform him/her of your bariatric surgery.

Troubleshooting

What To Do if Food Gets “Stuck”

When food is NOT passing through your stomach, also known as your pouch, you may experience any or all of the following symptoms:

- Excessive salivation
- Frothing/heartburn
- Nausea
- Cramping
- Vomiting/dry heaves
- Pain
- Thirst

In this case, the following steps can be taken to alleviate the discomfort as quickly as possible:

- Relax! Stress will only increase the discomfort.
- Don't eat anything. Drink sips of water or hot tea.
Warm beverages seem to help relax the stomach best.

- Stay on liquids for several hours.
- Remember, if you cannot take in liquids for 24 hours, you should contact us for further advice.

If you have heard of the Adolphs or meat tenderizer cocktail from others, **DO NOT USE**, as this may cause ulcer perforation.

Chewing Food

If you do not chew your food well enough, the bites you swallow will be too large to pass easily through your stomach. The un-chewed bites will remain in your stomach and are more likely to cause discomfort.

Your food should be cut the same size as your "pinky" nail to be small enough.

Nausea and Vomiting

It is very common for patients to feel nauseated during the first few months after surgery. If this nausea causes frequent vomiting, please call us or visit the office for follow-up.

Following weight loss surgery, you are virtually living off of stored fat for energy and maintaining muscle with oral intake of protein. This is why the “protein first” rule is so important.

When you feel full, stop eating and put the food away. A meal should take no longer than 20 to 30 minutes to finish. Use a timer. If it is taking longer, you are probably waiting too long between bites, or getting full and waiting for it to pass through to give you more room. The goal is not to **finish your meal, but to feel satisfied.**

One of the causes of nausea and vomiting is noncompliance with nutritional guidelines; therefore, following the provided guidelines is very important.

Any problems with nausea or vomiting should prompt the following questions and necessary changes to avoid further pain and discomfort:

- a. How long am I taking to eat and/or drink?
- b. Did I drink fluids with my meal or too soon before/after the meal?
- c. Am I eating more than I should?
- d. Am I chewing solid foods until they resemble a puréed consistency?
- e. Did I lie down too soon after my meal?
- f. Did I eat hard-to-digest foods such as tough meat or fresh bread?
- g. Did I eat foods from the next stage of the menu plan before being cleared by my provider to do so?

Repeated vomiting may cause undue stress on the new stomach and result in irritation or, even worse, rupture of the staple lines.

If vomiting persists throughout the day, do not eat solid foods. Sip on clear liquids (stage 1). **If vomiting occurs for more than 24 hours, contact the surgeon immediately.**

Frothing

As the new pouch heals, mucous sometimes is excreted to help break down food. With some patients, this mucous backs up in the esophagus and causes frothy clear vomiting. This is short-lived and usually resolves by the third month. Frothing is not a complication, so try drinking warm water a half-hour prior to your meal to emulsify the mucous. Your meal should then be better tolerated.

Gas Pains

Gas pains are common in the first few weeks after surgery. Sometimes these pains can be severe and more uncomfortable than the “surgical” pain. To help relieve these pains, try to increase your activity level to include some walking. You can also try anti-gas over-the-counter preparations such as Mylanta, Maalox and Gaviscon.

Gas pains or spasms may occur months or even years after your bypass and sleeve operations. The cause for random episodes of gas or spasms is often unknown, and this discomfort will usually relieve itself in a short time. If the discomfort from gas or spasms persists, contact your surgeon for evaluation and possible treatment with medication to relax the intestine.

Hair Loss

Hair loss is common after surgery especially between the third and sixth months. This is most often a result of surgery, anesthesia and rapid weight loss, and possibly a result of nutritional deficiencies. Hair will begin to regrow around six to nine months after surgery by maintaining proper nutrition. We recommend a minimum of 70mg of protein each day.

Bowel Habits

It is common to have some temporary bowel changes following surgery. These changes range from constipation to diarrhea. If you do not move your bowels by the first or second day at home, you may try a mild laxative such as Miralax. Follow the bottle instructions.

Maroon or black stools should be reported to your surgeon, as they may indicate the need for additional medication to reduce the chance of ulcers.

Constipation

After surgery, constipation may occur. Remember that food intake now is very small compared to that before surgery; therefore, bowel movements will be decreased. Many people report having a bowel movement every two to three days. If stools are hard, be sure to drink an adequate amount of fluid (64 ounces per day) between meals. Also, when appropriate, include more fiber- containing foods in the meal plan. You may use over the counter stool softeners if needed. Follow the bottle instructions.

Diarrhea

Immediately following surgery, there may be some diarrhea. This should be temporary. If diarrhea persists and adequate hydration is not possible, contact your surgeon. You may have bloody stools (black, tarry) the first one or two bowel movements. If this persists, please call the surgeon's office. Do not take Immodium.

Incision care

Your incision sites will be healing over the next few weeks. Do not use peroxide or Neosporin. Report any pus-like drainage (thick, creamy yellow), fever, body aches and chills to the surgeon. Do not pick Dermabond (glue-like material) over your incisions.

Bathing

You may take a shower (not a bath) when you get home. The incision can get wet, but try not to soak the wound. After showering, pat the wound dry. An incision will heal faster if it is kept dry during the first week you are home. No bath or swimming for four weeks after surgery.

Sleeping

You may sleep in whatever position is comfortable when you get home. Many people find that sleeping on their stomach will not be comfortable for a few weeks.

You may also try a mild crushed sleeping aid such as Tylenol PM or Melatonin to help you rest if the problem persists.

Headaches

If you are without anti-depression medication or caffeine for several days, you may have migraine-type headaches as a withdrawal effect. If you have seasonal allergies, you may take Sudafed, Claritin, Allegra, Tylenol Sinus/Allergy or nose spray for relief.

Returning to Work

You should plan on taking at minimum 7 days off work. We recommend to those who must return to work before two weeks to begin with a less-than-full-time schedule and work slowly back to full-time.

If you need return-to-work forms, or FMLA please bring them to the office and we will be happy to assist you with their completion.

***Remember, NO lifting over 10 pounds for four weeks...
NO EXCEPTIONS!***

Breathing Exercises (Incentive Spirometer)

The plastic breathing exercise tube is yours to take home. Please use it for the next week. Ten deep breaths every one to two hours during the day are highly recommended to enhance your recovery. Continue the deep breath/coughing exercises as instructed at least four times per day.

Activity

It is important to be up out of bed (or chair) and active when you return home. You might notice that you tire easily and need to take frequent rest periods.

You should walk increasing distances every day. **DO NOT** lay around. You should be up walking every two hours while awake. You can resume sexual relations when desirable, keeping the restrictions on other physical activity in mind.

Exercise

Exercise is one of the most important things you can do for yourself after surgery to keep healthy, increase your energy level and lose the maximum amount of weight.

Walking will burn about 200 calories per mile (there are 3,500 calories in one pound). When you get home, you should start a walking program to your tolerance. In addition to the walking program, you should be active and walking as you would normally around your house.

Pregnancy/Birth Control After Surgery

Women of childbearing age should be on a reliable method of birth control until their weight has stabilized. It is common for women who have had difficulty becoming pregnant to find that they are pregnant after some of the weight has come off. This can occur even in women who have previously taken fertility drugs.

We DO NOT recommend pregnancy until at least 18 months after surgery.

Pregnancies after this time frame have been normal in course.

Diversions Activities

Following surgery, you may find yourself spending a lot of time thinking about your weight-loss operation. Constant focus on the changes happening to your body can get tiring or even distressing. It is important to take some time to exercise another part of your body: your mind. The first six weeks after surgery, while your body is healing, is a good time to participate in activities that are fun and good for you. Get involved in non-food-related activities such as reading, art, music or other hobbies. Contact an old friend; go to a concert, movie or museum; or surf the Internet. By making activities and people the center of your life, food will decrease in importance.

Dumping Syndrome

Dumping occurs when a large load of high-fat-concentrated foods or simple carbohydrates (such as those found in table sugar, ice cream, milkshakes and sugary desserts) enters the jejunum (small intestine) too quickly after eating rather than gradually being released in small amounts.

Symptoms of dumping include abdominal fullness, nausea, cramping or abdominal pain followed by diarrhea. Patients have also reported feeling warm, dizzy, weak or faint. They sometimes experience an increased heart rate and may break out in a cold sweat. To avoid dumping, DO NOT eat or drink items that may cause distress - listed on pages 42-44.

Support Groups

One of the benefits of the Bariatric Surgery Program is the post-operative care provided to our patients. Medical studies on gastric bypass/sleeve patients conclude that the most successful patients are those who adhere to and take advantage of the follow-up activities provided by comprehensive programs.

Our bi-monthly meetings offer you the opportunity to compare your experience with other patients in an informal setting. We strive to provide educational sessions each month on topics of interest to gastric bypass/sleeve patients. We strongly encourage you to attend support groups. Remember, along with diet and exercise, the other lifestyle commitment you make when you decide to have surgery is adherence to follow-up.



**Support group meetings are held the first Monday of every month:
11- noon in conference room 4A at 3 Riverside Circle, Roanoke.**

**And the third Monday of every month:
11 – noon in conference room 4A at 3 Riverside Circle, Roanoke.**

**You can now call in to support groups:
Conference call number: 1-866-240-1897
Attendee number: 15640756**

The Internet

The Internet has a wealth of information and online support groups for bariatric surgery patients. Support group members have recommended searching under “gastric bypass” to find a wide selection of sites. You can post messages and ask questions of former patients from a variety of programs across the nation.

Other sites:

obesityhelp.com

bariatricpal.com

asmbs.org

carilionclinic.org/specialties/bariatric-surgery

Post-Operative Nutrition

Stages

- **Stage 1: Clear Liquid in the hospital**
- **Stage 2: Liquid for 2 weeks - all surgeries**
- **Stage 3: Puree for 2 weeks - all surgeries**
- **Stage 4: Soft for 2 weeks - all surgeries**
- **Stage 5: Regular Diet**

Each person's post-operative experience is different. You may stay in one stage longer or shorter than expected. Do not transition from one stage to another without guidance from your surgeon or dietitian.

No matter what stage you are in, it is important to remember the following:

- **Aim for 64 ounces of fluid**
- **Protein is the goal (70 grams per day)**
- **No caffeine (for first 3 months)**
- **No carbonation**
- **Eat or drink slowly**
- **Do not gulp fluids**
- **When trying new foods, add one at a time and go slowly**
- **Follow the "30/30/30 Rule" when you can drink 64 ounces of fluids between meals**

The "30/30/30 Rule"

- 1) Stop drinking 30 minutes before eating.
- 2) A meal should last no longer than 20-30 minutes, with no drinking.
- 3) Begin drinking again 30 minutes after a meal.

Liquid: This diet will provide easy-to-digest protein, fluids, salt and minerals that you need for energy. Foods and drinks allowed on this diet will become liquid at room temperature. Anything with chunks, nuts or fruit must not be consumed.

Pureed: These foods have a smooth, pudding-like consistency. The pureed consistency helps to keep food in one smooth ball while traveling through the digestive system. Pureed foods should have no lumps, chunks, nuts, seeds or coarse textures (these foods could block the exit from your stomach).

Soft: Anything that is hard to chew or swallow should be avoided during this stage. If you cannot chew it to mush in your mouth, do not eat it.

Liquid Stage

You will easily reach your fluid goal of 64 ounces by taking small (1-2 ounces) sips of water every 15 minutes while awake. You may find it helpful to use a shot glass or a medicine cup to help you measure out your 1-ounce sips.

During this stage, you will begin consuming two to three protein supplements or shakes per day. Remember to slowly work up to reaching your protein goal of **70 grams per day**.

You will start your vitamin regimen on your first day home. It is very important to get in the habit of taking these every day. If you find that you cannot tolerate the vitamins that you are taking, please call your surgeon or dietitian. PLEASE do not stop taking vitamins all together.

Sources of protein include: Other liquids include:

- | | |
|----------------------|----------------------------|
| • Protein shakes | • Sugar-free popsicles |
| • Non-fat or 1% milk | • Clear, low-sodium broth |
| • Low-carb milk | • Sugar-free Jello |
| • Lactaid milk | • Sugar-free Crystal Light |
| • Soy milk | or off brand |

Pureed Stage

Once you reach this stage, you can finally start to eat three meals a day. A meal should take no longer than **15–20 minutes** in this stage and should consist of small portions and small bites. Eat slowly, introduce new foods one at a time and stop eating before you feel full.

Protein is still your main goal at this stage. However, you are no longer relying on protein supplements as your primary source of protein. You may continue consuming protein supplements in between meals. Consuming adequate protein from foods and supplements will help you to maintain muscle mass while continuing to lose weight. Always eat protein foods first at every meal.

About half of what you drink should be high-protein beverages, and the other half should be sugar-free liquids. To prevent dehydration and to help food pass through your digestive system, aim for 48 to 64 ounces of fluid per day. Do not drink while eating; this will help to prevent your pouch from stretching.

Additional protein sources:

- Tuna
- Chicken
- Plain, non-fat yogurt
- Low-fat string cheese
- Low-fat cottage cheese
- Egg Beaters

At this stage, experimenting with blending foods in a food processor or blender may be a good way to add variety to your diet. To add protein, blend foods with milk. To add flavor, blend foods with fat-free broth.

Foods you should NOT eat:

Pureed beef, pork
or lamb

Hot dogs

Fried food

Fish canned in oil

Fried eggs

Hard cheese

Cream cheese

Raw vegetables

Fruit

White bread, pasta, rice

Alcohol

Sample Pureed Menu

Breakfast	Scrambled Egg Beaters cooked with non-stick cooking spray
In-between	High-protein drinks, water and calorie-free drinks
Lunch	Pureed tuna, pureed zucchini
In-between	High-protein drinks, water and calorie-free drinks
Dinner	Pureed chicken, pureed green beans
After	High-protein drinks, water, calorie-free drinks

Soft stage

In this stage you will progress to soft, easy-to-chew foods. It is very important to chew foods very well. It may help to count to make sure that you are chewing foods 20 to 30 times before swallowing. Your new stomach can only hold about two ounces (**three to four tablespoons**) of food. It may be helpful to buy smaller plates and utensils (i.e., baby spoons) to help you keep your bites and your meals the proper size. Protein is still your main goal, so eat protein foods first with each meal. Aim for 70 grams of protein per day.

Avoid starchy foods like white rice, pasta, potatoes and bread. Your goal will be to consume protein foods with soft, cooked vegetables three to five times per day. When planning your meals, include:

- **2-3 tablespoons of high-protein food**
- **½-1 tablespoon vegetables**

Always stop eating before you feel full. Do not force yourself to eat just to meet your protein goals. When adding new foods, you should do so one at a time. Continue drinking 48–64 ounces of fluid per day. Do not eat any high sugar foods.

Sample Soft Foods Menu

Breakfast	3 Tbsp. scrambled egg topped with soft mushrooms, peppers, onions
In-between	High-protein drinks, water and calorie-free drinks
Lunch	Canned tuna made with lemon juice and herbs or low-fat mayonnaise, soft cooked vegetables
In-between	High-protein drinks, water and calorie-free drinks
Dinner	1-1.5 ounce baked salmon or chicken, steamed broccoli
After	High-protein drinks, water and calorie-free drinks

Regular Diet Stage

In this stage, you will work with your dietitian to introduce lean red meat, raw vegetables and fresh fruits back into your diet, to create healthy meals and to make healthy choices for life. You will continue to make protein the focus of your meals. Your protein goal is still 70 grams per day. You will also continue to take small bites, eat slowly, avoid high-sugar foods and avoid any liquids 30 minutes before and after a meal.

Throughout your entire post-operative process, it is very important to “obey your stomach.” This means that you will pay attention to feelings of hunger and fullness, and you will learn the difference between cravings and real hunger. It is important to get in the habit of scheduled, structured meals and to use portion-size control. This will help you to avoid grazing and overeating throughout the day, which will hinder your weight-loss success or cause you to regain weight.

Remember that protein drinks are a supplement and should never be the exclusive source of your protein by the time you have reached eight to 12 weeks. Animal protein promotes improved weight loss and burning of body fat that supplemental protein cannot as effectively achieve.

How To Be Successful

Set realistic goals. It is possible to lose two to three pounds per week for the first year, but one to two pounds per week is more likely. In addition, your weight loss may slow down one year to 18 months after surgery. Losing weight too fast is not healthy. Weight loss should be gradual and sustained. It is possible to gain weight back after surgery. This is why it is so important to follow the guidelines discussed in this booklet, to exercise daily, to practice mindful eating and to have regular follow-ups with your dietitian and surgeon.



Keep a food journal. Keep track of what you eat, how you feel, your exercise habits and your vitamin intake. This not only helps to serve as a tool to keep you on track, but it can also help your surgeon and dietitian to work with you to make any necessary dietary adjustments, identify the cause of any issues you may be experiencing and monitor your success.

Exercise daily. Aim for a minimum of 30 minutes per day. This will help with the healing process, increase your energy levels, help you to meet your weight loss goals and prevent weight gain in the future.



Keep track of little successes. The scale is not the only way to measure weight-loss success. Keep track of your little victories, such as fitting into a smaller pants size, having more energy, being able to walk an extra mile, etc.

Guidelines for Food Selection: Regular Diet

The following list is to be used as a guide for making food selections.
Always work toward eating a well-balanced diet.

	Foods Recommended	May Cause Distress
Protein	Eggs, fish, chicken, turkey, tofu; if tolerated, nonfat/low-fat cottage cheese, plain or artificially sweetened nonfat/low-fat yogurt, milk, low-fat cheese.	Fried or high-fat meats, fried eggs, highly seasoned or spicy meats, skin of meats, tough meats. <u>Do not eat red meat (beef, lamb, pork) during the first four months.</u>
Starch Substitutes	Spaghetti squash, mashed cauliflower, cauliflower rice, cucumber slices in place of crackers. Skinny noodles can be consumed after 3 months.	<u>Pastries, donuts, muffins, pasta, rice, sugar coated cereals, coarse bran cereals and potatoes.</u> Beans may cause gas distress. <u>Avoid breads and starch.</u>
Vegetables	Soft, cooked fresh, frozen or canned vegetables (carrots, beets, mushrooms, spinach, squash, green beans); vegetable juice; raw vegetables as tolerated.	Any vegetable with tough skin or seeds (tomato, corn, celery). Cabbage, cauliflower, broccoli and Brussels sprouts may cause gas distress. Avoid potatoes, peas, corn.
Soups	Protein soups made with allowed foods, spicy soups as tolerated.	Soups prepared with heavy creams or made with high-fat ingredients. Avoid soups with potatoes, rice, noodles and macaroni.

Avoid the underlined foods for the long term.



	Foods Recommended	May Cause Distress
Fats	Small amounts of butter or margarine or oil, low-fat salad dressings, avocado, nonfat/low-fat mayonnaise, sour cream and cream cheese; peanut butter in small amounts. Limit fat to 2 tablespoons per day.	<u>Regular mayonnaise, sour cream, cream cheese or salad dressings.</u>
Sweets	Not recommended. See “dumping” explanation.	<u>All sweets and desserts especially if made with chocolate or dried fruits or if eaten on an empty stomach.</u>
Beverages	Coffee and tea, water, Crystal Light, sugar-free Kool-Aid, nonfat milk, one-percent milk, Lactaid milk	<u>Alcohol, sweetened fruit drinks or soda.</u>
Miscellaneous	Iodized salt, pepper, herbs and strongly flavored seasonings as tolerated.	Jalapenos, nuts, seeds, tough skins for at least three months post-op.

Note: Guidelines for this diet are based on nutrition information currently available, as well as the experience of thousands of patients who have had weight-loss surgery.

Foods NOT Recommended After Surgery

Sweets:

Cake	Honey
Candy	Ice Cream
Chocolate Candy	Jelly, Jams
Coffee Drink	Lemonade or Kool-aid made with sugar
Cookies	Milkshakes
Dried Fruits	Pudding
Fruit Juice	Sherbet/sorbet
Fruit Juice	Soda
Frozen Yogurt	Sweet Tea
Gum made with sugar	Syrup

Fats:

Bacon	Lard, shortening, or fatback
Butter	Mayonnaise
Coffee – Specially Drinks	Onion Rings
Cream Cheese	Pizza
Cream Sauces	Potato Chips
French Fries	Salad Dressing
Fried Foods	Sausage
Hash Browns	

Others:

Alcohol
Chinese foods
Sauces: Alfredo, barbecue, gravy and sauces

Recommended Sources of Lean Protein

To keep your protein lean try to broil, bake, grill, air fry, pressure cook or cook in a crockpot

- Beef should be 90% lean or less fat.
- Chicken and turkey without skin and white meat is a little leaner, if ground it still needs to be 90% or more lean.
- Fish of all types unbreaded, tuna packed in water
- Eggs, egg whites or egg substitute
- Tofu
- Low fat cheeses, low fat cottage cheese, low fat yogurt

Protein Examples

Each of these foods will provide approximately 7 grams of protein -

- 1 egg or ¼ cup egg substitute
- 1 ounce low-fat cheese
- ¼ cup low-fat cottage cheese
- 1/3 cup fat-free ricotta cheese
- 1 cup 1% or non-fat milk
- 1/3 cup non-fat dry milk powder
- 1 cup soy milk
- 1 cup low-fat, artificially sweetened yogurt
- 1 ounce meat (fish, turkey, chicken, beef)
- ½ ounce jerky

Each of these foods will provide approximately 7 grams of protein but have in moderation -

- ½ cup cooked dried beans such as: pinto, navy, black-eyed (15g carbs)
- 2/3 cup lentils (20g carbs)
- 2 Tbsp peanut butter (16g fat)

Protein Food Examples	Grams of protein per 3 ounces
Canned tuna – 3 ounces	20
Salmon – 3 ounces	19
Turkey breast – 3 ounces	26
Chicken breast – 3 ounces	27
Ground beef (lean) – 3 ounces	22
Non-fat milk – 1/2 cup	4
Eggs – 1 large	6
Mozzarella cheese – 3 ounces	19
Low-fat cottage cheese – 1/2 cup	12
Peanut butter – 2 tbsp.*	7
Almonds – 1/4 cup (24 nuts) *	8
Walnuts – 1/4 cup (14 halves)*	3
Veggie burger – 1 patty	23
Tofu – 1/2 cup	11
Yogurt, plain – 1 cup	9
Whey protein powder – 1/3 cup	19

*= these foods are high in either fat or carbohydrate so limit in diet

Sample menu: 70 g protein

Breakfast: 1 egg
 Snack: 1 protein shake (30 g protein)
 Lunch: 2 ounces tuna
 Snack: 1 ounce low fat cheese
 Dinner: 1 ounce chicken
 Snack: 1 cup yogurt

My Chart

Enroll in Carilion Clinic MyChart

- **Access your electronic medical records summary**
- **Request appointments, prescription refills and referrals**
- **Get test results and find educational resources**
- **Ask questions and receive messages from your personal health team**

Enroll online at CarilionClinic.org:

1. Click on the MyChart tab
2. Select “I need activator code” (if you were not given one by your primary care physician)
3. Fill out required fields
4. Submit

Your activation code will be sent to you through postal mail within one business day. Should you have any questions regarding your submission, we will contact you via email or the primary number you have submitted.

Exercises

Disclaimer

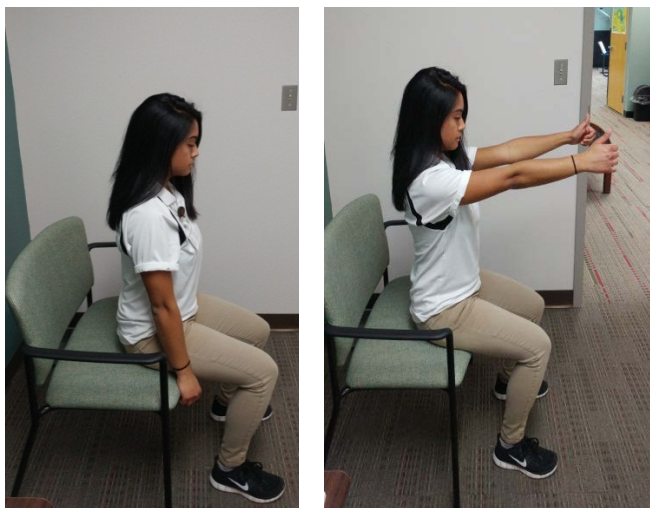
Some of the exercises shown in the booklet may be intended for individuals with a moderate to higher level of fitness. If you have trouble getting out of a chair without assistance, DO NOT try any of the exercises that are performed on the floor. Instead, do exercises that you can safely perform. Floor exercises can also be done in bed.

Certain exercises may be shown or described using an exercise band. If you do not have access to one, perform the movement as detailed, simply without the band. If you have questions on any of these exercises, please contact the Clinical Training Manager.

Patrick Dunham
(540) 989-5758
pmdunham@carilionclinic.org

Shoulder Flexion

1. Begin in a neutral position with your arms on your side
2. Raise arm to point to ceiling, keeping elbows straight. Hold 10 seconds



Shoulder Abduction

1. Begin in a neutral position with your arms on your side
2. Raise arm out to side, elbow straight and palm downward. Do not shrug shoulder or tilt trunk. Hold 10 seconds.



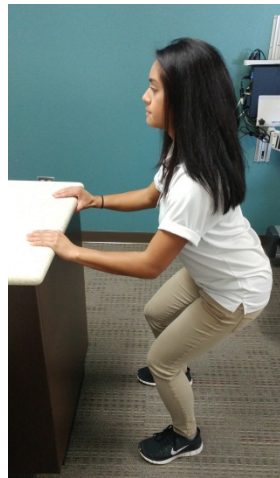
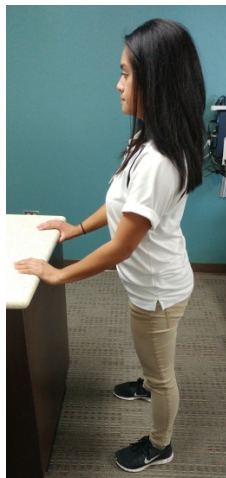
Seated Crunches

1. Begin by sitting in an upright position without
2. Lean backwards slowly as you engage your core
3. Lean forward back into an upright position



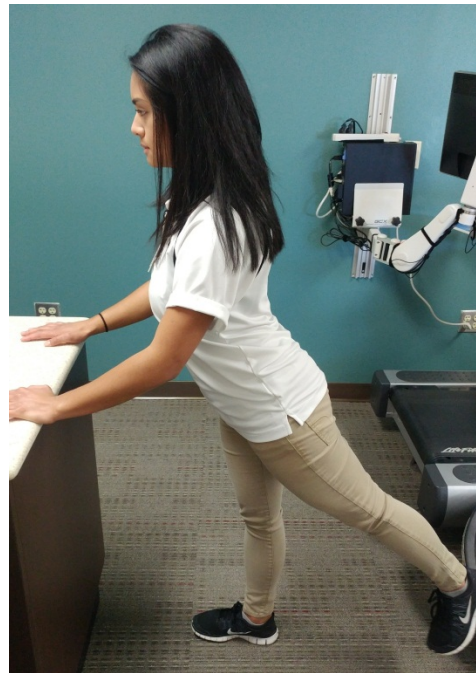
Mini Squats

1. Stand in front of a counter holding and placing your hands on top of it with your feet slightly apart and parallel.
2. Hinge forward at your hips and bend your knees to lower your buttocks about six inches, as if starting to sit down in a chair.
3. Return to starting position



Hip Extension Kick-backs

1. Stand in front of a counter holding and placing your hands on top of it with your feet slightly apart and parallel. Be sure your hip, knee and foot are pointing straight forward
2. By keeping your leg straight, slowly lift your leg behind you
3. Slowly return your leg back to the floor



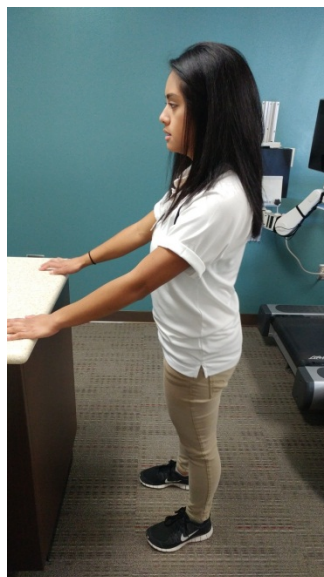
Hip Adduction

1. Stand in front of a counter holding and placing your hands on top of it with your feet slightly apart and parallel. Be sure your hip, knee and foot are pointing straight forward
2. By keeping your leg straight, slowly cross your leg across the other leg
3. Slowly return your leg back to the floor



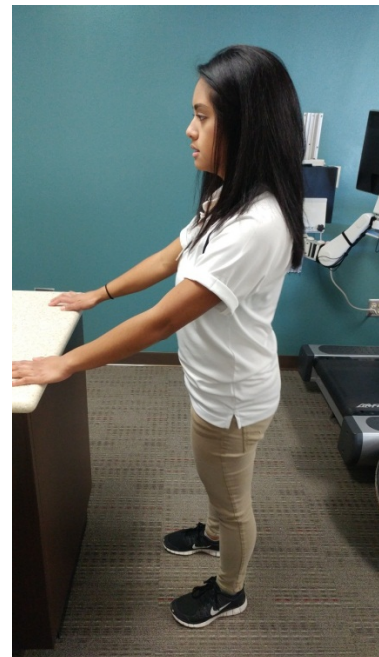
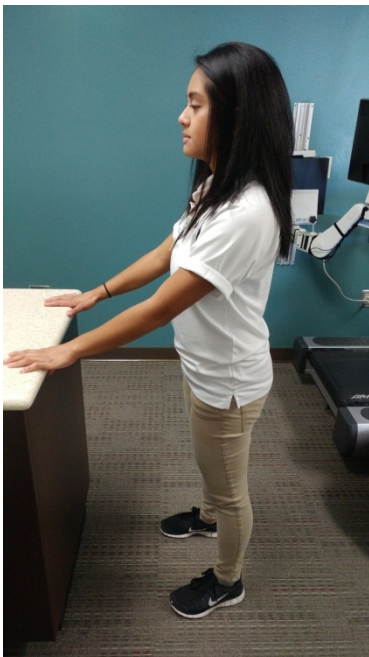
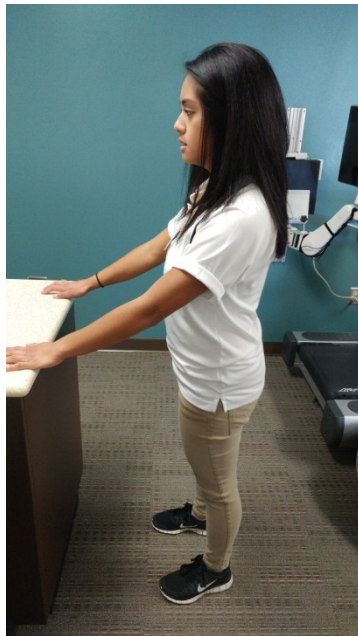
Hip Abduction

1. Stand in front of a counter holding and placing your hands on top of it with your feet slightly apart and parallel. Be sure your hip, knee and foot are pointing straight forward
2. By keeping your leg straight, slowly lift your leg up to the side
3. Slowly return your leg back to the floor



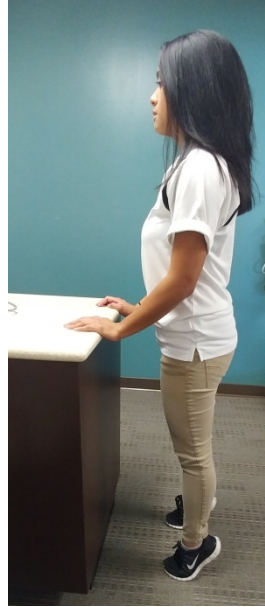
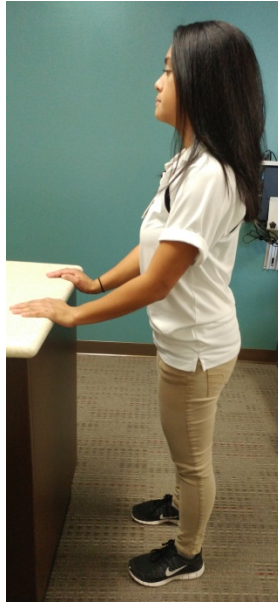
High Knee Raises

1. Stand in front of a counter holding and placing your hands on top of it with your feet slightly apart and parallel.
2. Lift one knee up and hold for about 1-2 seconds and return to starting position
3. Alternate Knees



Heel Raises

1. Stand in front of a counter holding and placing your hands on top of it with your feet slightly apart and parallel.
2. Slowly lift your heels as high as you can. Squeeze your calves at the top of the movement and then lower back to the floor

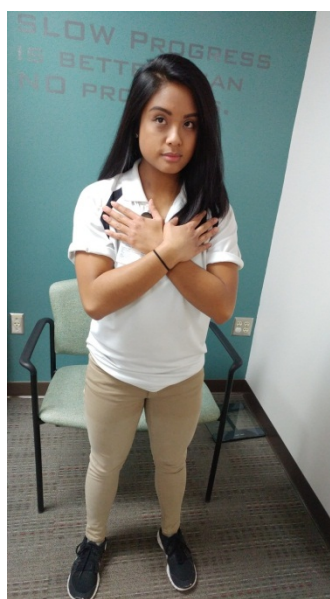


Chair Squats – Side View

1. Stand with a chair behind you, your knees just in front of the seat.
2. Lean forward as you bend your knees and lower yourself towards the chair as if attempting to sit.
3. Before you touch the chair, pause then stand back up to a full upright position.



Chair Squats – Front View



Bed Exercises

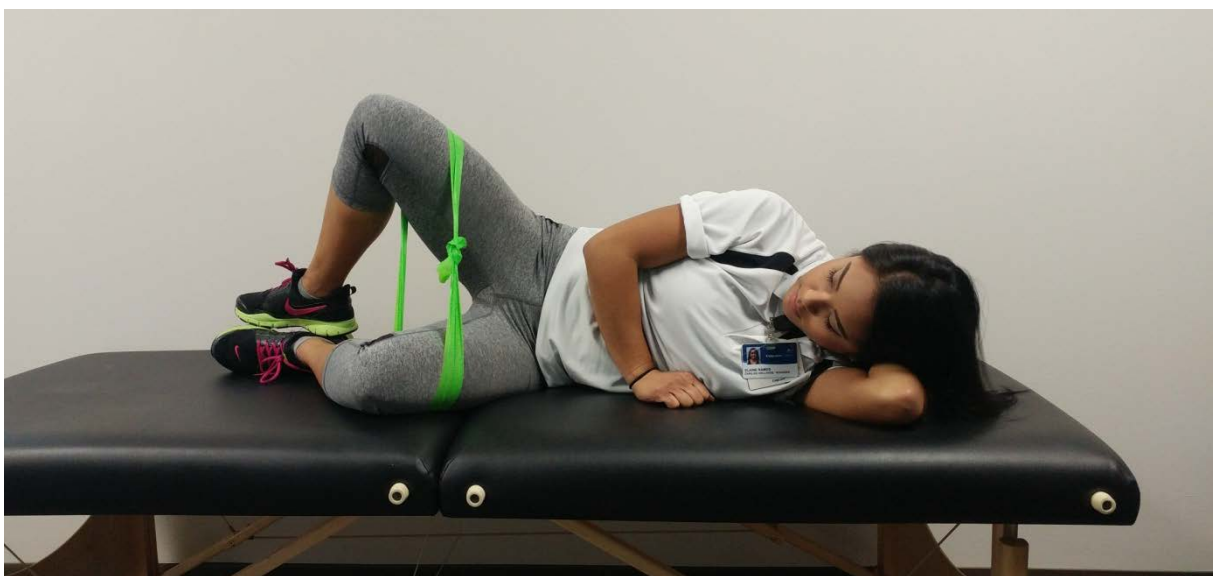
Short Arc Quad (SAQ)

- Place a bolster under your knee
- Slowly straighten and tighten your quad muscles until your leg is fully straightened. Maintain contact with the bolster at all times during the exercise.
- Slowly return back to starting position



Clamshell

- Lie on one side with legs stacked and the knees bent at a 45-degree angle.
- Rest your head on the lower arm.
- Engage your core to stabilize your spine and pelvis.
- Keeping your feet touching, raise your upper knee as high as you can without shifting your hips or pelvis and without moving your lower leg off the bed.
- Hold for a couple of seconds and return to your original position.



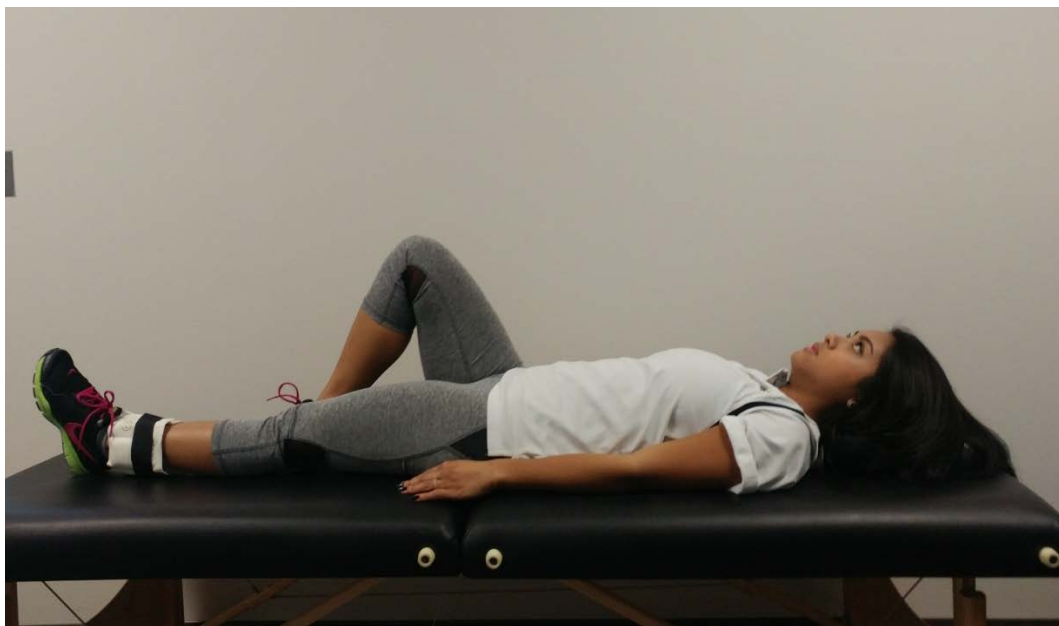
Glute Bridge

- Start by lying supine with knees bent and feet flat on the mat
- Squeeze your gluteal muscles and core muscles and raise your hips off the mat until your body forms a straight plane from your shoulders to your knees
- Hold that position for about 3-5 seconds
- Slowly return back to original position



Single Leg Raise

- Start with lying down in a supine position with one leg bent at a 90-degree angle with your foot flat on the mat and the other leg straight out in front of you.
- Contract by tightening your quadriceps muscles and slowly lift your leg up about 18 inches from the mat
- Hold for about 3 seconds and return back to your normal position



Chest Press

- Lie down on mat with dumbbells positioned to the sides of your chest with bent arms under each dumbbell.
- Press the dumbbell up with the elbows to sides until arms are fully extended.
- Slowly return back to starting position



Seated Knee Raises (Hip Flexion)

- Start by sitting with both knees bent at a 90-degree angle
- Lift one knee and hold for about 2-3 seconds and then lower it
- Do it with the other knee



Hip Abduction w/ Theraband

- Start at a seated position with both feet flat on the ground
- With the theraband around your both thighs as resistance, move your legs wide apart and then bring them together again.



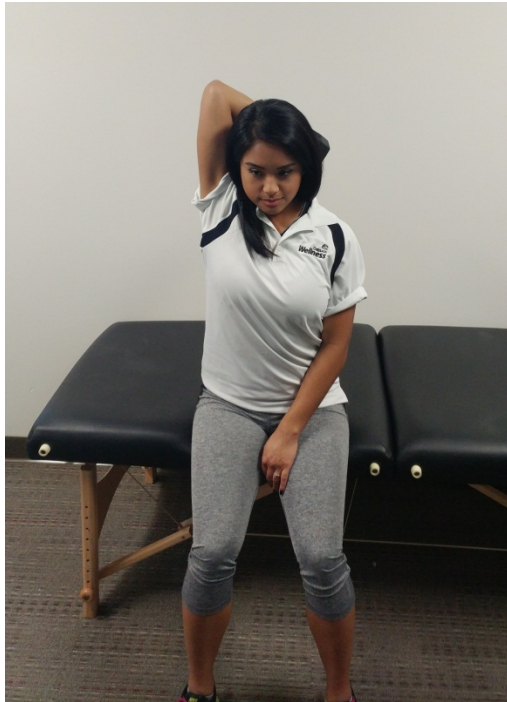
Dumbbell bicep curls

- Start with sitting at the end of the chair where your arms are fully extended and palms are facing in front of you and holding a dumbbell.
- Bending at the elbow, bring the dumbbell towards your shoulder.
- Slowly lower your arm as you return back to the starting position



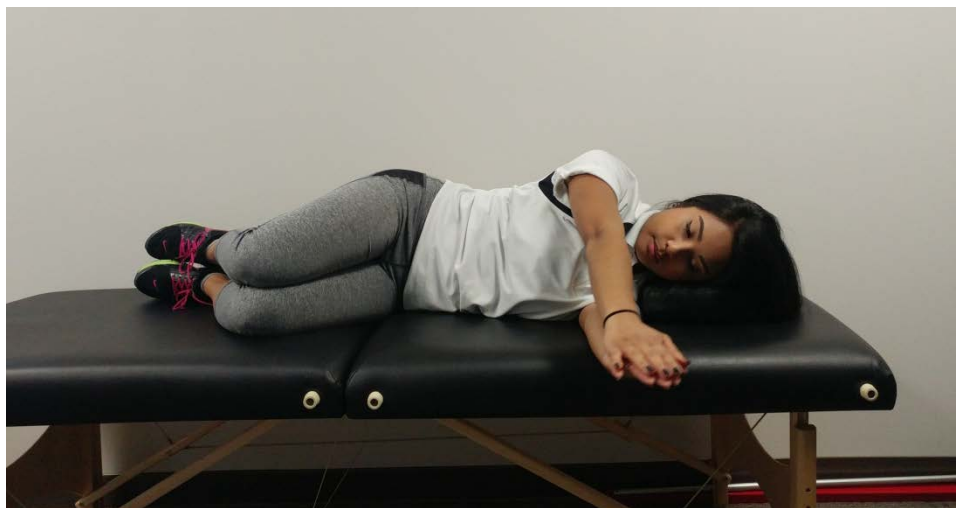
Dumbbell Triceps extensions

- Start at a seated position with one dumbbell over head with one or both hands under the under the inner plate or holding the handle. Your forearm should be lowered behind the upper arm.
- Avoid hitting dumbbell on the back of the neck by flexing your wrist on the bottom
- Raise dumbbell over head by extending your elbows while simultaneously hyperextending your wrists



Upper Body Clamshells (Side lying shoulder abduction)

- Start by lying on one side with legs stacked and knees bent at a 45-degree angle.
- With your arms fully extended, raise the upper arm all the way up with your fingers pointed to the ceiling.
- Return back to starting position



Shoulder Internal Rotation

- Start by lying on your side close to the edge of the mat with weight in hand.
- With your elbow positioned at a 90-degree angle, lower the weight towards the ground and internally rotate the shoulder until forearm is across your belly.



External Rotation

- Start by lying on your side close to the edge of the mat with weight in hand.
- Position your elbow at a 90-degree angle with your forearm across your belly.
- Lift the weight by rotating your shoulder towards the ceiling (towards the ceiling)
- Return back to starting position



Crunches

- Start by lying down in a supine position with knees bent and feet flat on the mat.
- Engage (tighten) your abdominal muscles and raise your shoulders off the mat and hold for about 2-3 seconds
- Avoid straining your neck
- Return back to original position



Notes

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