Guidebook for Bariatric Surgery

Fort Sanders Regional Medical Center

Center for Bariatric Surgery

Fort Sanders Regional Medical Center
1901 Clinch Avenue
Knoxville, TN 37916
(865) 673-FORT (3678)
www.fsregional.com/bariatrics

A Member of Covenant Health
Welcome

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Please Bring This Book With You To:
- Every office visit
- Every pre-surgical hospital visit
- The hospital on admission
- All support group visits
- All classes

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Requirements Prior to Weight Loss Surgery

- Attended informational seminar  
  Date: __________________

- Attended Initial Consult  
  Date: __________________  Dr. __________________

Complete the following testing / requirements by your Surgeon and/or Insurance

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<td>Abdominal Ultra Sound</td>
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<td>Upper GI X-ray</td>
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<td>Lab Work</td>
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Your surgeon is requiring you to lose _________ lbs. PRIOR to your surgery. We are not able to schedule you for surgery until this goal is met!

- Liquid Diet Required
  - yes
  - no

- Psychological Exam  
  Date & Time  __________________

- Sleep Study  
  Consultation  Visit  __________________
  2nd night study  Visit  __________________

- Cardiac Clearance
  - Not Required
  - Required: __________________

- Medical Clearance
  - Not Required
  - Required: __________________

- Gastrointestinal Clearance
  - Not Required
  - Required: __________________

- Nutritional/Exercise Evaluation with the Dietitian
  - Not Required
  - Required: __________________

Requirements Prior to Weight Loss Surgery - Continued

Physician supervised weight loss visits OR 10% Weight Loss

Complete the following testing / requirements by your Surgeon and/or Insurance

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Letter of Medical Necessity  
Required: __________________

Letter of Failed Weight Loss Attempts  
Required: __________________

Letter of Inabilities for ADL’s  
Required: __________________

Medical Records (patient advocate will obtain once you sign release)

Foundations for Success  
- This 2-hour class is about basic nutrition, physical activity and emotional eating.
  
  Date & Time: __________________ Location: Fort Sanders Regional - Classroom 1

Support Group Information  
- Chose the group you would like to attend. Support group meetings last 1 hour.

Support Groups:
  1st Tuesday of every month at 6:00PM Fort Sanders Classroom 1 _________
  1st Tuesday of every month at 5:00PM Fort Sanders Classroom 1 (Patients 6 months + out) _________
  3rd Tuesday of every month at 7PM Fort Sanders Classroom 1 _________
  1st and 3rd Friday of every month at 11am Fort Sanders Classroom 1 _________
  3rd Thursday of every month at 12 PM in Crossville, TN. Call 931-459-7164 for reservations and more information.

Pre and Post Operative Expectations:  
- This 2-hour class will be scheduled 2-3 weeks before surgery.
  
Are you a current daily tobacco user?  
- yes
  - no

Initial here understanding you MUST be nicotine free 30 days prior to surgery and for life after surgery.
Initials: _________ Date ____________
By choosing Fort Sanders Center for Bariatric Surgery we will help you gain improved health and quality of life through weight loss surgery. This book contains an overview of information specific to our surgical weight loss program. We provide a comprehensive program of the highest standard and believe that education and preparation for weight loss surgery is the foundation for success. We also believe support after surgery is essential for long-term success. Please read and review this book carefully, and contact us with any questions. Plan to bring this handbook with you to all your appointments.

The bariatric surgeons at Fort Sanders are some of the most experienced bariatric surgeons in the East Tennessee region. Our weight loss team includes certified bariatric nurses, dietitian, and behavioral specialists. The Center for Bariatric Surgery works in conjunction with Fort Sanders Health and Fitness Center’s N.E.W. U program. They utilize personal trainers that will work with you after your bariatric procedure to help you achieve and maintain weight loss.

When excess weight is affecting your daily life or health, or if you are unable to lose or keep weight off through diet and physical activity, weight loss surgery can help you to achieve results. Medical problems such as sleep apnea, high blood pressure, diabetes, joint problems, depression, or a BMI of 35 or greater are other reasons to consider bariatric surgery and the resulting life long health improvements.

**About Fort Sanders Center for Bariatric Surgery**

**OUR VISION**
Maximizing the quality and longevity of life for all individuals by eradicating obesity and related diseases.

**OUR MISSION**
To promote health and wellness by providing the opportunity to achieve an obesity-free life and empowering patients through life-long education, motivation and the highest quality medical care in a compassionate and supportive environment.

**OUR VALUES**
Our core beliefs promote the behaviors of integrity, compassion, commitment, hospitality, excellence, and respect to those that we serve.

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**Introduction to Bariatric Surgery**

A BMI above 40 indicates that a person is morbidly obese and therefore a candidate for bariatric surgery. Bariatric surgery may also be an option for people with a BMI between 35–40 who also suffer from obesity related health conditions such as diabetes, sleep apnea or heart disease. When other medically supervised methods have failed, bariatric surgery offers the best option for long-term weight control for those with clinically severe obesity.

Bariatric surgery has been endorsed by a consensus panel convened by the National Institute of Health (NIH) as the only effective means of inducing significant long-term weight loss for the vast majority of patients with clinically severe obesity.

The disease of morbid obesity interferes with basic physical functions. Long-term implications of the disease include shorter life expectancy and serious health consequences. Obesity is a serious public health issue in the United States. In 2015, the Centers for Disease Control and Prevention reported that 39.8% of US adults are obese which amounts to 93.3 million individuals.

The medical importance of morbid obesity is that people who are very obese have higher rates of medical problems, translating into greater need for weight loss and more extreme measures (such as bariatric surgery) to control their weight. The medical complications of obesity may occur in moderately obese people but the frequency of these associated problems (such as heart disease, high blood pressure, diabetes, and certain cancers etc.) increases dramatically as weight increases. For example, very obese men between the ages of 25-35 have a 12-fold greater risk of dying prematurely compared to their normal weight counterparts.

A qualified co-morbid condition per your insurance is a health condition related to a disease such as obesity. There are many health conditions related to morbid obesity, but some of the most common are:

- **Type 2 diabetes**, which can lead to heart disease, kidney failure, blindness, amputation of the feet or legs and nerve damage.
- **Heart disease**, such as hardening of the arteries, heart attack and angina.
- **High blood pressure**, which can lead to heart disease, stroke, kidney failure and vision loss.
- **High cholesterol**, which can lead to heart disease, stroke and kidney failure.
- **Obstructive sleep apnea** has been associated with high blood pressure and is known as the “silent killer”.
- **Osteoarthritis and joint pain**, which can lead to loss of mobility.

Other Co-morbid conditions that could be improved would be:

- Stress urinary incontinence
- Depression
- GERD/Acid reflux
- Female reproductive disorders

**Types of Bariatric Surgery**

- Adjustable Gastric Band (AGB)
- Vertical Sleeve Gastroplasty (VSG)
- Roux-en-Y Gastric Bypass (RYGB)
- Biliopancreatic Diversion with a Duodenal Switch (BPD-DS)
Dr’s. Mark Colquitt and Jonathan Ray believe that long term weight loss cannot be achieved by surgery alone but through a three prong approach of focus upon the connection of mind, body and spirit. This approach has allowed their patients lose over 200,000 pounds!

Our Team

Dr. Mark A. Colquitt, MD, FACS, FASMBS

Dr. Colquitt was born in Knoxville, TN. He completed four years of active duty in the Navy as a surgeon prior to returning to East Tennessee in 1994.

Undergraduate: University of Tennessee, Knoxville
Medical School: University of Tennessee, Memphis
Residency: Saint Mary's Hospital, Waterbury, CT; Yale University School of Medicine, New Haven, CT.
Board Certified: General Surgery
Member: Fellow, American College of Surgeons; Fellow, American Society of Metabolic and Bariatric Surgery; Society of American Gastrointestinal and Endoscopic Surgeons

Jonathan H. Ray, MD, FACS, FASMBS

Originally from Thibodaux, LA, Dr. Ray began his practice in Maryville in 1988.

Undergraduate: Nicholls State University, Thibodaux, Louisiana
Medical School: Louisiana State University Medical School, New Orleans, Louisiana
Residency: Charity Hospital System, New Orleans, Louisiana
Fellowship: Memorial Hospital, Jacksonville, Florida
Board Certified: General Surgery
Member: Fellow, American College of Surgeons; Fellow, American Society of Metabolic and Bariatric Surgery; Society of American Gastrointestinal and Endoscopic Surgeons

Contact Information

Thank you for choosing the Fort Sanders Center for Bariatric Surgery for your weight loss surgery. If you have any questions about your pre-surgical guidelines or your post-surgical care, please feel free to contact:

Dana Webber, MSN, NP-C, CBN
Coordinator, Bariatric Services
Fort Sanders Regional Weight Management and Nutrition Center
Newland Professional Building
2001 Laurel Avenue Suite 201
Knoxville, TN 37916
865-331-1218
E-mail: dbradle3@covhlth.com

Rachel Ignomirello, MS, RDN, LDN
Clinical Dietitian
Foothills Weight Loss Surgeons
Center for Advanced Medicine
1819 Clinch Avenue, Suite 108
Knoxville, TN 37916
865-984-3413
The Bariatric Surgeon’s Office is located in Suite 200 of the Center for Advanced Medicine (CAM) at 1819 Clinch Avenue. Below are directions to Fort Sanders Regional Medical Center and our campus.

Parking is available in the Laurel Avenue garage.

### Map and Directions

![Map](image_url)

### Directions

**From the West:**
- Take I-40 Eastbound Lanes
- Take the TN-62 exit (exit number 387) towards 17th Street/Western Avenue
- Immediately get in the right lane
- Turn right onto 17th Street
- Turn right onto Highland Avenue
- Turn left onto 19th Street
- Turn left onto Laurel Avenue
- Garage entrance is on your immediate right

**From the East:**
- Take I-40 Westbound Lanes
- Take exit number 387 towards TN-62/17th Street/Western Avenue
- Turn slight right onto Ailor Avenue
- Turn right onto 17th Street
- Turn right onto Highland Avenue
- Turn left onto 19th Street
- Turn left onto Laurel Avenue
- Garage entrance is on your immediate right

**From the South:**
- Take the Alcoa Hwy/TN-115 N/TN-73 N
- Take I-40 East ramp
- Get into right lane immediately and take 17th Street exit
- Turn right onto 17th St.
- Turn right onto Highland Ave.
- Turn left onto 19th St.
- Turn right onto Laurel Ave.
- Garage entrance is on your immediate right

**From the North:**
- Take I-75 South
- Take I-275 S. toward Asheville
- Merge onto I-40 West
- Take exit number 387 toward TN-62/17th Street/Western Avenue
- Turn slight right onto Ailor Avenue
- Turn slight right onto 17th Street
- Turn right onto Highland Avenue
- Turn left onto 19th Street
- Turn right onto Laurel Avenue
- Garage entrance is on your immediate right
Role of Support Groups

Society and Food
Everything in our culture is centered around food. We are bombarded with advertisements. Restaurants are seldom more than a block away or a five minute drive from anywhere. Eating is often a social event and how we spend time with family. Eating is how we celebrate, how we romance and the one thing that consistently marks every significant event in our lives. If you made the decision to address your weight, you now no longer fit into this part of your culture. The good part is, with some sustained work, you will never fit into those big pants either. The people around you may not understand your food choices. They may be supportive of your efforts or they may resent that you do not celebrate food with them anymore. They may be your food police and monitor everything you eat, and you may be the one to resent their “help.”

Whether supported by family and friends or not, there is a place to turn – it’s your local support group!

Support Groups and Long-Term Success
Weight loss support groups are instrumental for long-term success. Throughout years of seeing individuals succeed and then struggle, one thing that most of them seem to have in common is that they are not well connected to a support group. Simply, it is about “Keeping Your Head in the Game!”

No matter how you choose to lose weight, whether it was through non-surgical or surgical means, significant weight loss produces dramatic changes in your life. However, changes are not made to your brain and how you think. No matter what, changes are difficult, but they are not unique. Others who have gone through this journey can help guide you through these changes.

Support Groups and Helping Your “Addiction”
The notion has been put forth that, for many individuals struggling to lose weight, food was an addiction. While everyone’s experience with obesity is a very personal one, this theme rings true for many. People feel isolated in their addiction and in their recovery. Support groups offer the companionship, accountability and a healthy substitute for the prior unhealthy eating behaviors. For people with all types of addictions, meetings have been the solution. For example, alcoholics find solace and support in Alcoholics Anonymous meetings. Those addicted to drugs gain sobriety with the help of Narcotics Anonymous. Likewise, gamblers learn to spend time at Gamblers Anonymous meetings rather than at the horse track or in a casino.

Those who have spent most of their lives in a battle against obesity are also in need of such support to conquer their addictions and change their behaviors. Support groups typically offer the same anonymity and acceptance found in 12-step experiences. Members share a similar history and unity in their weight loss journey.

The group offers an understanding not found in our homes, family and communities. Families are also welcomed in these support groups. They see the similarities in others and feel less alone. They also get support for themselves with the changes in their home when a loved one has changed their lifestyle.

For people with all types of addictions, meetings substitute for the prior unhealthy eating behaviors. Support groups offer the companionship, accountability and a healthy culture. The good part is, with some sustained work, you will never fit into those big pants either. The people around you may not understand your food choices. They may be supportive of your efforts or they may resent that you do not celebrate food with them anymore. They may be your food police and monitor everything you eat, and you may be the one to resent their “help.”

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Regular attendance and involvement in support groups serve as a reminder of what you are supposed to be doing. Support groups keep you honest and accountable. You are reminded of the importance of portion control and physical activity. You learn tips that work for others and how to
Potential Changes to Your Body

Weight loss can offer many benefits, but the process also offers various challenges to overcome. Listed below is a partial list of possible post surgery issues:

**Diarrhea**
Diarrhea after surgical weight loss can periodically occur. Contact your nurse and dietitian if you experience short-term diarrhea and your surgeon if diarrhea persists which can lead to severe dehydration. An over the counter anti-diarrheal may also be recommended.

**Nausea/Vomiting**
Nausea, a common side effect of anesthesia, can last for a period of time but usually subsides within a couple of days. Nausea may be coupled with vomiting. If nauseated, stop drinking or eating and allow the queasiness to subside before resuming liquids or foods. Be sure to chew food well and eat slowly. If nausea persists and prevents you from consuming fluids, please notify the surgeon.

**Lactose Intolerance**
Symptoms of lactose intolerance include bloating, cramping, gas and diarrhea. These symptoms occur when you consume cow’s milk or cow’s milk based products that contain lactose, a milk sugar. If your body is not producing enough lactase, an enzyme that breaks down lactose, these symptoms will occur. Substitutions for cow’s milk are soy milk, almond milk and Lactaid® milk. Contact your dietitian for more help.

### Constipation

Constipation is usually due to lack of fluids, fiber or inactivity. To help relieve constipation, it is important to eat a balanced diet, drink fluids and stay active. A mild laxative, like Milk of Magnesia® or Miralax®, may be recommended by your surgeon.

### Hypoglycemia

Hypoglycemia is defined as a blood sugar level below 70mg/dl. Hypoglycemia symptoms include sweating, shakiness, weakness, headache, irritability, hunger, rapid heartbeat, pale skin and, in severe cases, confusion and lack of coordination. If any of these symptoms occur, check your blood sugar if you’re able. Eating regular meals, consuming the appropriate amount of calories and avoiding simple carbohydrates can prevent hypoglycemia. If it should occur follow the “Rule of 15”:

- Consume 15 grams of carb: 3 –4 glucose tablets, 1 tube of glucose gel, 1 tablespoon of honey or syrup or 4 ounces (1/2 cup) of juice
- Wait 15 minutes and recheck your blood sugar. Repeat if it is still below 70.
- Once your blood sugar is above 70, eat a meal or snack within an hour to prevent it from dropping again.

### Plateaus

A weight loss plateau and, more specifically, a fat loss plateau should be defined as no change in body weight for 3 weeks. The first week may be because of water retention, along with the second week, but the third week indicates that maybe your body is not changing as you have hoped, despite your best efforts. Before delving into some solutions to help you break your weight loss plateau, here are some important facts that you should know:

1. **Weight Loss Plateaus are VERY Common**

   Weight loss plateaus are to be expected as you are losing weight. Our bodies are resistant to change. Many people on the journey towards reaching their ideal weight have experienced as many as 2-3 plateaus lasting several weeks. Remember changing our bodies is not easy.

2. **The More Weight Lost means the more Weight Loss Slows**

   This comes down to simple mathematics. Example: Harvey is 230lb and loses 1% of his body weight in fat per week (0.5%-1% is a solid pace of fat loss). He would then lose approximately 2.3lb of fat per week until he weighs 200lb. Losing 1% of fat is now 2lb, or 15% less than 2.3lb. As Harvey’s weight decreases, less weight would be lost as a percentage of his total body weight. Weight loss inherently slows down as he becomes leaner. As the pace of weight loss slows down, the body will work harder to hold on to its fat reserves.

3. **Controlling the “Calorie Creep”**

   About 90% of all weight loss plateaus are related to “calorie creep,” or generally, eating more calories than you think you are eating. Combined with a decrease in metabolism from weight loss, plateaus are almost a certainty. The calorie creep can come from mindless eating, eating at restaurants that serve huge portions or from condiments like dressings, spreads and sauces. Maybe you don’t realize that small 100 calorie bags of “healthy” chips are really 400 calories because there are 4 servings in each bag. Alcohol also goes on the calorie creep list. The use of a food journal to track food and nutrition intake is recommended. This is the smartest and most important step you can take to improve your nutrition.

4. **Physical Activity**

   While nutrition is likely the culprit for the stall in your weight loss, make sure you are adding to the intensity of physical activity to help improve results. The preceding steps are strategies to assist in the breaking of weight loss plateaus. Most of the time a plateau results as a matter of not balancing calorie intake with calorie burn.

#### Tips:
- **DO NOT** think that you are doing anything wrong.
- **DO NOT** cut back on food volume.
- **DO** contact the office to ensure that your current diet and physical activity is appropriate.

**Weight Gain**

Weight gain can occur after surgical weight loss if you are consuming too many calories, snacking inappropriately or not incorporating physical activity into your lifestyle. Physical activity is 50% of weight loss and 100% maintenance.

The keys to keeping your weight off following bariatric surgery include:

- **Staying active** - keep moving, park further away from your destination and be mindful of how much you are moving each day.
- **Do not skip meals** - this can lead to grazing which can lead to weight gain. Your body needs to become accustomed to three meals each day.
- **Meet your protein goal for the day** - protein not only helps you feel full, but is filled with nutrients that keep your body healthy.
- **Follow heart healthy eating guidelines** - refer to your notes from class about good nutrition.
- **Meet your fluid goals** - drink at least 64 oz. of mainly water-based beverages every day. Water is not only wonderful for your body, but also makes you feel full. Also, thirst is masked by a feeling of hunger, so keep your thirst at bay.
- **Take your vitamins and supplements daily** - keeping your vitamin and nutrient counts at healthy levels makes you feel better throughout the day.

Successful weight loss and maintenance depends on your willingness to comply with healthy eating guidelines and physical activity. If you get off track, please contact your dietitian for an appointment.

---

**Helpful Information**

incorporate them into your life and family. You learn strategies and get advice but, most of all, you realize you are not in this alone.

So, “Keep Your Head in the Game!” Go to your local support group.

**Helpful Information** - Continued

your weight loss plateau, here are some important facts that you should know:

1. **Weight Loss Plateaus are VERY Common**

   Weight loss plateaus are to be expected as you are losing weight. Our bodies are resistant to change. Many people on the journey towards reaching
Nutrition & Physical Activity

Importance of Protein
After surgery, the daily protein goal is about 60-100g (depending on your surgery type). For some, reaching this target can be difficult. There are many ways to add this important nutrient into your diet. These include high protein food choices, protein shakes, protein bars and supplements.

Protein Shakes – It is recommended that you start sampling protein shakes prior to your surgery. Be advised, your tastes may change post-op. This goes for some beloved foods, too (thank goodness!). Make sure that you have a variety of flavor options on hand when you get home from the hospital. You don’t want to have to go shopping until you are feeling better. If you have a few different flavors or types of shakes, you can vary them to keep the flavors enjoyable.

Shakes taste best very cold but can also be made as a hot drink. If you’d like your shake hot, mix the powder with cold liquid (milk or water) BEFORE adding the hot liquid to prevent clumps! Also, try adding things to your shake to help change up the taste. Examples: Splenda®, ice, sugar free syrups, cinnamon or other spices, extracts found in the spice aisle and different types of milks, like soy or almond. Be creative!

If you are having problems with gas and bubbles in your shakes, make them and let them sit in the refrigerator for a while so that the bubbles dissipate.

Protein Bars – You may start using protein bars when you are on Phase 4 of your weight loss journey. Make sure when you are choosing protein bars, the ingredients fit into your daily budget of calories, fat, carbs and protein. A good rule of thumb is to find a bar where the grams of carbs do not outweigh the grams of protein. Also be sure that they are very low in sugar (4g or lower). Sugar alcohols are sometimes found in protein bars. These are okay, but can cause gas, bloating and upset stomach. Some people don’t have issues with the sugar alcohols, so if you are not sure you may just have to experiment.

Protein Supplements – Because your protein requirements are quite high following surgery (60-100 grams/day), many patients consider a protein supplement, especially while they are adjusting their food intake. You want to get a supplement that will help you reach your daily targets but will not add high amounts of sugar to your diet.

For additional information and tips on protein shakes, bars, supplements and snack options, please refer to page 28 for more information and tips on protein supplements.

Protein Shakes & Bars

Pre-Surgery

Pre-operative Checklist
Your pre-operative care will play an important role in the success of your surgery and recovery. The following guidelines will help you make the most of this time and ensure a smooth stay.

You will need to call 865-331-1634 and schedule a pre-admission appointment with the hospital within 30 days of your surgery date. We urge you not to wait until the last minute. It is important to arrive on time for your appointment and to bring the following information with you:

• Your insurance card(s)
• Photo ID
• Co-pay, if applicable
• Advance Directives and/or Living Will, if applicable
• A list of all medications you are taking, as well as their dosages (including any over-the-counter medications, vitamins, or herbal supplements). If it is easier, you can bring your medications bottles and packages with you.
• A completed health history (a form is included with this folder)
• Any orders or papers the office may have given you

You do not have to fast for this testing unless specifically instructed to do so by your physician.

Pre-surgery Psychological Evaluation
A pre-surgical psychological exam is recommended for all patients by the National Institute of Health, most surgeons and most insurance companies. While 25% of Americans suffer from clinical levels of depression, approximately 90% of candidates for bariatric surgery report significant depression. We often make suggestions to help you through this process and have greater success post-operatively.

Many insurance companies cover this evaluation, however, deductibles and coinsurance may apply. Please contact your insurance company regarding coverage of the evaluation and any out of pocket costs.

Day Before Surgery
• Clear liquids only the whole day before surgery. You are allowed to keep consuming clear liquids up until hospital arrival the next day.
  - Clear liquids include broth, popsicles, gelatin, and any sugar-free and caffeine-free beverages.
  - If you are a gastric bypass or duodenal switch patient, drink one (1) bottle of Magnesium Citrate around noon. You will need to stay near a bathroom, as this will clean out the bowels. Drink plenty of fluids if you have high output.
  - Sleeve patients no longer have to take the magnesium citrate.
• Drink 2 bottles of Ensure Pre-Surgery the evening before your surgery. Drink your third and final bottle of Ensure Pre-Surgery on the way to the hospital for your surgery. This new Enhanced Recovery After Surgery (ERAS) protocol is to carb load your body for the stress of surgery.
  - Drink the bottles quickly (within 5-10 minutes).
Surgery Day

On the Day of Your Surgery
You will be given a surgery time at your pre-admission testing appointment. Be sure to arrive at the hospital two hours before your surgery is scheduled to begin. Go to the first floor of the hospital and check in at the glass window of Day Surgery.

On the morning of your surgery, wash your abdomen with the soap you were given at your pre-admission appointment. You may have been instructed to take some of your home medications on the morning of surgery. Remember to only take a sip of water with your medications.

A family member can accompany you in the Day Surgery area while you are being prepped for surgery. Once you are taken to the actual pre-operative area, family will be directed to the Surgery Waiting Lounge. Your progress through the surgery process will be updated on our surgery flow board. Surgery waiting lounge staff will also be able to provide updates on your progress. Following your procedure, your surgeon will talk to your family.

Some of things the nurses will be doing in pre-operative area are:
- Complete your paperwork
- Have you change into a special gown
- Start an IV (intravenous) line
- Give you any necessary medications, such as antibiotics to prevent infections, IV acetaminophen to help with pain control and an anticoagulant (blood thinner) to prevent the formation of blood clots
- Apply a sequential compression device (SCD) or thromboguards on your legs. These are air filled stockings that alternate inflation and deflation to improve circulation and help prevent blood clots.

After Your Surgery
After your surgery, you will recover in the post anesthesia care unit (PACU). You will be monitored closely for changes in vital signs, level of consciousness and independent and effective breathing.

Our nursing staff will ask you to rate your pain. Do not try to be brave. Let us manage your pain so that your body can begin to heal. You may experience nausea and vomiting due to anesthesia. Your nurse can give you medication to help you with that side effect as well.

If you have been diagnosed with sleep apnea, plan to bring your C-pap machine and mask to the hospital. This will ensure that your oxygen levels remain healthy while you sleep.

Once discharged from the PACU, you will then be transferred to an inpatient room on 5West. Your nurse will monitor your vital signs, oxygen levels, pain and nausea/vomiting.

While in the hospital, you will complete Phase 1 and start Phase 2 of your dietary guidelines. Refer to your phase section on page 22 for more information.

You will get out of bed to walk every two hours while in the hospital. The first time will be with a nurse. If you are stable, then your support person can walk with you. This is essential and there are no exceptions. Walking will help relieve the CO2 gas pain and reduce risk of blood clots. The faster you are up and ambulating, the quicker you will begin your recovery.

It is important to take deep breaths and use the incentive spirometer every hour while you are awake. This will help clear your lungs from the anesthesia. Take sips of water, no gulping, no ice and no straws. You don’t want to over-fill your new, smaller stomach.

Bariatric Oral Intake and Activity Log
We want you to begin tracking your intake and activity immediately following surgery. See Bariatric Intake and Activity Log on the next page and keep your log until your first post-op appointment after surgery. After, you may continue on our log or start Baritastic tracking app.

Please feel free to ask any questions related to your post-operative instructions. Be sure your family/support person is aware of your post-operative needs as well. A section for your questions and notes can be found in the back of this guidebook. Be sure to write things down so you won’t forget them!
Bariatric Oral Intake and Activity Log

Date: _______/_____/_______

1:00 AM_________ 1:00 AM_________
2:00 AM_________ 2:00 AM_________
3:00 AM_________ 3:00 AM_________
4:00 AM_________ 4:00 AM_________
5:00 AM_________ 5:00 AM_________
6:00 AM_________ 6:00 AM_________
7:00 AM_________ 7:00 AM_________
8:00 AM_________ 8:00 AM_________
9:00 AM_________ 9:00 AM_________
10:00 AM_________ 10:00 AM_________
11:00 AM_________ 11:00 AM_________
12:00 PM_________ 12:00 PM_________
1:00 PM_________ 1:00 PM_________
2:00 PM_________ 2:00 PM_________
3:00 PM_________ 3:00 PM_________
4:00 PM_________ 4:00 PM_________
5:00 PM_________ 5:00 PM_________
6:00 PM_________ 6:00 PM_________
7:00 PM_________ 7:00 PM_________
8:00 PM_________ 8:00 PM_________
9:00 PM_________ 9:00 PM_________
10:00 PM_________ 10:00 PM_________
11:00 PM_________ 11:00 PM_________
12:00 AM_________ 12:00 AM_________

Oral Intake:
Please mark the number of oz. taken in for hour time frame. Please mark if fluid was protein.

Total Intake:
Need 64 combined ounces daily.

Activity:
Must walk every 2 hours no exceptions. Specify number of feet walked or approximate.

What To Do Following Your Surgery

WHEN SHOULD I CALL THE SURGEON?
If you experience any of the following, call your surgeon’s office:
- Severe or increasing pain that is not controlled by your pain medication.
- Swelling, redness, increased tenderness or increased drainage around your incision sites.
- Temperature above 101°F.
- Nausea or vomiting that does not subside within 6 hours.
- Trouble breathing/shortness of breath.
- Excessive or uncontrolled bleeding from your incisions.
- Other medical-related questions or concerns

If you have questions or concerns, call the physician’s office at 865-984-3413.

Medication Safety Following Bariatric Surgery

Following your surgery and before you go home, a pharmacist will meet with you to discuss your former, current and future medication usage.

There are two main types of drug formulation: immediate release and extended release. Immediate release medications dissolve and get absorbed right away in the stomach. Extended release medications are delivered over an extended period of time and are delivered by different parts of your stomach and small intestine at different times. Because your stomach is a small pouch and your intestines are smaller, extended release medications are not absorbed properly with gastric bypass and duodenal switch surgery types.

It is important to tell ALL of your healthcare providers about your surgery and your medication needs.

Sleeve patients can use extended release medications, but they must remain intact. Look for “XR,” “SR,” “DR” or “CR” on the label. These medications cannot be tampered with because too much medicine may be released into your system at once. Be sure to ask your pharmacist before opening products you purchase over the counter.

The guidelines above are designed for patients immediately following surgery. As your recovery progresses, so will your ability to tolerate tablets, capsules and gelcaps.

Drugs to Avoid

Tylenol® (Acetaminophen) is the pain reliever of choice. NSAIDS (i.e. Advil, Motrin, Naproxen, ibuprofen, Aspirin, BC Powder) can all cause ulcers in patients who have undergone bariatric surgery. 81mg coated “baby” aspirin is an exception. You may also receive Celebrex short-term while in the hospital. Certain medications should also be held prior to surgery:

<table>
<thead>
<tr>
<th>Medication</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSAIDs (Motrin, Aleve, Advil, etc.)</td>
<td>1 week</td>
</tr>
<tr>
<td>Coumadin® (Warfarin)</td>
<td>1 week</td>
</tr>
<tr>
<td>Pradaxa® (Dabigatran)</td>
<td>1-5 days (based on renal function)</td>
</tr>
<tr>
<td>Xarelto® (Rivaroxaban)</td>
<td>1 day</td>
</tr>
<tr>
<td>Eliquis® (Apixaban)</td>
<td>2 days</td>
</tr>
<tr>
<td>Plavix® (Clopidogrel)</td>
<td>5 days</td>
</tr>
<tr>
<td>Effient® (Prasugrel)</td>
<td>5 days</td>
</tr>
<tr>
<td>Brilinta® (Ticagrelor)</td>
<td>1 week</td>
</tr>
<tr>
<td>Metformin® (Glicophagel)</td>
<td>2 days</td>
</tr>
<tr>
<td>Oral estrogen containing contraceptives and hormone replacements</td>
<td>1 week</td>
</tr>
</tbody>
</table>
Oral birth control may not work as effectively after surgery. Fertility increases as you lose weight quickly, and it’s encouraged to wait 18-24 months post-op before trying to get pregnant. For that reason, use a back-up barrier methods to prevent pregnancy. Examples include IUD and condoms. Discuss your options with an OB-GYN.

When you sprinkle or squeeze medications out of their original form, you will need to mask the flavor. A few options include mixing the medicine in Crystal Light® and water, or you can make a slushie out of a sugar free popsicle (don’t chew the popsicle). Unsweetened applesauce is another option.

As you lose weight post-surgery, the types and dosages of medications you took PRIOR to surgery may change. Weight loss can improve the following conditions:

- High Cholesterol
- High Blood Pressure
- Diabetes

In fact, people with diabetes may need to learn how to manage LOW blood sugar (less than 70). If you experience low blood sugar levels, drink ½ cup of juice, 3-4 glucose tablets or 1 tube of glucose gel to raise blood sugar levels.

If you have any questions regarding medications, please talk to your physician.

### Concentrated Sweets

Most of the foods and beverages that contain concentrated sweets are filled with “empty” calories in the form of sugar. These products provide calories with limited nutritional value and often do not contain the right amount of vitamins, minerals, protein and fiber. These nutrients are essential following weight loss surgery to help you recover and receive the nutrition your body needs.

Remember, every bite counts following your surgery. Filling up on these “concentrated sweets” can prevent weight loss by replacing healthier foods in your diet with high calorie, high sugar foods. Take a look at the concentrated foods/beverages list below:

<table>
<thead>
<tr>
<th>Ice cream/Sherbet/Sorbet</th>
<th>Regular Soft drinks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweetened, fruited or frozen yogurt</td>
<td>Sugared Tea/Lemonade/Kool Aid®</td>
</tr>
<tr>
<td>Pudding</td>
<td>Snapple®/fruit drink/fruit juice</td>
</tr>
<tr>
<td>Chocolate milk</td>
<td>Jelly/Jam</td>
</tr>
<tr>
<td>Dried fruit</td>
<td>Syrup/Molasses</td>
</tr>
<tr>
<td>Canned or frozen fruit in syrup</td>
<td>Table sugar</td>
</tr>
<tr>
<td>Honey</td>
<td>Cake/Pie/Cookies</td>
</tr>
<tr>
<td>Sugar-coated cereal</td>
<td>Candy</td>
</tr>
<tr>
<td>Doughnut</td>
<td>Regular Jell-O®</td>
</tr>
<tr>
<td>Popsicle</td>
<td>Sugar gum</td>
</tr>
</tbody>
</table>

**NOTE:** Artificial sweeteners, such as Splenda® or Stevia, are approved to use.

### Alcohol Consumption Following Surgery

Alcohol should not be consumed for at least six months after surgery. Some doctors recommend that patients stay away from alcohol for at least a year and recommend not drinking and driving up to 24 hours after consuming an alcoholic beverage after surgery. Alcohol can cause stomach irritation and ulcers and slow the rate of healing. There is no nutritional value in alcohol.

Consuming alcohol can defeat the purpose of surgery. Alcohol converts readily into blood sugar which can slow down weight loss and can cause dumping syndrome. Dumping syndrome occurs when food is emptied into the small intestine too soon. The potential results of dumping syndrome are sweating, rapid heart rate, cramping, nausea and diarrhea. The stomach pouch created in the surgery is much smaller than a normal stomach, and patients have a tendency to become inebriated quicker.

The use of surgery is typically for those who have serious obesity problems. While the surgery typically helps patients with that problem, they can transfer their addiction to another vice, alcohol.

Should you decide to start drinking after surgery, wait for the appropriate recovery time. Once you resume drinking alcohol, drink only on rare occasions and drink only in small quantities to avoid quick inebriation, dumping syndrome and other potential problems.
**Diet Progression after Weight Loss Surgery**

**Phase 1 for Hospital: Clear Liquids**

While in hospital: Sips of room temperature water at first, then clear liquid tray ordered at night.

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Not recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear liquids only-broth, Sugar-Free JELLO®, decaf tea, sugar-free popsicles, water</td>
<td>Any solid food or thick liquids - sugar, pepper, milk, juice, regular gelatin, Italian ice, carbonation, ice</td>
</tr>
</tbody>
</table>

You will also receive a packet of Juven, which is a therapeutic nutrition drink mix with a unique blend of key ingredients to support wound healing. Mix Juven into your water bottles.

No caffeine, chewing gum or plastic straw for one month after surgery.

**Phase 2: Protein Supplements**

Begin day after surgery in the hospital. Duration - until post op office visit with surgeon.

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Not recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same clear liquids as above (decaffeinated, sugar-free, non-carbonated) Mix protein supplement with almond milk, soy milk, or water (no lactose or dairy products yet). You will be served Ensure Max protein shake while in the hospital. Include 2-3 protein shakes per day; it may be 4-6 ounces at a time. Try to consume 4 ounces of fluids between meals every hour to stay hydrated. For sleeve and bypass patients, goal is to aim for 60-80 grams of protein per day. For DS patients, goal is to aim for 80-100 grams of protein per day. You are healing during this time, so do not advance too quickly unless directed by surgeon. Failure to comply may result in slower healing and your overall progress. To help meet protein goals, can use unflavored protein powder and/or protein water.</td>
<td>Soft proteins - Canned chicken or tuna, scrambled eggs, hard boiled eggs, soft tofu, soft cooked plain beans, and low-fat dairy: light Greek yogurt, skim or 1% milk, reduced fat cheese, low-fat cottage cheese, low-fat ricotta cheese. Unflavored protein powder or plain Greek yogurt can be added to the following foods to make them a protein source: Unsweetened applesauce, sugar free pudding, tomato soup, vegetable juice, plain hummus Powdered peanut butter, such as PB 2®, can be added to protein shakes, yogurts, and puddings. Try to consume 4-6 ounces of fluids every hour between meals to stay hydrated.</td>
</tr>
</tbody>
</table>

**Phase 3: Soft Proteins**

Begins: After you’ve met with your surgeon. Typically 1 week post operation. Duration: Is based on your progress. The surgeon will tell you when to progress to phase 4.

**Eating Goals**

- You will also begin taking your chewable vitamins at this time. Refer to vitamin supplements section for more information on needs.
- 3 meals per day, NO snacks. If you are unable to meet your protein requirements through your 3 meals, add unflavored protein powder to your meals (mix in yogurt, cottage cheese, beans) or add 1/2 to whole protein shake between your 3 meals.
- Take small, dime-sized bites
- Chew thoroughly
- Stop eating when satisfied, even if you still have food on your plate. Throw the food away or give to someone else.
- Meal time should last about 20-30 minutes

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Not recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can also use Lactaid® milk or dairy-free alternative such as soy milk. Most patients do OK with cheeses and yogurt due to lower lactose content.</td>
<td>Meat, poultry, seafood, fruits, vegetables, starches/grains (potato/breads/rice) Solid foods that cannot be mashed completely with a fork.</td>
</tr>
</tbody>
</table>

**Phase 3 - Sample meal plan:**

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Mid-Morning</th>
<th>Lunch</th>
<th>Mid-Afternoon</th>
<th>Dinner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrambled egg with 2% cheese</td>
<td>1/2 Protein Shake</td>
<td>1/2 cup of tuna salad (canned tuna, light mayonnaise, pickle juice, and spices)</td>
<td>1/2 Protein Shake</td>
<td>1/2 cup soft, cooked beans with a sprinkle of shredded cheese and dollop of plain Greek yogurt</td>
</tr>
</tbody>
</table>

If you are unable to meet your protein requirements through your 3 meals, add unflavored protein powder to your meals (mix in yogurt, cottage cheese, beans) or add 1/2 to whole protein shake in addition to your 3 meals.
Phase 4: Beginning Solids

Begins: Typically at 4 weeks or one month post-op. Await surgeon’s approval BEFORE progressing diet. Gradually begin adding these food choices to your diet, but listen to your body for when you are full. If you are full, don’t force anymore. Some find it helpful to add one new food at a time. Remember to CHEW, CHEW, and CHEW! Especially as you add more textured foods to your diet.

Use the “post surgical plate” as your guide, which places an emphasis on eating protein first (protein should be half of the meal) then fruit or vegetable. Always listen to your body’s cues to signal fullness and stop when comfortably full.

You may begin trying most foods with attention to your personal tolerance for texture and volume. You should be getting more protein from foods than protein supplements now. Ideally, you should not need protein supplements beyond 3 months post op. Any exceptions will come from your surgeon or dietitian.

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Key points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proteins</strong> - All foods from soft diet plus meat, poultry, and fish. All meats need to be soft, tender, and moist. Chili made with lean meat and beans, thin sliced poultry deli meat, and tuna salad made with light mayo or plain Greek yogurt.</td>
<td>Use moist heating methods for meats. Consider using a Crock Pot. Be cautious with raw fruits and vegetables. Try cooked first and then progress to steamed then raw as tolerated after 3 months post op. Each person will be different on tolerance. Keep in mind that starches are limited the first 6 months after surgery because they are not essential to your nutrition at this time and may slow down your weight loss. Choose vegetable alternatives instead, such as cauliflower rice and zucchini noodles. Fats should be limited due to their concentrated calories and the possibility of dumping syndrome or rapid gastric emptying.</td>
</tr>
<tr>
<td><strong>Fruits and vegetables</strong> - These should be “fork tender.” Choose “No Sugar Added” fruit cups in their own juices (NO SYRUP) or thawed frozen fruit. Vegetables should be soft and well-cooked, such as canned carrots or green beans.</td>
<td></td>
</tr>
<tr>
<td><strong>Fats</strong> - Use mostly healthy fats such as tuna, salmon, avocado, or olive oil. For margarines and salad dressing, use 1 tablespoon (avoid creamy dressings and watch sugar content). 10 grams of fat at each meal will help prevent gallstones if you still have a gallbladder</td>
<td></td>
</tr>
</tbody>
</table>

Diet Progression after Weight Loss Surgery - Continued

Phase 4 - Sample meal plan

**Soft meal ideas for 1-6 months post op.**

**Breakfast:**
- Choose ONE
  - Light Greek yogurt (12-15g protein),
  - ½ cup cottage cheese (14g protein)
  - 2 eggs or 4 egg whites (12g protein)
  - Protein bar

**Lunch:**
- Choose ONE
  - 3-4 oz. tuna with ½ cup sliced tomato
  - 3-4 oz. chicken salad made with low fat mayo or plain Greek yogurt with ½ cup unsweetened applesauce
  - 3-4 oz. tilapia with ½ cup cooked carrots
  - 3-4 oz. deli turkey with ½ cup seeded and peeled cucumber

**Dinner:**
- Choose ONE
  - 3-4 oz. shredded pork tenderloin with ½ cup green beans
  - 3-4 oz. salmon with ½ cup zucchini
  - 3-4 oz. ground turkey patio with ½ cup mushrooms
  - 3-4 oz. shredded chicken with ½ cup cooked carrots

DINING OUT? Try chicken salad in a cup, refried beans with cheese, chili, tomato or broth-based soups, soft steamed veggies, baked fish or thinly sliced deli meat. NO starches such as bread, pasta, or rice until 6 months.
Diet Progression after Weight Loss Surgery - Continued

6 Months and Beyond

After 6 months you can start adding healthy starches (oatmeal, whole wheat bread, sweet potatoes, green peas, corn, whole wheat pasta, brown rice and quinoa) back into your diet, but always keep in mind that protein should always be the first food you eat in a meal. A portion is 2 tablespoons, 2-3 crackers or 1/2 slice of bread.

Sample meals
Remember you will get the most satisfaction and fullness from solid foods. These examples can be used at any meal... get creative and add spices!!

Breakfast ideas:
- 1 scrambled egg and 1 piece Canadian bacon with no sugar added or “own juices” fruit cup
- 1 poached egg and 1 Morningstar farm sausage patty with 1/2 cup blueberries
- Light Greek yogurt with 2 tbsp. high fiber cereal added

Lunch ideas:
- Deli ham or turkey, salad with low fat dressing and 2 whole wheat crackers
- Tuna salad, raw carrots and celery (chew, chew, chew) and 1/2 piece whole wheat toast
- Morningstar Farm® veggie or black bean burger with 1/2 cup lettuce and salsa

Dinner ideas:
- Grilled chicken or fish, green beans, 2 tbsp. sweet potato
- Tender steak, steamed broccoli or cauliflower (chew, chew chew) and 2 tbsp. quinoa
- Center cut pork chop (don’t overcook), cooked vegetables, 2 tbsp. peas

- At this point you know a lot about what you are able to eat. You will continue to learn on a daily basis.
Most foods can be eaten at this point, but just keep in mind some of the things that you will always need to be careful with. The following are tips to follow indefinitely:
  - Chew all solid foods well.
  - Always be mindful of eating (meaning no multitasking during meals and snacks).
  - Stop eating when comfortably full - make this a habit for life!
  - Stay hydrated! 64 ounces of fluid per day is the MINIMUM need for most people. Water should be your main beverage forever.
  - Always take vitamins and mineral supplements.
  - Focus on having a high quality diet for life (i.e., colorful fruits, and vegetables, lean meats, beans, whole grains, using spices instead of salt and heart healthy fats). You have a small capacity, so make smart choices!
  - Continue to avoid sugary beverages and desserts as well as high fat foods.
  - Keeping a food diary is a good way to keep tabs on your intake and keeps you accountable.
  - Make activity a part of your daily life as this will lead to long term success - MOVING is a priority now!
  - Come to support group as often as you can! It is proven the more you attend the more successful you will be and maintain longer!
  - Call your bariatric team for support and guidance on eating if you get off track. This is a lifelong journey, and we want you to succeed!

<table>
<thead>
<tr>
<th>Group</th>
<th>Food Choices and Servings</th>
<th>Food Choices and Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lean Meat Group:</td>
<td>Choose 3-4 oz. per meal</td>
<td>Choose 3-4 oz. per meal</td>
</tr>
<tr>
<td>35-55 calories</td>
<td>and eat FIRST</td>
<td>and eat SECOND</td>
</tr>
<tr>
<td>Skinless turkey breast</td>
<td>Low-fat chicken Breast</td>
<td>Egg substitute (1/2 cup)</td>
</tr>
<tr>
<td>Skinless chicken Breast</td>
<td>Seafood: tuna, salmon, cod, tilapia</td>
<td>Medium egg (2)</td>
</tr>
<tr>
<td>Low-fat lunch meat</td>
<td>Shellfish: shrimp, crab, lobster</td>
<td>Light Greek yogurt (1)</td>
</tr>
<tr>
<td>Lean pork: tenderloin, sirloin, center, Canadian bacon</td>
<td>Lean beef: sirloin, tenderloin</td>
<td>2 soy sausage patties</td>
</tr>
<tr>
<td>Quinoa</td>
<td>3 turkey sausage links</td>
<td>3 turkey sausage links</td>
</tr>
<tr>
<td>Whole wheat bread</td>
<td>Low-fat cottage cheese (1 cup)</td>
<td>Healthy cooking oils</td>
</tr>
<tr>
<td>(1/2 slice)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Fruit Group:       | Choose ½-1 cup total per meal and eat SECOND |
| 60 calories        |                                           |
|                    | Apple                                     |
|                    | Applesauce                                |
|                    | Apricots                                  |
|                    | Banana (1/2)                              |
|                    | Pineapple                                 |
|                    | Plum                                      |
|                    | Blueberries                               |
|                    | Melon                                     |
|                    | Strawberries                              |
|                    |                                           |
|                    | Apple                                     |
|                    | Applesauce                                |
|                    | Apricots                                  |
|                    | Banana (1/2)                              |
|                    | Pineapple                                 |
|                    | Plum                                      |
|                    | Blueberries                               |
|                    | Melon                                     |
|                    | Strawberries                              |
|                    |                                           |
|                    | Apple                                     |
|                    | Applesauce                                |
|                    | Apricots                                  |
|                    | Banana (1/2)                              |
|                    | Pineapple                                 |
|                    | Plum                                      |
|                    | Blueberries                               |
|                    | Melon                                     |
|                    | Strawberries                              |
|                    |                                           |

| Vegetable Group: | Choose ½-1 cup total per meal and eat SECOND |
| 25 calories      |                                           |
| Asparagus        | Greens                                   |
| Green Beans      | Lettuce                                  |
| Beets            | Mushrooms                                |
| Broccoli         | Onions                                   |
| Cabbage          | Scallions                                |
| Carrots          | Summer squash                            |
| Cauliflower      | Spinach                                  |
| Cucumber         | Tomato                                   |
| Eggplant         | Zucchini                                 |

| Starch Group:    | Choose 2 tbsp per meal and eat LAST |
| 80 calories      |                                           |
| Not until 6      | Low sugar oatmeal                        |
| months after     | Peas                                     |
| surgery          | Corn                                     |
|                  | Baked or sweet potato                    |
|                  | Brown rice                               |
|                  | Whole wheat bread (1/2 slice)            |
|                  |                                           |
|                  | Quinoa                                   |
|                  | Whole wheat tortilla                     |
|                  | Whole wheat pasta                        |
|                  | Barley                                   |
|                  | Whole wheat crackers                     |
|                  | Whole wheat flour                        |
|                  | Cornstarch                               |
### Sample Menu

<table>
<thead>
<tr>
<th>Day</th>
<th>Breakfast</th>
<th>Lunch</th>
<th>Dinner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>1-2 boiled eggs</td>
<td>2 oz turkey breast</td>
<td>3-4 oz. grilled tuna steak</td>
</tr>
<tr>
<td></td>
<td>½ cup raspberries</td>
<td>1 slice low-fat cheese</td>
<td>½ cup grilled zucchini and onions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>½ cup cooked carrots</td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td>½ cup cottage cheese</td>
<td>3-4 oz. of tuna salad</td>
<td>3-4 oz. baked chicken breast</td>
</tr>
<tr>
<td></td>
<td>½ peach</td>
<td>1 cups cherry tomatoes and cucumbers with vinegar</td>
<td>½ cup steamed vegetable medley</td>
</tr>
<tr>
<td>Day 3</td>
<td>2 turkey sausage links</td>
<td>3-4 oz. chicken salad</td>
<td>3-4 oz. baked pork tenderloin</td>
</tr>
<tr>
<td></td>
<td>½ pear</td>
<td>½ cup green beans</td>
<td>½ cup mixed greens</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>½ cup stewed apple</td>
</tr>
<tr>
<td>Day 4</td>
<td>1 Dannon Light and Fit</td>
<td>3-4 oz. shredded pork</td>
<td>3-4 oz. grilled sirloin steak</td>
</tr>
<tr>
<td></td>
<td>Greek Yogurt</td>
<td>1 cup light coleslaw</td>
<td>½ cup grilled onions and mushrooms</td>
</tr>
<tr>
<td></td>
<td>½ cup blueberries</td>
<td></td>
<td>2 tbsp peas (after 6 months)</td>
</tr>
<tr>
<td>Day 5</td>
<td>1 Morningstar Farms</td>
<td>1 Morningstar Farms Veggie Burger</td>
<td>3-4 oz. crablegs (meat)</td>
</tr>
<tr>
<td></td>
<td>Veggie Sausage Patty</td>
<td></td>
<td>½ cup steamed broccoli</td>
</tr>
<tr>
<td></td>
<td>½ cup strawberries</td>
<td></td>
<td>2 tbsp dried beans (after 6 months)</td>
</tr>
<tr>
<td>Day 6</td>
<td>1 oz of Canadian Bacon</td>
<td>3-4 oz. crab salad</td>
<td>3-4 oz. center-cut pork chop</td>
</tr>
<tr>
<td></td>
<td>1 poached egg</td>
<td></td>
<td>½ cup grilled onions and squash</td>
</tr>
<tr>
<td></td>
<td>½ cup honeydew</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 7</td>
<td>½ cup egg beaters</td>
<td>3-4 oz. salmon</td>
<td>3-4 oz. baked turkey</td>
</tr>
<tr>
<td></td>
<td>Grilled onions and peppers</td>
<td></td>
<td>½ cup cooked carrots</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 tbsp sweet potato (after 6 months)</td>
</tr>
</tbody>
</table>

### Protein Bars

You may start using protein bars when you are on Phase 4. Keep in mind, when considering protein bars, make sure they fit into your daily budget-of calories, fat, carbs and protein. Make sure that they are low in sugar - 4g or lower. Try to find a bar where the grams of carbs do not outweigh the grams of protein. Sugar alcohols are sometimes found in protein bars. These are OK but can cause gas, bloating and upset stomach. Some people don’t have any issues with the sugar alcohols, so you may just have to experiment.

See list below for recommended protein bars:

- **QUEST®**: These are really good because they have around 10 grams of fiber, 20 grams of protein and 1 gram of sugar. They sell at Kroger®, Trader Joes®, Earth Fare®, or you can order at quest.com.
- **Atkins® Caramel Double Chocolate Crunch** - Very Tasty! Only 11g of protein and 18g carbs - but 10g of fiber. Can be purchased at Wal-Mart®.
- **Pure Protein - Revolution®** is my favorite but there are a variety of flavors. Most have 20 grams of protein and 1g sugar. Purchased at Wal-Mart® and Kroger®.
- **Oh YEAH®** - Chocolate Peanut Butter has 14g of protein and an amazing 8g of carbs purchased at Vitamin Shoppe®. Nice crunch wafer bar.
- **Power Crunch®** - any flavor has 14g of protein and still nice 10g carbs purchased at the Vitamin Shoppe®, Nice crunch wafer bar.
- **Premier Protein®** bar - variety pack has a whopping 30g of protein and 12-16g of carbs purchased at Sam’s Club®. These bars are pretty chewy and don’t taste too bad, but if you are in need of some serious protein this bar helps you knock the protein out.
- **Nature Valley® Protein** - Peanut Butter Dark Chocolate - this has 10g of protein and 14 g of carbs, 6g of sugar and 5 g of fiber. This is a chewy bar and has a great taste can be purchased at grocery stores, Wal-Mart® and Sam’s®.
- **Muscle Milk®**
- **Think Thin®**
Protein Shakes

Tips that may be useful...

• It is recommended that you start sampling these shakes pre-op, however be advised that your tastes will change post-op.

• Make sure that you have a variety at hand when you get home from the hospital. You don't want to go shopping until you are feeling better. If you have a few different ones, you can vary them since they get a little old after drinking them days on end.

• Shakes taste best very cold but can be made as a hot drink. If you want a hot protein drink, it is necessary to mix the powder with some cold liquid (milk or water) BEFORE adding the hot liquid. You will need to make it into a paste, then add the remaining hot liquid. If not mixed correctly, it will be a clumpy mess.

• Try adding things to your shake to help change up the taste for example: Splenda®, ice, Sugar Free Syrup (http://www.davincigourmet.com/), cinnamon or other spices, extracts found in the spice aisle and different types of milk like soy or almond.

• If you are having problems with gas and bubbles in your shakes, make them and let them sit in the refrigerator for a while so that the bubbles can dissipate.

• Do I need an expensive mixer to mix my shakes? Not really, but consider how often you will use and depend on the mixer. If you purchase a cheaper model, its life may be short lived due to how often you will use it. If you are on the run, consider a shaker bottle that can be found online, in the Foothills office or at GNC®/Vitamin Shoppe®.

• Protein supplements come in different forms: RTD-Ready to drink, powder and bullets/shots.

• Many online bariatric sites have sample packs that can be purchased, or some will give them to you, that you can try. This will be great to try different proteins without having to get the whole keg full!

• Some local shops do accept returns on protein if you do not care for or tolerate the product. Our office can't accept open bags back due to regulations.

• Notice how many scoops are needed to fulfill the serving size listed on the container.

Protein Shake Guidelines

Per serving: <200 calories, <5g total fat, <10g total carbohydrate, <3g sugar, and 20-30g protein.

Where do I get the best protein?

Just to name a FEW common

1. Foothills - Dr. Colquitt and Dr. Ray’s office
2. Unjury®
3. GNC®
4. Vitamin Shoppe®
5. Wal-Mart®/Target®/SAMS®

Medical ID Bracelets

As a bariatric patient, you may want to consider getting a medical ID bracelet. If you can’t speak for yourself, it will speak for you. The bracelet can communicate medical conditions and information to medical staff. Accidents happen far more than you think they do. Each year approximately 450,000 of us are taken to hospitals unconscious and without identification. Brands like ROAD iD work well!

If you get one, put the following information on it:

• Your Name
• Your Surgery Type:
  - Sleeve Gastrectomy
  - Roux-en-Y Gastric Bypass
  - Duodenal Switch
• No Oral NSAIDs
• No Blind NGT
• (Plus anything else you want to add such as allergies, other medical conditions, emergency contact person, etc.)

Fluids

- The general fluid goal is 64 fluid ounces or more a day. It may take time to reach goal. Women should get a minimum of 48 ounces of fluid daily.

- At least half of goal should be met with clear liquids. Protein shakes can count toward fluid goal.

- No drinking with meals or for 30 minutes after.

- Start drinking upon awakening, and sip slowly yet consistently for the rest of the day. This will be a full-time job, so keep liquids with you at all times.

- Dehydration can occur if you don’t meet your fluid needs. Here are some signs: dry mouth, thick saliva, chapped lips, headache, low urine output (less than 5x a day), and dark urine.
## Supplements

### Supplements Recommendations*

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Multivitamin</th>
<th>Iron</th>
<th>Calcium</th>
<th>B12</th>
<th>Vitamin A</th>
<th>Vitamin D</th>
<th>Vitamin E</th>
<th>Vitamin K</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gastric Sleeve</strong></td>
<td>Bariatric formulated vitamin as directed</td>
<td>Iron in multivitamin typically sufficient (menstruating women may need additional)</td>
<td>1500mg daily**</td>
<td>350-500mcg daily (B12 in multivitamin may be sufficient)</td>
<td>Multivitamin is sufficient</td>
<td>3000U daily***</td>
<td>Multivitamin is sufficient</td>
<td>Multivitamin is sufficient</td>
</tr>
<tr>
<td><strong>Gastric Bypass</strong></td>
<td>Bariatric formulated vitamin as directed</td>
<td>Iron in multivitamin typically sufficient (menstruating women may need additional)</td>
<td>1500mg daily**</td>
<td>350-500mcg daily (B12 in multivitamin may be sufficient)</td>
<td>Multivitamin is sufficient</td>
<td>3000U daily***</td>
<td>Multivitamin is sufficient</td>
<td>Multivitamin is sufficient</td>
</tr>
<tr>
<td><strong>Duodenal Switch</strong></td>
<td>Bariatric formulated vitamin as directed with additional A, D, E, K</td>
<td>45-60mg elemental daily (menstruating women may need additional)</td>
<td>1800-2200mg daily**</td>
<td>500-1000mcg daily</td>
<td>10,000U daily</td>
<td>3000U daily***</td>
<td>150IU daily</td>
<td>300mcg daily</td>
</tr>
</tbody>
</table>

*Additional supplements may be required if lab values are low

** For men or anyone prone to kidney stones, take 750mg chewable calcium citrate with vitamin D daily

***3000U daily vitamin D -> total amount from vitamin D supplements, multivitamin, and calcium supplements.

---

### Supplements - Continued

**Importance of Vitamin and Mineral Supplements Post-Op:**

- You need supplements EVERY DAY to prevent serious deficiencies. This is going to be a lifetime requirement.
- Beginning ~1 week post-operation (or after first visit with your surgeon), you will begin taking a daily multivitamin. It is strongly advised to begin with a chewable, soft chew, or powder bariatric-formulated multivitamin. Do not take children's multivitamins, gummy vitamins, prenatal vitamins, vitamin patches, or general brands (One-A-Day or Centrum). These do not have sufficient vitamin/mineral levels.
- Take 1500mg of chewable calcium citrate with vitamin D daily. Calcium citrate is absorbed better than calcium carbonate, so read your labels. For men or anyone prone to kidney stones, take 750mg chewable calcium citrate with vitamin D daily. If you are taking a bariatric-formulated multivitamin with iron, you will need to take it two hours apart from calcium citrate supplements due to competition for absorption in the body. In addition, dosages of calcium citrate should be separated into 500-600mg at a time. See below for example supplement schedule:

<table>
<thead>
<tr>
<th>Time</th>
<th>Supplement 1</th>
<th>Supplement 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>8am</td>
<td>Calcium citrate - 500mg chew</td>
<td>Bariatric multivitamin w/iron</td>
</tr>
<tr>
<td>10am</td>
<td>Calcium citrate - 500mg chew</td>
<td>Bariatric multivitamin w/iron</td>
</tr>
<tr>
<td>12pm</td>
<td>Calcium citrate - 500mg chew</td>
<td>Bariatric multivitamin w/iron</td>
</tr>
<tr>
<td>2pm</td>
<td>Calcium citrate - 500mg chew</td>
<td>Bariatric multivitamin w/iron</td>
</tr>
<tr>
<td>4pm</td>
<td>Calcium citrate - 500mg chew</td>
<td>Bariatric multivitamin w/iron</td>
</tr>
</tbody>
</table>

*Additional supplements may be required if lab values are low

**This is only a sample schedule. Your schedule and dosage may be different based on what YOU purchase!

**Supplement Tips:**

- Bariatric-formulated multivitamin must be chewable, soft chew, or powder for 1 month after surgery. Can switch to capsules after 1 month
- Will need additional iron supplement and vitamin B12 if multivitamin does not contain it
- Brand recommendations: Bariatric Advantage, BariMelts, BariActiv, Opurity, Bariatric Fusion, ProCare Health Bariatric, etc.
  - Bariatric Advantage Advanced Multi EA meets the supplementation recommendations for DS patients – this supplement is sold in the office
- **Duodenal Switch Special Note:** DS patients require lifelong supplementation of fat-soluble vitamins A, D, E, K. Inadequate supplementation of these fat soluble vitamins can result in severe medical complications. Review the list below for signs and symptoms of deficiency. If you experience these symptoms or suspect fat soluble vitamin deficiency, please contact your surgeon. Additional supplementation may be required to correct lab values.

**Bariatric specific formulas and websites:**

- Bariatric Advantage - www.bariatricadvantage.com
- BariMelts - www.barimelts.com
- Celebrate - www.celbratevitamins.com
- Fusion - www.bariatricfusion.com
- ProCare Health - www.procarenow.com
## Fat Soluble Vitamin Deficiencies

<table>
<thead>
<tr>
<th>Vitamin</th>
<th>Symptoms and Health Risks</th>
</tr>
</thead>
</table>
| Vitamin A | • Impaired night vision (night blindness)  
• Xerophthalmia - dry, thickened conjunctiva and cornea  
• Keratinized growths on the conjunctiva causing hazy growths  
• “Goose flesh” or “toad skin” - dry, scaly, rough skin  
• Impaired mucous membrane integrity causing increased risk of bacterial, viral, or parasitic infection  
• Prolonged vitamin A deficiency can cause blindness                                                                 |
| Vitamin D | • May not notice any physical symptoms initially  
• Cognitive impairment or difficulty thinking clearly  
• Unexplained fatigue  
• Osteomalacia - muscular weakness and bone tenderness with an increased risk of fractures, particularly in the wrist or pelvis |
| Vitamin E | • May not notice any physical symptoms initially  
• Muscle weakness  
• Loss of muscle mass  
• Abnormal eye movement or vision problems  
• Changes in balance and coordination                                                                 |
| Vitamin K | • Blood clotting delay (uncontrolled bleeding)  
• Hemorrhaging in severe cases can cause fatal anemia                                                                 |

## 10 Steps to Long Term Success

1. At first, your stomach will only be allowed to hold 4-6 ounces (roughly ½ cup at a time). You will feel satisfied only after a few bites - do not overdo it.
2. Eat three small meals a day. **DO NOT GRAZE BETWEEN MEALS.**
3. Eat slowly (20-30 minutes per meal) and chew thoroughly (15-20 times a bite).
4. Stop eating as soon as you feel comfortably satisfied.
5. **Do not drink while eating.** Wait 30 minutes after eating to drink again.
6. Eat only good QUALITY food (with emphasis on protein first). Solid food is more important than liquid food. As your diet progresses from liquids to solids, try to get most of your protein from food sources.
7. **Drink at least 64 oz of water a day to prevent dehydration.** Signs of dehydration include: headache, dizziness, nausea, fatigue, whitish coating on tongue, infrequent urination and dark urine.
8. Drink only low-calorie or zero-calorie beverages. **No carbonation.**
9. **Physical activity for 30 minutes at least 5 times a week.** For the first 4 weeks walking should be the main type of activity. Include strength training and more strenuous physical activity after 4 weeks.
10. **You need vitamin supplements FOREVER to prevent vitamin or mineral deficiencies.**
Physical Activity Tips and Goals

Physical Activity Key to Success
Physical activity is an important part of living a healthy lifestyle. New patients should begin activity before surgery and continue a physical activity regime following their procedure. Be sure to start slowly, increasing time and intensity as you become accustomed to physical activity.

The goal of our patients is to build up the amount of time you spend doing aerobic physical activity. Aerobic activity is brisk, physical activity that requires the heart and lungs to work harder to meet the body’s increased demand of oxygen. This type of activity promotes the circulation of oxygen through the blood. Patients are also encouraged to perform resistance training, also known as strength training, which increases the strength and mass of muscles, bone strength and metabolism.

A combined program of aerobic training and resistance training induces a significant increase in muscular strength and aerobic power, a decrease in body fat and an increase in basal metabolic rate.

Physical Activity Tips and Goals

• Physical activity burns calories and preserves lean body mass (muscles).
• In the hours immediately following surgery, you will be encouraged to walk in the hospital. Walking and low impact physical activity should be continued for the first month.
• Once cleared by your doctor (typically one month after surgery), your 20lb weight restriction will be lifted. Work to increase the intensity, duration, and frequency of your workouts.
• Goals: 30 minutes of moderate-intensity (“aerobic”) activity at least 5 days a week. Include two days of “strength-training” activities, like free weights, machines, and resistance bands.
• Use your free 6-month member to Fort Sanders West Health and Fitness Center. You will become a member of the N.E.W. U Program, where you get group sessions, wellness coaching, personal trainer, and much more!

Four Steps to a Physically Active Lifestyle

To help you get started on your new physical activity program, try the following four steps to measure your progress.

Step 1: Set Personal Goals
• Set S.M.A.R.T. goals (Specific, Measurable, Attainable, Relevant, and Timely)
  Example: “I will increase my physical activity for energy by walking Monday, Wednesday, and Friday for 15 minutes. I will start today and have this goal accomplished by the end of the month.”
  Tip: Write your goals down so you can refer back to them for encouragement.

Step 2: Determine How to Achieve Your Personal Goals
• Choose activities that fit your lifestyle.
• Incorporate cardiovascular, strength and flexibility activities into your plan. Examples:
  - Cardiovascular - walking, biking, treadmill, water activity
  - Strength Training - weight machines, free weights, resistance bands
  - Flexibility - stretching after physical activity
• Schedule time for your physical activity
• Choose a location for physical activity: home, work, park, gym, mall, church, etc.

Step 3: Implement Your Plan
• Make a commitment and start today.
• Get started slowly and pace yourself.
• Stay consistent.
• Fit physical activity into your daily routine.

Step 4: Regularly Evaluate Your Plan
• Discuss your program with the exercise physiologist or doctor.
• Monitor your progress.
• Recognize achievement of your goals.
Weight Loss Facts

- More than **93 million Americans** are affected by the **disease of obesity**.
- According to CDC, 56.3% of women and 42.2% of men in 2015-2016 were trying to lose weight.
  - Most diets do result in *initial* weight loss, but long term maintenance is very hard.
- **Bariatric surgery has been shown to be the most effective and durable treatment for morbid obesity.**
  - Surgery is only the first step in treating obesity...

What is the Solution?

- **Long-term behavior change!**
  - Healthy eating patterns
  - Regular movement
  - Positive attitude
- Are you **ready to change** your habits?
  - To succeed, you must commit to a healthy lifestyle for a lifetime.
- Changes pre-op make post-op changes easier
  - The sooner you start, the more prepared you will be for the surgery, recovery, and for the rest of your life.
- **Don’t wait until last minute!**

**Calories**

*Energy $\$$*

- **A calorie is a unit of energy**, just like dollars measure how much money we have.
- Excess calories are saved in our fat account, like how we save dollars in a savings account.
- To balance our checkbook, we need to pay attention to:
  - How much we get paid = how many calories consume = **food choices & portions**
  - How much things cost = how many calories we burn = **physical activity**
How to Lose Weight

- **Weight Gain** = Consume more calories than burned
- **Weight Loss** = Burn more calories than consumed

- **1 Pound of Fat = 3500 Calories**
  - To lose 1lb of fat in 1 week: 500 calorie deficit per day

**Physical Activity**

- 30 minutes of aerobic activity at least 5 days per week
- 2 or more days of “strength-training” activities (weights, resistance bands, machines, calisthenics)
- Stretching and balance exercises

- **Benefits**: boosts your metabolism/burns calories, builds/maintains muscle, combats diseases, improves mood, reduces stress, improves sleep, and increases energy levels
- Mild exercise (20 min/day 3-4 times/week) may help reduce surgical complications, facilitate healing, and enhance post-operative recovery.

**Physical Activity Ideas and Tips**

- Start by adding 2-5 minutes to whatever you do
- Walking around house, neighborhood, on a trail, mall, etc.
- Take the stairs instead of the elevator
- At stores: park farther & don’t use a motorized cart (if able)
- Non-weight bearing = stationary/recumbent bike, Pilates, chair aerobics, swimming, and water aerobics
- Household chores like cleaning, vacuuming, mowing the grass, walking the dog, gardening, washing the car, etc.
- Try fun activities: dancing/Zumba, Just Dance, Wii Sports, mini golf, bowling, ice skating, fun walks/runs, sports, etc.
- Use what you have for "weights": water jugs, canned goods, jars, bottles, potato sack, plastic bag full of dried beans, etc.
- Limit sedentary activities such as television or computer time
  - Or combine sedentary activities with exercise
  - Find something you enjoy doing & don’t make excuses

**Physical Activity**

- Pedometers and Fitness Trackers
  - Fitbit, Garmin, Omron, smart watches, etc.
  - Can track exercise, track heart rate, and vibrate when inactive!
- Mobile Apps: RunKeeper, FitStar, EndoMondo, SworkIt, Freeletics, Nike Training Club, Couch to 5K

**Change** how you talk about it!

- Exercise is not a chore
- “Only If” → “Even If”
Physical Activity Questions?

What is Nutrition?

- Nutrition is how the food we eat affects our body.
- By following a healthy eating pattern, your body will get the nutrients it needs for proper health.
- Remember these three things:
  - Moderation – all foods can fit
  - Balance – choose high nutritional value
  - Variety – choose all food group

6 Major Classes of Nutrients

**Macronutrients vs. Micronutrients**

**Macronutrients**
- Carbohydrates, Protein, and Fat
- Essential in large amounts
- Provide calories for energy
- Needed for growth, metabolism, and other bodily functions

**Micronutrients**
- Vitamins and Minerals
- Essential in small amounts
- Help the body to produce enzymes, hormones, and other substances for growth and development
Carbohydrates

- The sugars, starches, and fibers found in fruits, grains, vegetables, legumes, and milk products
- Breaks down into glucose, which is blood sugar!

Carbohydrate Functions:
- **Primary source of quick energy** for the entire body
- Optimal brain function, influencing mood and memory
- Fuel for central nervous system
- Energy for muscles
- Prevents protein from being used as energy

Healthy Carbohydrates

- **Whole Fruit**
- **Whole Starchy Vegetables** (white and sweet potatoes, corn, peas, winter squash, butternut squash)
- **Whole Grains** (brown rice, oats, and quinoa) and foods made from whole grains (like whole-wheat breads, cereals, crackers, and pasta)
- Legumes (beans and lentils)
- Low-fat/non-fat milk and light yogurt

Refined or Simple Carbs → Healthy Bariatric Alternatives

- Sugar, syrup, honey, agave → Sugar-substitute (sugar-free)
- Candy, cakes, cookies, and juice → Whole fruit with skins
- Sugar-sweetened beverages → Water or sugar-free drinks
- White flour, bread, rice, and pasta → Whole-wheat or vegetables
- Processed sugary cereals → Whole grain/fiber cereal or oatmeal
- Potato chips → Air-popped light popcorn or raw vegetables

How much carb do we need?

- **RDA**: 135 grams per day (4 calories/gram)
- 45-65% of daily calories

- **Added Sugar**: Limit as much as possible
  - Watch the drinks, desserts, yogurts, and cereal/granola
  - <10g added sugar per serving

- **Fiber**: Increase slowly with plenty of fluid
  - 2.5g per serving is good source
  - 50 and Under: 25-38g fiber a day
  - Over 50: 21-30g fiber a day
Lean Protein Portions

<table>
<thead>
<tr>
<th>Food Name</th>
<th>Portion</th>
<th>Calories</th>
<th>Protein (grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken – boneless skinless breast</td>
<td>3 oz.</td>
<td>138</td>
<td>26</td>
</tr>
<tr>
<td>Steak – sirloin trimmed</td>
<td>3 oz.</td>
<td>166</td>
<td>26</td>
</tr>
<tr>
<td>Tuna – canned water packed</td>
<td>3 oz.</td>
<td>111</td>
<td>25</td>
</tr>
<tr>
<td>Chicken – skinless leg</td>
<td>3 oz.</td>
<td>162</td>
<td>21</td>
</tr>
<tr>
<td>Turkey – white meat</td>
<td>3 oz.</td>
<td>105</td>
<td>21</td>
</tr>
<tr>
<td>Beef – top loin</td>
<td>3 oz.</td>
<td>176</td>
<td>21</td>
</tr>
<tr>
<td>Hamburger – 90% lean</td>
<td>3 oz.</td>
<td>169</td>
<td>21</td>
</tr>
<tr>
<td>Ham – lean 5% fat</td>
<td>3 oz.</td>
<td>133</td>
<td>21</td>
</tr>
<tr>
<td>Pork tenderloin</td>
<td>3 oz.</td>
<td>139</td>
<td>21</td>
</tr>
<tr>
<td>Pork loin chop</td>
<td>3 oz.</td>
<td>172</td>
<td>21</td>
</tr>
<tr>
<td>Cod – white baked</td>
<td>3 oz.</td>
<td>89</td>
<td>21</td>
</tr>
<tr>
<td>Flounder</td>
<td>3 oz.</td>
<td>62</td>
<td>21</td>
</tr>
<tr>
<td>Halibut</td>
<td>3 oz.</td>
<td>119</td>
<td>21</td>
</tr>
<tr>
<td>Salmon – baked</td>
<td>3 oz.</td>
<td>155</td>
<td>21</td>
</tr>
</tbody>
</table>

Lean Protein

- Lean beef and steak
- 90/10 or above ground beef
- Pork tenderloin, pork chops, Canadian bacon
- Fish and seafood (white fish, tuna, salmon, crab)
- Boneless, skinless poultry (chicken, turkey)
- Whole, ground, deli meat slices
- Low-fat dairy
  - Skim or 1% milk, reduced-fat cheeses, light yogurt
- Eggs and egg whites
- Soy products
- Tofu, edamame, tempeh
- Legumes, beans, lentils

Protein

- Protein is made of amino acids and:
  - Builds and repairs body tissues
  - Muscles, organs, skin, hair, blood, hormones
  - Boosts immunity
  - Balances fluid in the body
- Our body cannot make protein, therefore it must come from what we eat.
- Eat a protein source with every meal
- How much do we need?
  - Around **60-80 grams a day** to prevent muscle loss
  - Good protein sources contain at least 7 grams of protein per every 100 calories

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- Builds and repairs body tissues
- Muscles, organs, skin, hair, blood, hormones
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- Our body cannot make protein, therefore it must come from what we eat.
- Eat a protein source with every meal
- How much do we need?
  - Around **60-80 grams a day** to prevent muscle loss
  - Good protein sources contain at least 7 grams of protein per every 100 calories
Protein Tips

- Trim off any visible fat or skin
- Watch how you prepare the protein
  - Use less oil/butter when possible
  - Healthy cooking methods: Broil, bake, braise, roast, and grill
- Protein shake guidelines: (per serving)
  - < 200 calories
  - < 5g total fat
  - < 10g total carbohydrate
  - < 3g sugar
  - 20-30g protein
- To stay fuller longer, solid protein is better than liquid protein.

Fat

- Fat is made of fatty acids, which are required for:
  - Absorption of Vitamins A, D, E, K
  - Synthesis of several vital hormones
  - Stored energy
  - Protection for internal organs
  - Body temperature regulation/insulation
- How much do we need?
  - Less than 30% of our calories should come from fat.
  - Before surgery, that is between 50-70 grams a day.
  - Servings are small because the calories are concentrated → 9 calories per gram

Types of Fat

- Unsaturated Fats (INCLUDE)
  - Olive oil, canola oil, avocado, nuts/nut butters, seeds, salmon, soft/tub margarine, cooking spray, etc.
  - Healthy fat sources but must still watch portions
- Saturated Fats (LIMIT)
  - Fatty meats (bacon/sausage), full fat dairy (whole milk, cream, cheese, butter, ice cream), coconut oil, Crisco, etc.
  - Choose lean/low-fat options
- Trans Fat (ELIMINATE)
  - "Partially hydrogenated oils"
  - Shortening, fried foods, biscuits, pastries, crackers, stick/hard margarine, etc.
  - Increase risk of heart disease and stroke

Reduce the Fat

Make Substitutions

- Regular sour cream → Fat-free sour cream or plain Greek yogurt
- Creamy salad dressing (ranch) → Light dressing or vinaigrette
- Creamy sauce (alfredo or cheese) or soup (cheese or cream) → Broth-based soup, tomato-based sauce (marinara)
- Regular mayo → Light/olive-oil mayo
- Cream cheese → Fat-free cream cheese
- 2% or whole milk → Skim or 1% milk
- 80/20 ground meat → Extra-lean meat (90/10 or above)
- Bacon or sausage → Turkey bacon, chicken sausage, vegetarian meats
- Oil/butter to cook with or coat pans → Nonfat cooking spray or nonstick pans

Cut the Extras

- Cream cheese on bagels
- Butter on toast
- Mayonnaise and cheese on burgers or sandwiches
- Dressing and croutons on salads
- Sour cream and butter on potatoes
- Milk and creamer in coffee
- Meat-based dishes
  - Try seafood or beans
Pre-Op Healthy Portion Sizes

<table>
<thead>
<tr>
<th>Grains</th>
<th>Vegetables</th>
<th>Fruits</th>
<th>Protein</th>
<th>Dairy</th>
<th>Fats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/3 cup brown rice</td>
<td>1 cup raw carrots</td>
<td>1 medium apple or orange</td>
<td>3 oz. chicken</td>
<td>1 cup skim milk</td>
<td>¼ avocado</td>
</tr>
<tr>
<td>1-2 slices of whole wheat bread</td>
<td>½ cup cooked broccoli</td>
<td>2 plums</td>
<td>1 packet tuna fish</td>
<td>1 cup light yogurt</td>
<td>2 tbsp. light cream cheese</td>
</tr>
<tr>
<td>1 pancake (4 inch ¼ inch thick)</td>
<td>1 cup raw spinach salad</td>
<td>1 cup berries</td>
<td>½ cup beans</td>
<td>1 cup plain non-fat yogurt</td>
<td>2 tbsp. salad dressing</td>
</tr>
<tr>
<td>½ cup cereal</td>
<td>½ cup cooked green beans</td>
<td>½ medium banana</td>
<td>3 oz. lean meat loaf</td>
<td>1 cup soy milk</td>
<td>1 tsp. margarine</td>
</tr>
<tr>
<td>1/3 cup pasta</td>
<td>1 cup cucumber</td>
<td>1 small slice watermelon</td>
<td>2 eggs</td>
<td>1 oz. reduced fat cheese</td>
<td>1 tbsp. olive oil</td>
</tr>
</tbody>
</table>

Pre-Surgery Plate

- Non-Starchy Vegetables: broccoli, carrots, green beans, asparagus, greens, cauliflower, radish, cabbage, cucumber
- Starches/Grains: whole grains, baked potato, sweet potato, corn, green peas
- Lower Sugar Fruits: berries, lemon, lime, grapefruit, apples, apricot

Meals and Snacking

- **Aim for 3 evenly-sized meals about every 4 hours throughout the day**
  - Do NOT skip meals because you won’t lose weight
  - Eat breakfast within an hour of waking
  - Include protein at every meal
- **Snack only if planned or if physically hungry. Keep it under 200 calories and include protein:**
  - ¼ cup nuts with 1 small, fresh fruit
  - 6 oz. light Greek yogurt
  - 1 oz. low fat or non-fat cheese with 5 whole grain crackers
  - ½ cup low fat cottage cheese with sugar-free peaches
  - 2 tbsp. hummus with non-starchy vegetables
  - 1 small apple with 1 tbsp. peanut butter
- **Avoid “grazing” throughout the day!**
  - Plan/prep your eating!

Water… FLUID!

- **Bodily Functions:**
  - Carries nutrients to cells and carries waste from your body
  - Regulates body temperature
  - Lubricates joints
  - Helps with weight loss
- **General goal is 64 fluid ounces (8 cups) of sugar-free & caffeine-free fluids**
- **Tips to Increase Intake:**
  - Flavor it
  - Keep it with you at all times
  - Drink water in place of sugary beverages
How to Read a Nutrition Facts Label

If it has a label, read it!

Start with Serving Size

Limit products with more saturated fat and added sugar

Choose products with more fiber and protein

Dining Out Tips

1. Plan ahead and compare nutrition
2. Don’t be afraid to ask questions about substitutions
3. Choose water or unsweet tea
4. Skip cheese and mayo on sandwiches
5. Add non-starchy veggies to meal or as side items
   • Avoid the fries → swap for side salad
6. Choose “grilled, baked, or steamed” instead of “fried, creamy, and buttery”
7. Portion out what you want in a to-go box before start of meal
8. Split an entrée

Basic Lifelong Nutrition/Physical Activity - Continued

Bariatric Fluid Tips

- Watch out for too much caffeine and alcohol
  - Limit to 1 serving
  - Replace with more fluid
- No carbonated beverages
- No drinking with meals or for 30 minutes after

Vitamins and Minerals

- Contribute to your health in hundreds of ways:
  - Strong bones
  - Wound healing
  - Boost immune system
  - Regulation of the metabolism
  - Helping with the release of energy from the food you digest
- You will require supplementation after surgery for LIFE!
  - Can take a general multivitamin before surgery. May be required if deficient.

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Emotional Eating

Are You an Emotional Eater?

• Do you eat more when you’re feeling stressed?
• Do you eat when you’re not hungry or when you’re already full?
• Do you eat to feel better (to calm and soothe yourself when you’re sad, mad, bored, anxious, etc.)?
• Do you reward yourself with food?
• Do you regularly eat until you’ve stuffed yourself?
• Does food make you feel safe? Do you feel like food is a friend?
• Do you feel powerless or out of control around food?

Beat Emotional Eating Cues

1. Be Aware: identify the feelings that make you want to eat when you don’t really need to
2. Redirect: find methods that will help you control and send those impulses away from food

• Change the way you respond to stress/emotion
• Focus on internal cues, not external!
• Make your stomach the boss

Emotional Eating

• Emotional eating: eating as a way to suppress or soothe negative emotions, such as stress, anger, fear, boredom, sadness, and loneliness
• Eating to satisfy emotional needs, rather than to satisfy physical hunger
• Disrupts your weight loss efforts
• It is ok to have emotions. Sit quietly for a moment and acknowledge them.
• You don’t need food to acknowledge those emotions

Small Steps to Better Health

• Healthy, balanced eating
• Regular, consistent movement
• Aim for 7-9 hours of sleep
  • Decreases unhealthy cravings, increases metabolism, and decreases hunger hormones
• Learn to manage stress
  • Cortisol triggers cravings & fat storage
  • No stress eating or tobacco/nicotine!
• Have discipline...
  • Choose between what you want now and what you want most

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Emotional Eating

Physical vs. Emotional Hunger

- Emotional hunger can be powerful and can lead to mindless eating. It’s easy to mistake it for physical hunger.
- Here are clues you can look for to help you tell physical and emotional hunger apart:

<table>
<thead>
<tr>
<th>Physical hunger</th>
<th>Emotional hunger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strikes below neck (i.e. stomach growling)</td>
<td>Above the neck (i.e. “taste” for ice cream)</td>
</tr>
<tr>
<td>Occurs several hours after meal</td>
<td>Unrelated to time</td>
</tr>
<tr>
<td>Goes away when full</td>
<td>Persists despite fullness</td>
</tr>
<tr>
<td>Eating leads to feeling of satisfaction</td>
<td>Eating leads to guilt and shame</td>
</tr>
</tbody>
</table>

Emotional Eating

The Hunger Scale

- Rate yourself on a scale of 1-10 before and after eating
  - GOAL before a meal = 3 or 4
  - GOAL after a meal = 5 or 6
- You need to re-learn hunger/satiation cues through slow and mindful eating

Emotional Eating

Journal Your Food

- Self-monitoring allows you to observe and monitor eating behaviors and habits!
- Write down what you eat/drink: 1c. this, ¼c. that, 1 tbsp. this, 1 bottle that, etc.
- Write what your mood was when you ate: happy, bored, sad, etc.
- Write who you ate with & where: your car, at the table, alone, with friends, etc.
- Try a smartphone app:
  - Baritastic (37916), MyFitnessPal, LoseIt

Emotional Eating

State Your Intentions

- When you’re about to emotionally eat, admit what you’re doing by saying out loud, “I’m not physically hungry...”
  - Simply taking time to think about what you’re about to do may be enough to stop you.
- Ask yourself these questions:
  - Am I physically hungry, or am I eating because I like the taste? Am I physically hungry, or am I eating because it’s in front of me?
  - Why do I want this food?
  - Does it really address my problem/emotion?
**Emotional Eating**

**Find Alternatives**

- **If you’re sad or lonely:** call someone who always makes you feel better, play with your dog or cat, or look at a favorite photo or cherished memento.
- **If you’re anxious or upset:** expend your nervous energy by dancing to your favorite song, squeezing a stress ball, taking a brisk walk, or taking some deep breaths.
- **If you’re exhausted:** treat yourself with a hot cup of tea, take a bath, light some scented candles, or wrap yourself in a warm blanket.
- **If you’re bored:** read a good book, explore the outdoors, go for a walk, or turn to an activity you enjoy (playing the guitar, shooting hoops, scrapbooking, adult coloring book, working on cars, etc.).

**Mindless Eating**

When you eat on the couch, at your desk, in the car, or standing at the sink, your brain doesn’t always register that fact that you had a meal → feelings of deprivation and overeating later on.

**Strategy: Eat Only At The Table & Portion**

- Even when you're just having a snack, take the time to put it on a plate and eat it at the table.
- Serve yourself one serving of the amount listed on the food label, and only eat on a plate or bowl instead of right out of the package.

**Forgotten Food**

- We eat the **volume** we want, not the calories.
  - Portion your food instead of eyeballing it.
- Study on chicken wings: participants who left the bones on their plate ate less wings (**negative feedback**)
  - See it while you eat it and after so you remember.
- Parisians stop eating when no longer hungry, not when plate or glass is empty.
  - Not a waste because it’s not on your waist.

**Surveying the Table-Scape**

**Portion Distortion**

- We consume more from bigger packages and bigger servings (whatever the product!)
  - Big plates lead to big meals.

**Strategy: Be Your Own Table-Scaper**

- Use mid-size or small plates/bowls, rather than large.
- Choose smaller silverware.
Re-Scripting Meals at Home

Distracted diners = eat faster, consume more calories, can’t remember what was eaten, eat up to 2x as much at next meal, etc.

Strategy: Eat Distraction-Free
- Minimize distractions: no cell phones or TV during meals → turn them off
- When you eat, just eat
- Focus on when you feel satisfied
- Eat in dining room at the table

In the Mood for Comfort Food

Strategy: Make Comfort Foods Comforting
- Don’t keep hard-to-resist foods at home
- Don’t deprive yourself
- Be creative and make healthy alternatives
  - Eat satisfying amounts of healthier foods, enjoy an occasional treat, and get variety to help curb cravings
- You don’t cure emotional eating by removing comfort foods. You do it by learning how to comfort yourself!

Hidden Persuaders Around Us

- When foods are sitting out, people tend to "graze" and eat them more frequently.

Strategy: Shift Your Surroundings
- Put tempting foods in the back of the cabinet or in a basement (inconvenient)
- Make healthy food and drinks easier to see and less healthy foods harder to see.
  - Bowl of fruit visibly on the counter
  - Vegetables in the freezer instead of ice cream
  - Bottles of water in the fridge instead of soda

Re-Script Your Meals at Home

Strategy: Slow Down Your Eating
- Take 20-30 minutes for the meal
  - Set a timer!
- Chew food thoroughly
  - 20-25 times!
- Put fork down between bites
  - No more shoveling!
- Pace yourself with the slowest eater
- Eat with non-dominant hand or use chopsticks
- Concentrate on the flavor and texture
**What is Mindful Eating?**

- Mindful eating develops your *awareness* of eating habits and allows you to *pause* between your triggers and your actions.
- Be fully *attentive* to your food and feelings.
  - May slow you down and make meals more enjoyable.
- **By practicing mindful eating, you can change emotional eating habits and regain control over food and feelings.**

---

**Mindlessly Eating Better**

1. Before eating, pause and focus on the present moment for a while.
2. Think about how you are feeling.
3. Remove distractions while eating.
5. Pay attention to what you put in your mouth. Ask yourself, “Do I need to keep eating?” and “Am I satisfied?”

---

**Mindlessly Eating Better**

- You can beat the hold of emotional and mindless eating.
- **Be Mindful** of what, where, when, how, and why you eat.
- It is an every day lifestyle change. If you do not do well at one meal/day, get right back up.
- Eating and living healthy is **NOT** a diet or quick change. It is a complete *lifestyle* change, and YOU CAN DO IT!

---

**How To Get Started:**

- **Set realistic short-term goals**
  - Lots of small changes → big one
  - Plan, plan, plan... How are you going to make that goal happen?
- Get back on track if you slip
  - Weight loss is like driving...
  - **No more “food funerals,” “last suppers,” or “restaurant bucket lists”**
- Start healthy habits **now**!
  - Can take **21 days** to break and make a habit
  - Get support → “teammates” and “fans”
  - Push yourself because you CAN do this
MEDICATIONS AFTER BARIATRIC SURGERY

Fort Sanders Regional Medical Center
Dana’s Office Phone: 865-331-1218

DIFFERENCES IN DRUG FORMULATION

- Immediate release
  - Dissolves and gets absorbed right away in the stomach
- Extended release (“XR”, “ER”, “SR”, “DR”, “CR”)
  - Delivers medication over an extended period of time
  - Can require different parts of the stomach and small intestine to deliver the appropriate amount of medication
  - Gastric Bypass and Duodenal Switch surgeries change your stomach into a small pouch and shorten your intestine
  - Extended release medications are not absorbed properly with these surgery types

DECISION-tree for drug formulation

- Immediate release
- Extended release
- Gastrointestinal surgery
- Drug absorption

Basic Lifelong Nutrition/Physical Activity - Continued

Pre-Weight Loss Surgery Behavior Change Goals

- Eliminate carbonated drinks
- Eliminate caffeine
- Eliminate alcohol
- Eliminate simple/added sugars
- Assess your hunger level before eating
- Take small bites
- Chew food 20 times per bite
- Put your fork down between bites
- Stop eating when no longer hungry
- Practice portion control
- Don’t drink with meals
- Eat 3 meals per day, including breakfast
- Eat protein with each meal
- Drink 64 ounces of no-calorie fluids daily
- Limit fried foods and high-fat condiments
- Begin regular physical activity
- Record food and beverage intake and physical activity
- Read food labels
- Identify sources of support

Conclusion

EVERY JOURNEY BEGINS WITH A SINGLE STEP.
BUT YOU’LL NEVER FINISH IF YOU DON’T START.
Not all medications may be cut or opened

- Sleeve patients can use intact extended release medications
- Most extended release formulations must remain intact
  - Mechanism to gradually release the medication
  - Tampering with the tablet damages the mechanism
  - End up with an overdose because too much is released in your system at once
  - Note: Some delayed release (DR) capsules may be opened and sprinkled (DO NOT CHEW)

If unable to tolerate large medications

- Large tablets may be cut... DO NOT CRUSH!
- Capsules may be open and sprinkled
- Gel caps may be punctured and squeezed
- Liquid forms are an option for some medications
  - Many contain sugar = CALORIES
  - Choose sugar-free or diabetic versions
- Talk to the pharmacist before adjusting any medicines
- Tell all healthcare providers!
  - Doctors, nurse practitioners, pharmacists, dentists, optometrists, etc.

DRUGS TO AVOID FOR LIFE

Avoid NSAIDS (Non-steroidal anti-inflammatory drugs)

- Advil, Motrin, Aleve, Naproxen, Ibuprofen, Aspirin*, BC/Goody's Powder, Excedrin, Certain Cold Products, Diclofenac, Celecoxib/Celebrex*, Meloxicam/Mobic

Tylenol (Acetaminophen) is your pain reliever of choice now!

*Exceptions:
- 81mg coated aspirin
- Celebrex provided short-term in the hospital

Cold and flu medicines

- Avoid over-the-counter (OTC) medicines that contain NSAIDS
- Choose medicines that are sugar-free
- To treat nasal congestion: phenylephrine (Sudafed PE) or pseudoephedrine (Sudafed) and oxymetazoline (Afrin) nasal spray. Consider saline spray if you have high blood pressure concerns.
- To treat cough: dextromethorphan (Delsym). If you have a thick productive cough, consider a guaifenesin combination product (Mucinex DM) with plenty of water.
- To treat sore throat: sugar-free lozenges (Halls, Cepacol) or throat spray (Chloraseptic)
- To treat fever/aches and pains: acetaminophen (Tylenol)
- Combination products examples: DayQuil Cold & Flu, Theraflu Severe Cold, and Tylenol Cold + Flu
**Medications After Bariatric Surgery - Continued**

**HOW LONG TO HOLD MEDICATIONS BEFORE SURGERY**

<table>
<thead>
<tr>
<th>Medication</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSAIDs (Motrin, Aleve, Advil, etc.)</td>
<td>1 week</td>
</tr>
<tr>
<td>Coumadin® (Warfarin)</td>
<td>1 week</td>
</tr>
<tr>
<td>Pradaxa® (Dabigatran)</td>
<td>1-5 days (based on renal function)</td>
</tr>
<tr>
<td>Xarelto® (Rivaroxaban)</td>
<td>1 day</td>
</tr>
<tr>
<td>Eliquis® (Apixaban)</td>
<td>2 days</td>
</tr>
<tr>
<td>Plavix® (Clopidogrel)</td>
<td>5 days</td>
</tr>
<tr>
<td>Effient® (Prasugrel)</td>
<td>5 days</td>
</tr>
<tr>
<td>Brilinta® (Ticagrelor)</td>
<td>1 week</td>
</tr>
<tr>
<td>Metformin® (Glucophage)</td>
<td>2 days</td>
</tr>
<tr>
<td>Oral estrogen containing contraceptives and hormone replacements</td>
<td>1 week</td>
</tr>
</tbody>
</table>

Speaking of contraceptives… Use a non-oral BC (IUD) and a barrier back-up method (condoms) for 18-24 months after surgery.

**CHANGE IN DOSAGES OF MEDICATIONS**

- High cholesterol, high blood pressure, diabetes
  - May need a reduction in doses or even may be discontinued after surgery – ONLY BY A MEDICAL PROFESSIONAL
  - Make appointment around 2 weeks after surgery
  - Continue to monitor blood sugar, blood pressure, etc.
- Managing low blood sugar (less than 70) – “Rule of 15”
  - Consume 15g of carb: 3-4 glucose tablets, 1 tube of glucose gel, 1 tablespoon of honey or syrup, 4 ounces (1/2 cup) of juice
  - Wait 15 minutes and recheck. Repeat if still below 70.
  - Once your blood sugar is above 70, be sure to eat a meal or snack within an hour to keep from dropping again.

**MEDICAL ID BRACELET**

- Name
- Surgery Type:
  - Sleeve Gastrectomy
  - Roux-en-Y Gastric Bypass
  - Duodenal Switch
- No Oral NSAIDs
- No Blind NGT

**MEDICATION QUESTIONS??**
**DIETARY PHASE PROGRESSION**

Rachel Ignomirello, MS, RDN, LDN
865-331-1535
rtuskan@covhlth.com

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**Pre-Op Liquid Diet**

- Very low-calorie diet to shrink the liver for a safer procedure
  - Only to be used under medical supervision
- You will know if this is required at your pre-op office appointment
  - They will give the informational handout there
- Follow the diet to a T
  - Each food and drink has a role
  - NO “cheat meals”
- You are allowed to use seasonings and spices
  - Clear liquids are “free foods”
- Call the office or myself for any concerns or questions

---

**Day Before Surgery**

- Clear Liquids ONLY (until hospital arrival)
  - Broth, gelatin, popsicles, water, sugar-free sports drinks, hot tea, and caffeine-free drinks
  - Red and purple colors are OKAY
- Different than the 2-week liquid diet
  - No shakes, yogurt, applesauce, etc.
- Bottle of Magnesium Citrate (laxative) around noon
  - Only for Gastric Bypass and DS patients!
  - **Tips:** drink it cold, fast, through a straw, drink a chaser, lemon/lime flavor in a citrus flavored drink
  - Drink plenty of water because you will lose fluids as it flushes your GI system out.

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**Evening Before and Morning Of Surgery**

- Ensure Pre-Surgery Clear Carbohydrate Drink
  - 2 bottles night before surgery (12 hours before arrival)
  - 1 bottle morning of surgery on the way to hospital
- Instructions:
  - Drink bottles within 5-10 minutes
  - Allowed to add sugar-free flavor drops
- Benefits:
  - Reduces depletion of glycogen and protein-stores
  - Reduces nausea and vomiting after surgery
  - Reduces insulin resistance
  - Reduces time in the hospital
**Dietary Phase Progression - Continued**

**After Surgery**
Once on 5W floor
- Small sips of room temperature water
  - Constant, slow sipping (no chugging)
- Medicine cup = 1 fluid ounce (30mL)
  - Drink every 30 minutes at least
  - You are not limited to this amount
- No ice while in hospital
  - Ice when home is okay if you tolerate
- Dehydration makes nausea worse
  - Keep sipping despite any nausea/pain
- Visualize the size of your new stomach →→
  - May only be able to hold 2 ounces at first

**Phase 1: Clear Liquids**
Night of surgery/hospital stay
- Broth
- Sugar-Free Gelatin
- Sugar-Free Popsicle
- Juven Packet and Water (Mixed Together)

- Allowed: sugar-substitute and salt
  - Choose sugar-free options for the rest of your life
- Not Allowed: sugar, pepper, plastic straw, milk, fruit juice, regular gelatin, Italian ice, sweet tea, coffee, etc.
  - Watch out for these on your tray & do NOT consume them

**Phase 2: Protein Supplements**
Day after surgery until first post-op appointment
- Clear liquid (another tray with Juven in hospital)
  - Ensure Max protein shake with breakfast and lunch tray
  - Sip on shake, and take home what you don’t finish.
  - Use sugar-free mints or Listerine strips in moderation
- No straws, chewing gum, or caffeine for 1 month after surgery!

**Lifelong Protein Goals:**
- Sleeve/Bypass = 60-80g a day (2-3 total shakes)
- DS = 80-100g a day (3-4 total shakes)
Protein Shake/Supplement Guidelines and Ideas

- **PER SERVING:**
  - ≤ 200 calories
  - ≤ 5g total fat
  - ≤ 10g total carbohydrate
  - ≤ 3g sugar
  - 20-30g protein

- **Flavor Add-Ins:** savory protein powders, sugar-free syrups, sugar-free drink powders, baking extracts, spices, etc.
  - Examples: Peppermint or raspberry in chocolate, banana or lemonade in strawberry, creamsicle (orange in vanilla), etc.

- If very lactose intolerant, try “whey isolate” protein, egg protein powder, or plant-based (soy) protein powders

Other Protein Ideas

- **Unflavored Protein Powder**
  - Sugar-free gelatin
  - Sugar-free popsicle

- **Protein Water**
  - Can also use in popsicle molds

- **Count toward protein and fluid goals**
- Use these ideas between meals
- If you make the gelatin, you have to mix the protein with the cool liquids to prevent clumps

Lifelong Fluid Goal = 64 Fluid Ounces

- **Choose:** sugar-free and caffeine-free fluids
  - Water, Broth/Bouillon, No Added Sugar Popsciles, Sugar-Free Gelatin, Propel, GZero, Powerade Zero, Vitamin Water Zero, Life Water Zero, Decaf Tea, Sugar-Free Drink Enhancers (Crystal Light, MIO)
  - Choose electrolyte beverages for better hydration
  - Use sugar-substitutes (Splenda, Stevia) to sweeten

- **No carbonated beverages. No alcohol for 6 months.**

- Drink consistently throughout the entire day
  - 1 ounce of fluid every 15 minutes

- Despite being on liquids, dehydration can still occur.
  - Dehydration = dry mouth, thick saliva, chapped lips, headache, dizziness, low urine output (<5 times/day), and dark brown urine
  - Hydration = clear/light yellow urine, high urine output

Phase 3: Soft Proteins

1 week post-op to 1 month

- Canned tuna or chicken, soft scrambled eggs, hard boiled eggs, soft-cooked beans, soft tofu, powdered peanut butter, and low-fat dairy: light Greek yogurt, skim or 1% milk, reduced fat cheese, low-fat cottage cheese, low-fat ricotta cheese

- Add unflavored protein powder to: unsweetened applesauce, sugar-free pudding, tomato soup, V8 vegetable juice, plain hummus
  - Limit tomato products if you don’t tolerate acid

- No other meat/seafood, fruits, vegetables, or starches/grains (potatoes, corn, peas, breads, rice, pasta, flour, etc.) during this phase
Phase 3 Tips

- Aim for 3 meals a day without grazing
  - Slow, mindful meals with thorough chewing
  - You may only tolerate ¼-½ cup of food at one time
  - Use unflavored protein powder (in food/drink) or a protein shake (between meals) to reach protein goal
- No drinking with meals or for 30 minutes after
  - Make sure food is not dry, crunchy, or spicy
- Add new foods one at a time to assess tolerance (dairy)
  - 1 cup of decaf coffee is okay now
  - Choose sugar-free and low-fat additives
  - Careful with eating out (tuna/chicken salad, eggs, beans)
  - Be creative with recipes and flavor combos
  - Can use seasonings, spices, and sauces as tolerated

Phase 4: Beginning Solids

Starts 1 month post-op

- Soft meats, poultry, & seafood first (ground/moist/juicy)
  - Slow cooker, meat salads, marinated meats, canned meats
  - Avoid dry & tough proteins until tolerated
  - “Fork tender” fruits and non-starchy vegetables
    - Soft and well-cooked vegetables
    - “No sugar added” fruit cups or thawed frozen fruit
    - Avoid raw fruits and vegetables until tolerated (~3 months)
- Bariatric plate: eat in order of importance!
  1. High-quality lean protein (3-4oz)
  2. Fruit and non-starchy vegetables (½-1 cup total)
  3. No starchy vegetables or grains for 6 months
    - Use vegetables instead

Vitamins and Minerals – starts PHASE 3

- You will require supplementation everyday after surgery for LIFE
- Bariatric-formulated multivitamin
  - Chewable, soft chew, liquid, or powder for 1 month after surgery
    - Can switch to capsules after 1 month
    - May need additional B12
  - NO OTC: Centrum, One-A-Day, Flintstones, gummy vitamins, prenatal vitamins, vitamin patches, etc.!
- 1500mg calcium citrate (750mg if male or prone to calcium kidney stones)
  - Body only absorbs 500mg at one time → 3 chews 2-4 hours apart
  - Separate iron (multivitamin) and calcium by 2 hours
- DS patients need extra Vitamins A, D, E, K & Calcium
  - Bariatric Advantage Multi EA
  - Need 1800-2200mg calcium (~4 chews)
- Set up a supplement schedule based on what you purchase

Phase 4 Tips

- Remember: no drinking with your 3 meals or for 30 minutes after
  - If food feels “stuck,” do not drink fluids to push down. Just get up, walk around, and wait for it to pass.
  - Add low-fat condiments, sauces, or broth to dry meats
- Eat your protein first, and aim for 20-30g of protein per meal
  - An entire protein bar or shake at one sitting counts as a meal
  - Can re-introduce gum (never swallow), straws, & caffeine
    - Stick to 1 cup coffee/tea and drink extra water
  - No soups for meals → use fork or drain off extra liquid
  - Always measure and weight your portions → no eyeballing
    - Use small or child-size plates and utensils
  - Start back on a physical activity routine → 150-300 minutes/week of aerobic activity and include 2 days of strength-training (muscle-building)
    - Burns calories (weight loss) and prevents muscle loss
    - Use your free 6-month membership to FSW Health & Fitness Center
### 6 Months Out

- **Allowed to add in healthy starchy vegetables and whole grains:** oatmeal, whole wheat bread, whole wheat crackers, sweet potatoes, plain baked potato, brown rice, corn, peas, winter squash, etc.
  - 2 tablespoon serving size – eaten LAST
  - Healthy carby/fiber sources, so don’t be afraid to add!
  - No cereal and milk (because it’s like drinking with meal)

- **15g of fiber a day** can help prevent constipation at this point
  - Before 6 months, you can use Benefiber, Citrucel, Metamucil, Fibercon, or other soluble fiber supplements
  - Try 64 fluid oz., physical activity, and probiotics
  - Try these ideas before adding Miralax

- **Can slowly re-introduce alcohol** now, but be careful!
  - Low tolerance, lowers inhibitions, and high sugar/calories
  - No carbonation: beer, champagne, sparkling wine, mixers
  - Limit 1 drink of low sugar/calorie versions of wine or cocktails

### Meals and Snacking - Long-term

- **Aim for 3 bar/plate balanced meals (one meal every four hours),**
  - **CANNOT** skip meals because you will overeat, you won’t lose weight, and you won’t meet your protein needs!

- **Avoiding grazing and unnecessary snacking**!
  - Snack only if physically hungry & struggling to reach protein goal
  - DS patients will likely require a “protein boost” snack

- **Choose healthy snacks** under 200 calories and include protein:
  - 6 oz. light Greek yogurt
  - 1 oz. low fat or non-fat cheese with 5 whole grain crackers
  - ½ cup low fat cottage cheese with ¼ cup no-sugar-added peaches
  - 2 oz. beef or turkey jerky with non-starchy vegetables
  - ½ protein shake or bar
  - ¼ cup nuts with 1 small, fresh fruit

### Journaling and Records - Continued

- **Self-monitoring allows you to observe and keep track of eating behaviors/habits!** How else will you know if you’re meeting or struggling with your daily goals?

<table>
<thead>
<tr>
<th>The Essentials</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food item(s) and amount: ounce, tablespoon, cup</td>
<td>Hunger and fullness levels: before and after meals</td>
</tr>
<tr>
<td>Protein grams</td>
<td>Mood/feelings: bored, sad, happy</td>
</tr>
<tr>
<td>Time of day</td>
<td>Location of meal: table, car, desk, watching TV</td>
</tr>
<tr>
<td>Fluids – type and ounces</td>
<td>Whom you dine with: alone, family, coworker, friend</td>
</tr>
<tr>
<td>Vitamins and supplements</td>
<td>Food intolerances</td>
</tr>
<tr>
<td>Physical activity – type and minutes</td>
<td>Nausea, vomiting, or pain</td>
</tr>
</tbody>
</table>

### Be Careful With What You Eat

- **Wait at least 3 months before trying:** nuts, seeds, dried fruits, fruit skins, celery, broccoli, cabbage, and tough meats with gristle

- **Nausea can be caused by:** eating/drinking too much, eating/drinking too fast, drinking with meals, dehydration, poor vitamin compliance, consuming wrong types of food/drink, etc.
  - If vomiting occurs, stop eating solids and return to phase 2 liquids for 24 hours. Call the office if these symptoms persist.

- **Limit high fat (fried/greasy foods) & sweets** will slow your weight loss and could cause “dumping syndrome” (flu-like symptoms)
  - Aim for 30g of fat per day
    - 10g fat per meal (tablespoon portion) of mostly unsaturated fat
    - Aim for <10g of added sugar per serving of a food item
  - Limit sugar as much as possible. Choose sugar-free foods or substitutes. Satisfy sweets cravings with fruit.
  - Before 6 months, 30-60g carbohydrate. Between 6-12 months, 60-100g carbohydrate. After 1 year, 135g carbohydrate.
Final Tips & Thoughts

- See guidebook & handouts for sample meal plans and food lists
- Do NOT advance to the next phase until designated time!
- Enjoy your THREE meals slowly (20-30 minute meals) & mindfully
  - Must still eat and drink even if you’re not hungry/thirsty!
- Take small bites & CHEW (20-25x) to applesauce consistency
- You will eventually be able to eat about ½-1 cup (4-8 oz.) at a time
- Stay hydrated between meals (64 fluid oz.)
- Always take your bariatric vitamins, stay physically active, attend support groups, & attend all follow-up appointments: 1 week, 1 month, 3 months, 6 months, 1 year, 18 months, then annually!
- At this point, this is your new way of life 😊
Use the following page(s) for notes and questions.