

Bariatric Surgery Guide

Roux-en-y gastric bypass edition

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Important Contact Information

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Preparing for Surgery

Personal Preparation

Now that you have decided to proceed with surgery, there are certain steps to take before your operation to ensure that you are as prepared as possible for the procedure. Start taking multivitamins once daily to improve your general health. Further, take chewable calcium with vitamin D twice daily. Vitamin and mineral intake is especially important after bariatric surgery in order to maintain good nutrition and health. If you start taking these supplements before surgery, it will be easier to remember them after surgery.

Another important way to prepare for surgery is exercise. The best time to begin your exercise program is before your surgery. We're not kidding. The sooner you start exercising the easier it will be after you have surgery. Success in gastric bypass is all about choosing the right habits, with the support of the surgery to improve your success. We want you to start moving more, but we don't want you to injure yourself. Walking on a daily basis improves your circulation and makes breathing easier during recovery. You will also benefit from having a plan in place, so you don't have to figure out your walking route during the confused recovery phase. A pedometer is a recommended purchase to keep you informed of your walking progress. Should you be unable to walk daily due to joint pain, then you may want to look into an aquatics program. Every town has classes for arthritic or cardiac patients that are held in a safe and clinical environment. Water exercises still condition your breathing, but are not weight bearing and are therefore easier for people who have joint problems. You can also practice the exercises that speed up your recovery.

Good skin integrity is essential for the operative site. It is important to maintain good hygiene, by keeping skin clean and dry, especially in the days before surgery. Skin breakdown could possibly cause your surgery to be delayed.

Medicines

It is important to avoid aspirin and all aspirin-containing medicines for at least 10 days prior to surgery. Herbal medications such as St. John's Wort, Ginkgo Biloba, Garlic, etc, should be discontinued, as these have blood-thinning properties. Other herbal supplements such as Kava and Valerian Root are known to interact with anesthesia and should also be stopped at least 10 days before surgery. Again, remember to tell your surgeon all the medicines and herbal supplements you are taking. Do not forget to check the label of your multivitamin; many times they can contain herbal supplements as well. Remember to check all labels of over-the-counter medicines, since certain over-the-counter medicines can contain aspirin, too. If in doubt, please check with your pharmacist or your surgeon.

Alcohol and Tobacco

Since smoking hinders proper lung function, it can increase the possibility of anesthetic complications. Smoking can increase your risk of complications such as deep vein thrombosis (blood clots in the legs). Smoking also reduces circulation to the skin and impedes healing. Patients are required to stop smoking before surgery. Smokers who undergo anesthesia are at increased risk for developing cardiopulmonary complications (pulmonary embolism, pneumonia and the collapsing of the tiny air sacs in the lungs) and infection. Besides the well-known risks to the heart and lungs, smoking stimulates stomach acid production, leading to possible ulcer formation. Patients must agree to permanently refrain from smoking. Ask your Primary Care

Physician to write you a prescription for a smoking cessation aide, if necessary. We will randomly check for compliance with smoking cessation.

Alcohol causes gastric irritation and can cause liver damage. During periods of rapid weight loss the liver becomes especially vulnerable to toxins such as alcohol. You may find that only a couple of sips of wine can give you unusually quick and strong effects of alcohol intolerance. In addition, alcoholic beverages are high in empty calories and may cause “*dumping syndrome*.” For these reasons, we recommend complete abstinence from alcohol for one year after surgery and avoiding frequent consumption thereafter.

Work and Disability

Expected return to work time is about two weeks. This may vary greatly. The time you take off from work depends on many things. These include the kind of work you do, your general state of health, how badly your work needs you, how badly you need your work (i.e. the money), your general state of motivation, the surgical approach (laparoscopic versus open) and your energy level. It is important to remember that one is not just recovering from surgery, but one is eating very little and losing weight rapidly. The first few weeks are a precious time to get to know your new digestive system, rest, exercise and meet with other post-operative patients in support group meetings. If financially feasible, take this time to focus on your recovery.

If you are ill before surgery

Should you develop a cold, persistent cough, fever, skin breakdown or any changes in your condition during the days before your surgery, please notify the surgeon immediately. You will

need to be re-evaluated for surgical readiness. You need to be in the best possible shape for anesthesia. Scheduling can be adjusted to your condition if necessary.

Hospital Pre-admitting Procedure

Before you can have your surgery, you will go follow your hospital's policy on pre-admission testing and registration. Specific instructions will be given to you by your hospital or surgeon's office.

What to Bring to the Hospital

It is recommended to bring only the bare necessities to the hospital. Do not bring any jewelry or more than \$20 cash. You may want to bring a picture of a family member, friend or pet to help you relax.

There are a few other things that may make your stay a little more comfortable:

- Small overnight bag with toiletries such as toothbrush and toothpaste, soap, shampoo and lotion
- Bathrobe
- Address and phone book of loved ones
- Lip balm
- Comfortable, loose-fitting clothes to go home. Clothes that are easily removed and easy to slip on are best.

Your Surgery Day

Personal Preparation

We recommend that you shower in the morning on the day of surgery, but do not use any moisturizers, creams, lotions, or make-up. Remove your jewelry and do not wear nail polish. You may wear dentures, but you will need to remove them just prior to surgery. Please bring your eye glasses and a case if possible.

General Surgical Risks

It is important for you to understand fully the risks involved with surgery so that you can make an informed decision. Although surgical complications are infrequent, all surgeries have some degree of risk. Your surgical team will use their expertise and knowledge to avoid complications. If a problem does occur, your surgical team will use those same skills in an attempt to solve the problem quickly. The importance of having a highly qualified medical team and the use of a certified facility cannot be overestimated.

In general, the least serious problems occur more often and the more serious problems occur rarely. If a complication does arise, you, the surgeon, and the nursing staff will need to cooperate in order to resolve the problem. Some complications can involve an extended hospital stay and recovery period.

Anesthesia

When general anesthesia is used, you will be sound asleep and under the care of your anesthesiologist throughout the operation. Once you are settled on the operating table, you will be connected to several monitors and an intravenous (IV) catheter. A quick acting sedative will be given through the IV tubing after you have breathed pure oxygen for a few minutes. Once you fall asleep, your anesthesiologist will usually slip an endotracheal tube through your mouth into your windpipe to guarantee that your breathing is unimpeded. An anesthetic gas and other medications will keep you asleep and pain free.

Many patients have an instinctive fear of anesthesia. Extremely sensitive monitors used during surgery have greatly reduced the risks of anesthesia. A minute change in the oxygen level in your blood, in the amount of carbon dioxide you breathe out, in the percentage of anesthetic gas being administered, in your heart rate, or in your blood pressure would be reported immediately. Most complications of anesthesia in the past have occurred because of “simple” problems that were not recognized quickly enough. The sophisticated monitoring system now used makes recognition and treatment of problems with anesthesia almost immediate.

Your anesthesiologist will discuss the specific risks of general anesthesia with you before your surgery.

Hospital Admitting Procedures

Check-in at the hospital. You will be asked to change your clothing and put on a hospital gown and slippers. If you wear dentures, corrective lenses, or hearing aids you will be asked to remove them for safety reasons. Please bring your own container. Please remove all body jewelry.

You will be asked to sign an operative consent form, even though you may already have done so at your surgeon's office. Your signature indicates that the procedure has been explained to you, that you understand it, and that you have no further questions.

Your blood pressure, pulse, respiration, oxygen saturation, temperature, height and weight will be measured. An intravenous (IV) line will be placed in your forearm. This allows fluids and/or medications into your blood stream. You may also be given some medicine to help you relax.

The Operating Room

Going to the Operating Room (OR) is not a normal experience for the most of us. Your surgical team recognizes the natural anxiety with which most patients approach this step in the process to achieving their goals. We believe that a description of the surgery experience will help you prepare for it.

Specialists using the most modern equipment and techniques will attend to you. The team includes at least a board certified anesthesiologist, a trained surgical assistant and nurses that will assist your surgeon. A registered nurse is in charge of the OR.

The Operation

Once you enter the OR, the staff will do everything they can to make you feel secure. You will be transported on a stretcher on wheels. There, the nurses who will be assisting your surgeon will review your chart. Medicines that will make you drowsy will flow through the tubing into a vein in your forearm. At the same time, to ensure your safety, the anesthesiologist will connect you to monitoring devices.

The Recovery Room

You will be closely monitored, during this period. Recovery Room nurses will remain with you at all times. When your initial recovery is completed and all your vital signs are stable, you will be transported to your room.

Most patients have very little memory about their stay in the Recovery Room. Yet, it is common for patients to be drowsy and sometimes confused when they first wake up. You will have the urinary catheter in place. The urinary catheter will usually be removed on the first post-operative day, which means that you will be expected to walk at least three times that day.

Your Hospital Stay

Recovery

The hospital stay for gastric bypass averages three days. LAP BAND patients generally stay 23 hours. Those with complications will stay longer. Patients undergoing the laparoscopic method usually have a shorter hospitalization. When you return to your room after surgery, you will continue to be closely monitored by your nurses. The first few days after the operation are a critical time for your stomach and intestines to heal.

Along with periodic monitoring of your vital signs (blood pressure, pulse, temperature, respirations), your nurses will encourage and assist you in performing deep breathing, coughing, leg movement exercises, and getting out of bed after surgery. These activities prevent complications. Be certain to report any symptoms of nausea, anxiety, muscle spasms, increased pain or shortness of breath to your nurse. To varying degrees, it is normal to experience fatigue,

nausea and vomiting, sleeplessness, surgical pain, weakness and lightheadedness, loss of appetite, gas pain, flatus, loose stools, and emotional ups and downs in the early days and weeks after surgery. You may discuss specific medical concerns with your surgeon.

With the help of your nurse or physical therapist, you should sit up and dangle your feet the first night of surgery and stand at your bedside. Yes, it will hurt, but each time you get out of bed it will get easier. Each day you will notice your strength returning, with less and less pain. You will be asked to get out of bed and walk the first post-operative day. After that, you will be required to walk at least three times per day and to do your leg and breathing exercises hourly. Changing positions in bed, walking and prescribed exercise promotes circulation. Good blood flow discourages the formation of blood clots and enhances healing. The floor nurses will remind you to do so. You may not feel well enough to go for a walk, yet it is very important that you try your best and do as much as possible. Getting up, walking and doing your post-operative exercises will speed up your recovery and minimize complications.

Exercises that Speed up your Recovery

To enhance your recovery your nurse will instruct you in coughing and deep breathing, turning in bed and exercising your feet and legs. You will be shown how to use “*incentive spirometer*” to help you expand your lungs. Coughing and deep breathing is important so that you will loosen any secretions that may be in your throat or lungs and to help prevent pneumonia. Deep breathing also increases circulation and promotes elimination of anesthesia.

⇒ The proper way to deep breathe and cough is to follow these steps:

1. Inhale as deeply as you can
2. Hold breath for two seconds
3. Exhale completely

4. Repeat the first three steps three times
5. Inhale deeply
6. Cough. The cough should come from the abdomen, not from your throat. Hold your pillow on your abdomen for support.

Exercising your feet and legs is important for promoting good circulation.

⇒ The proper way to exercise your feet and legs is to follow these steps:

1. Push your toes of both feet towards the end of the bed (as in pressing down on a gas pedal).
2. Pull your toes toward the head of your bed, then relax
3. Circle each ankle to the right, then to the left.
4. Repeat three times.

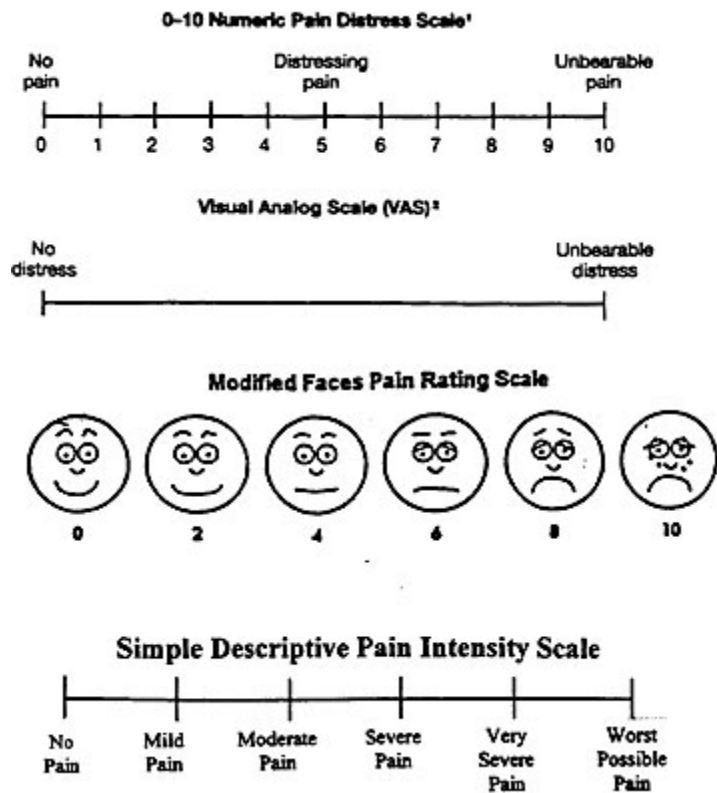
These exercises should be repeated at least once every hour after surgery, but it is also a good idea to practice these exercises before surgery to increase lung function and agility.

Pain Control

You may feel pain where the incision was made or from the body position was in during surgery. Some patients can experience neck and shoulder pain after laparoscopy. Your comfort is very important to your medical team. Although there will always be some discomfort after an operation, keeping your pain under control is necessary for your recovery. When you are comfortable you are better able to take part in activities such as walking, deep breathing and coughing. These activities are imperative in order to recover more quickly.

If you are feeling pain after surgery, you will be able to push a button on a cord to administer pain medication to yourself. This method of administration is called “*patient-controlled analgesia*” (PCA). As soon as you are able to tolerate fluids, your medical team will add oral pain medication.

Please remember that you will not be bothering the staff if you are asking for pain medicine! Your nurses and doctors will ask you to pick a way that you can describe your pain. This is done to ensure uniform language. Two helpful ways to describe pain include the number scale (0 to 10 scale: 0= no pain, 10=the worst pain possible) or you can use words (none, mild, moderate, severe). Here are some examples of what the pain scales look like:



⇒ No matter which form of pain control you receive, PCA or pill, here are some pointers to help you be more comfortable:

1. Tell your nurses and physician if you are having pain, particularly if it keeps you from moving, taking deep breaths, and generally feeling comfortable.
2. Everyone is different, so keeping your nurses informed about how you feel will help them help you.
3. Plan ahead for pain; if you are comfortable lying down, you may still need pain medication to get up and walk around.
4. Keep ahead of the pain. Don't wait for the pain to be at its worst before you push the PCA button or ask for pain medicine. Pain medication works best when used to prevent pain.
5. The risk of becoming addicted to pain medicine is very low when it is used for a specific medical purpose, such as surgery.

Diet at the Hospital (Stage I Diet)

At the hospital, you will be served clear liquids and eventually full liquids as your new stomach pouch begins to heal. If you are served something other than stage I diet, do not eat it. Call your floor nurse to have your meal changed. It is a very unlikely occurrence to have the wrong meal served, however, in light of your post-op status we thought that it would be worth mentioning

Most likely, you will not feel hungry the first week or so after surgery. This is normal, no reason for concern and may last a few weeks. However, it is very important to keep drinking water and to eat protein when at home to prevent dehydration and to promote healing.

Going Home

Your date of discharge will be determined by your surgeon based on your individual progress. Prior to your discharge, specific dietary and activity instructions will be reviewed with you, along

with precautions and situations when your surgeon should be notified. Discuss your going home concerns with your nurse or discharge coordinator.

Please give some thought to your living environment. Are there many steps in your home? Is your bedroom upstairs? How accessible is your bathroom? Please tell the hospital staff about your living environment so they can prepare your going home with your specific needs in mind.

Home again

Checking in

We care about your progress. Keep in touch with us and with your surgeon. We will do our best to make sure that you are well taken care of. Your first office visit with your surgeon should be scheduled 14 days after your surgery. Your surgeon's discharge instructions will tell you when you should return to the office for a follow-up. Please call your surgeon's office the day you arrive home (or on Monday, if you were discharged over the week-end) to make an appointment. You will be seen by your surgeon on a periodic basis after that. Generally, your surgeon likes to see you 6 weeks, 3 months, 6 months, 12 months, and 24 months post-operative, then annually thereafter. Please call your surgeon's office with any surgical concerns between scheduled visits. Don't leave your Primary Care Physician out of the loop – don't hesitate to contact him or her with medical concerns.

Specific Recovery Instructions

There are many things you will experience once you are home recovering. When you get home, plan on taking things easy for a while. Your body is still recovering from the stresses of major

surgery and weight loss occurring during the recovery period. Your activity will be restricted to no strenuous activity for 3 to 6 weeks after the operation. You may walk and perform light household duties as tolerated upon your return home. Usually, frequent walks of short duration are tolerated better than one or two long walks that go to or past the point of fatigue. Increase the distance that you walk gradually. By the time of your six weeks office visit you should be walking regularly two miles a day or more unless you have specific problems with your weight bearing joints. In the later case, water exercises are recommended. You can start water activities about three weeks after surgery. Patients undergoing the laparoscopic method are more frequently able to return to all activities within a shorter time frame. You may be tired, weak, nauseated or have vomiting the first few weeks after surgery. Keep up your fluid intake with small, frequent sips as necessary. 1 ½ to 2 Liters a day is the recommended minimum intake. Refer to the Diet section for specific dietary instructions.

Resume traveling short distances as soon as you feel strong enough to make the trip. Do not drive a motor vehicle or operate heavy machinery until you are off the prescription pain medicines, usually about one week after your surgery.

The first several weeks after your surgery you may feel weak and tire easily after activity. However, try to be as active as possible. Plan to walk as much as you can tolerate without becoming too tired. Start with short walks, increasing the distance each day. The more physically active you are, the more recovery is enhanced and the more energy you'll have. Continue walking at least four times daily, so that you are walking 30 to 45 minutes by the sixth week. Find out more about starting an exercise program by reading about first steps and continue to do the exercises that speed up your recovery.

Avoid sitting and standing without moving for long periods. Change positions frequently while sitting, and walk around in lieu of standing still. These strategies will help prevent blood clots from forming in your legs. Avoid lifting anything heavier than 20 pounds, or do push or pull motions (i.e. vacuuming) during the first six weeks. Climbing stairs is encouraged.

Remember that most patients will feel tired, less energetic and sore for several weeks following either operative methods as these are major operative procedures and you will be losing weight as well as healing wounds.

Wound Care

Your wound needs minimal care. If sutures were used, they dissolve, so there is no need to remove any stitches. You will notice some tape on your wound. This tape is called “*steri-strips*®”. They will fall off on their own. If surgical staples were used, they will have to be removed, usually around your tenth post-op day. The removal of surgical staples is painless. Leaving the wound open to air, whenever possible, helps prevent suture infection.

No matter how your wound was closed, it is important to keep the wound clean and dry to promote faster healing. You may shower, but pat dry the incision area. After about three weeks, the incision is usually ready for immersion. Ask your surgeon for the official “go ahead” before you take a tub bath. As you feel stronger you may enjoy a swim or a soak in the tub.

Despite the greatest care, any wound can become infected. If your wound becomes reddened, swollen, leaks pus or has red streaks, has yellow/green, purulent and/or odorous drainage, feels increasingly sore or you have a fever above 100.5°F, you must report to your surgeon right away. Please *do not use* any antibiotic ointment or other occlusive ointment on your incision.

Medical Concerns

Urgent Symptoms

Even though we do not expect you to have any serious problems, some symptoms that you may experience need to be addressed immediately. If you experience any of these symptoms, contact your surgeon right away:

1. Fever (100.5°F or above).
2. Redness, swelling, increased pain and/or pus-like drainage from your wound.
3. Chest pain and/or shortness of breath.
4. Nausea and/or vomiting that last more than 12 hours.
5. Pain, redness, and/or swelling in your legs.
6. Urine output less than four times in 24 hours.
7. Pain that is unrelieved by pain medication

If symptoms occur after normal business hours go to the nearest Emergency Room.

Normal Symptoms

1. **Swelling and bruising** – moderate swelling and bruising are normal after any surgery.
⇒ *Severe swelling and bruising may indicate bleeding or possible infection.*
2. **Discomfort and pain** – mild to moderate discomfort or pain is normal after any surgery.
⇒ *If the pain becomes severe and is not relieved by pain medication, please contact your surgeon.*
3. **Numbness** – small sensory nerves to the skin surface are occasionally cut when the incision is made or interrupted by undermining of the skin during surgery. The

sensation in those areas gradually returns – usually within 2 to 3 months as the nerve endings heal spontaneously.

⇒ ***Be especially careful not to burn yourself when applying heating pads to the area that may have some post-operative numbness.***

4. **Itching** – itching and occasional small shooting electrical sensations within the skin frequently occur as the nerve endings heal. These symptoms are common during the recovery period.

⇒ ***Ice, skin moisturizers, and massage are often helpful.***

5. **Redness of scars** – all new scars are red, dark pink or purple. The scars take about a year to fade.

⇒ ***We recommend that you protect your scars from the sun for a year after your surgery. Even through a bathing suit, a good deal of sun light can reach the skin and cause damage. Wear a sunscreen with a skin-protection factor (SPF) of at least 15 when out in sunny weather.***

Home Pharmacy Supplies

- Gauze pads
- Bandage tape
- Cotton balls
- Hydrogen Peroxide
- Thermometer
- Heating pad
- Acetaminophen

Nausea

Nausea is may related to insufficient chewing, fullness, sensitivity to odors, pain medication, not eating, post-nasal drip and/or dehydration. For nausea that occurs in the first days after surgery, the nausea can suppressed with medications called anti-emetics. In unusual cases the nausea can be so severe that it prevents patients from taking in adequate amounts of liquids. If this happens you need to come back to the hospital to receive intravenous fluids. Persistent vomiting can lead to dehydration and electrolyte imbalance, and can cause vitamin deficiencies to occur.

Odors can sometimes be overwhelming after surgery. Many former patients found that by putting a few drops of peppermint essential oil on a handkerchief can be very helpful if you are dry heaving. Avoid perfumes and scented lotions. If food odors bother you, try to have someone else prepare your meals or prepare bland foods.

- ⇒ Learn to recognize when you are full. This will not happen immediately, but by eating very slowly, it will become easier.
- ⇒ Should you have difficulty drinking due to nausea, you may want to try peppermint tea, fennel tea, decaffeinated green tea or water with lemon (hot or cold).
- ⇒ Sucking on a cinnamon stick can help alleviate nausea.
- ⇒ If you believe that your pain medication is the cause of your nausea, please call your surgeon's office to have the prescription changed.
- ⇒ Stay hydrated – fluids should be continuously sipped all day long to prevent dehydration. You need a minimum of 1 ½ to 2 Liters of fluids per day. Increase this amount by 20 % if you are sweating.
- ⇒ Take your nausea medicine as prescribed by your surgeon.

Vomiting

Vomiting is often times associated with eating inappropriately. It very difficult to gauge in the beginning how little food will satisfy your hunger. Chew your food well, keep it moist and eat only half of what you anticipate eating. If there is still space, and you still feel hungry, then you can always eat more. Chances are that you are going to feel full with very little. A couple of teaspoons may be all that you can take in at one time.

If you overeat after surgery, you may vomit. Sometimes fullness occurs quickly. Allow yourself time to recognize the feeling of fullness. Typically, with Gastric Bypass, a profound feeling of satisfaction follows the fullness within a few minutes, and makes further eating a matter of indifference.

These may cause vomiting:

- | | |
|---|---|
| ⇒ Eating too fast | ⇒ Drinking liquids either with |
| ⇒ Not chewing food properly | meals or right after meals |
| ⇒ Eating food that is too dry | ⇒ Drinking with a straw |
| ⇒ Eating too much food at once | ⇒ Lying down after a meal |
| ⇒ Eating solid foods too soon after surgery | ⇒ Eating foods that do not agree with you |

If you begin vomiting that continues throughout the day, stop eating solid foods and sip clear liquids (clear and very diluted juice, broth and herbal tea). Should you have difficulty swallowing foods or keeping foods down, please call your surgeon. Vomiting may indicate that the stomach pouch is blocked. **If vomiting continues for more than 24 hours, contact**

your surgeon, since vomiting can lead to severe dehydration, a situation that needs to be taken seriously.

Dehydration

Dehydration will occur if you do not drink enough fluids. Symptoms include fatigue, dark colored urine, dizziness, fainting, nausea, low back pain (a constant dull ache across the back), and a whitish coating on the tongue. Blood work should be done if these symptoms persist, in order to establish the severity of dehydration. Dehydration may lead to bladder and kidney infections. Contact your surgeon if you believe that you may be dehydrated. In some cases you need to be admitted to the hospital so that fluids can be administered.

→ Note: If your urine is dark and your mouth is dry, you are not drinking enough.

This is what you can do in order to prevent dehydration:

- 💧 Buy a sports bottle and take it with you everywhere so you can sip water all day.
- 💧 Drink at least 1 ½ to 2 Liters of fluids per day. Increase this amount if you are sweating.
- 💧 Avoid beverages containing caffeine – they are diuretic and can dehydrate you. Unsweetened herbal iced tea is okay to use.
- 💧 If you have difficulties drinking due to nausea, suck on ice chips.

Bowel Habits

It is normal for you to have one to three bowel movements of soft stool per day. It may be foul smelling and associated with flatulence. Most of these changes resolve as your body heals and you adapt to changes. Please call your surgeon, should you have persistent diarrhea.

After restrictive surgery, the amount of food consumed is greatly reduced, and the quantity of fiber or roughage consumed may be much smaller. Correspondingly, the amount of bowel movements will be diminished, causing less frequent bowel activity, and sometimes constipation. If this becomes a problem, a stool softener may be indicated to avoid rectal difficulties.

Keeping your bowel movement regular:

- ⇒ Remember that your stools will be soft until you eat more solid food.
- ⇒ Lactose intolerance and high fat intake are generally the culprits of loose stool and diarrhea. Avoid all high fat foods and discontinue the use of all cow milk products. Yogurt is okay.
- ⇒ Use to your [Pocket Journal](#) to help recognize problem foods
- ⇒ If cramping and loose stools (more than 3 per day) or constipation persist for more than two days, please call your surgeon's office.

Flatulence:

Everyone has gas in the digestive tract. Bariatric patients have a shortened bowel, thus causing gas to be more odorous and expelled more forcefully. Gas comes from two main sources: swallowed air and normal breakdown of certain foods by harmless bacteria that is naturally present in the large intestines. Many carbohydrate foods cause gas; fat and protein very little. The foods that are known to cause more gas are beans, veggies, some fruits, soft

drinks, whole grains/wheat and bran, cows milk and cows milk products, foods containing sorbitol and dietetic products.

Here are some helpful hints:

- ⇒ Eat your meals more slowly, chewing food thoroughly
- ⇒ Lactose intolerance is generally the culprit of gas, too. Discontinue the use of all cow milk products. Yogurt is okay.
- ⇒ Avoid eating chewing gum and hard candy
- ⇒ Avoid drinking with a straw
- ⇒ Eliminate carbonated beverages
- ⇒ Remedies include Lactobacillus acidophilus, natural chlorophyll, and simethicone.

Hernia

You may notice a bulge under the skin of your abdomen. What you are noticing are the bowels that are not being contained in the abdomen due to a weakness in the abdominal wall at the site of the incision. You may feel pain when you lift a heavy object, cough, or strain during urination or during bowel movements. The pain may be sharp and immediate. In some cases the pain may be a dull ache that gets worse toward the end of the day or after standing for a long period of time. Minimize the risk of developing a hernia by avoiding very heavy lifting for three months after surgery. If you notice that you may have a hernia, please call your surgeon for a consultation. Surgery is the only way to fix a hernia. If the hernia comes out and will not go back in when you lie down and is associated with severe pain and vomiting, it can result in an emergency. Call your surgeon's office or your primary care physician on an emergency basis.

Thrush/Yeast Infections

You may notice that after surgery you may have a white, cottage cheese-like coating on your tongue. The tongue could also be very red and inflamed. Most likely you have thrush – a yeast overgrowth in your mouth. Oftentimes this is due to large amounts of antibiotics peri-operatively. Call your primary care physician if you should have an oral infection or a rash on your skin. You can reduce this problem by taking *Lactobacillus acidophilus* in addition to the prescribed regimen post-operatively.

Vaginal yeast infections are caused by yeast called *Candida albicans*. Yeast are tiny organisms that normally live in small numbers on the skin and inside the vagina. The acidic environment of the vagina helps keep yeast from growing. If the vagina becomes less acidic, too many yeast can grow and cause a vaginal infection. Yeast infections can be very uncomfortable, but are usually not serious. Symptoms include itching and burning of the vagina and around the outside of the vagina (vulva), a white vaginal discharge that may look like cottage cheese, and swelling. Yeast infections are so common that that most women will have one some time in their lives. Half of all women have more than one yeast infection in their lives. If you have symptoms of a yeast infection call your primary care physician or your gynecologist. You can help prevent yeast infections by not wearing tight-fitting or synthetic clothing, wearing cotton underwear, not wearing pantyhose every day and not douching or using feminine hygiene sprays. You can also take *Lactobacillus acidophilus* in addition to the prescribed regimen post-operatively.

Anemia

It is recommended that all menstruating women take an iron supplement in order to prevent anemia. Please contact your physician in order to find out which iron supplement is best for

you. Signs of iron deficiency anemia include pallor, decreased work performance, weakness, difficulty maintaining body temperature, fatigue, dizziness and shortness of breath. Iron deficiency may also be caused by low vitamin A. Vitamin A helps to mobilize iron from its storage sites, so a deficiency of vitamin A limits the body's ability to use stored iron. This results in an "apparent" iron deficiency because hemoglobin levels are low, even though the body can maintain an adequate amount of stored iron.

Transient Hair Loss/Skin Changes

Hair thinning or loss is expected after rapid weight loss. It is temporary. Unfortunately, that does not make it any less disheartening. During the phase of rapid weight loss, calorie intake is much less than the body needs, and protein intake is marginal. The body is in a state of starvation. One of the side-effects is hair thinning or hair loss. This is a transient effect and resolves when nutrition and weight stabilize. The hair loss usually occurs anywhere from 3 to 9 months after surgery. For the same reason, skin texture and appearance may change. It is not uncommon for patients to develop acne or dry skin after surgery. Protein, vitamins and water intake are also important for healthy skin. You can minimize the loss of hair by taking your multivitamins daily and making sure that you consume at least 75 grams of protein per day. Nioxin shampoo has been shown helpful for some patients, as well as biotin tablet or powder. We advise patients to avoid hair treatments and permanents – no need to stress your hair from the outside, too.

Scars

Scars are expected after any surgery. The size of the scars depend on the type of procedure (open versus laparoscopic), the sutures used and how your body heals. Scars are a fact of life. But there is a way to make them less visible, should this be a concern of yours. Once your incision is fully healed, you may start using silicone pads and scar minimizing creams to

make the scars look softer, smoother, flatter and closer to your skin's natural color. Keep your scars out of the sun light to help them heal properly.

Sexuality/Pregnancy

You may resume sexual activity when you feel physically and emotionally stable. Women need to use a mechanical form of birth control, as fertility may be increased with weight loss and oral contraceptive may not be fully absorbed.

Many severely obese women are also infertile, because the fatty tissue soaks up the normal hormones and makes some of its own as well. This completely confuses the ovaries and uterus, and causes a lack of ovulation. However, as weight loss occurs, this situation may change quickly. This happens often enough for us to give special warning. You may start planning a pregnancy after weight loss stabilizes. It is imperative not to become pregnant during the first 18 months, since we want both you and the baby to be healthy and safe.

If you become pregnant, along with extra servings of protein, vitamins and blood tests, we ask that you arrange for your OB/GYN to contact your surgeon's office. They will be able to discuss specific information about your surgery, so the specialists can collaborate their efforts.

Long Term Complications

Late complications with gastric bypass operations have been gratifyingly low. The most frequent late complication is weight gain due to enlargement of the pouch, enlargement of the outlet, and last, but not least, patient non-compliance. Re-operation for the first two causes gives the patient a "second" chance.

The development of gallstones is related to the rapid and significant amount of weight loss and therefore is highest in the first six months after surgery. Gallstones are not a complication of surgery as such, but rather a complication of rapid weight loss. Obese persons have a very high rate of gallstone formation compared to normal weight persons, mainly because of the many diet/weight loss episodes that obese persons undergo. By age 50, nearly 50 % of morbidly obese women have developed gallstones.

Bowel obstruction due to a blockage from adhesions (scar tissue) can occur as it can after any abdominal operation, trauma, or intra-abdominal infection.

Stomal ulcer is an acid-peptic ulcer that occurs on or near the anastomosis (connection) between the stomach pouch and the bowel, “the stoma”. An ulcer may also rarely occur in the usual duodenal ulcer position. There is a higher risk of developing ulcers after bariatric surgery. Patients who use non-steroid anti-inflammatory drugs (NSAID) such as ibuprofen, Aleve®, etc. and smokers have a even higher incidence of ulcers. It can be treated with the same kind of drugs that are currently so popular for the treatment of duodenal and stomach ulcers. Only rarely is surgery required as treatment.

Late stomal stenosis, or narrowing of the outlet of the stomach pouch, is a complication that can occur in gastric bypass patients. This operation often requires a re-operation.

Iron deficiency anemia is a complication of significance in the long term. It usually occurs in menstruating women who do not take extra iron supplements. It is almost always preventable. It is not difficult to treat, but must be recognized in order for it to be treated. This is one of the important reasons for long term follow-up. Read more about the needed supplements in the diet guidelines.

Diet

Nutritional Expectations

After Gastric Bypass you will need to make changes to your eating patterns. The diet after surgery progresses from a liquid diet to a pureed diet to a soft diet and then a modified regular diet. The diet progression is designed to allow your body to heal. Initially, it will help you meet your protein and liquid requirements, and later, to assist you in meeting your nutritional needs. It is imperative that you follow the diet's progression and adhere to this regimen to maximize healing and minimize the risk for unnecessary complications. The size of your stomach pouch is about one ounce or one to two tablespoons. At first your capacity will be somewhat limited, so be patient. You may find that two to three teaspoons of food fill you up. This is expected. You may also find that you are able to eat more of one type of food than another. That is okay, too. Over time, your food pouch will stretch. By six months after surgery, it may stretch to eight ounces or one cup. Long term, the size of your pouch is likely to be eight to twelve ounces or 1 to 1 ½ cups. This will limit the amount of food you can eat at one time.

One of the changes that patients often comment about is the concept of “wasting food”. After surgery your eyes and head still work the same way as they did before. However, because of the new stomach pouch, you will be satisfied with much less. It is critical that you listen to your body's signals of fullness and not to your eyes that see food left on your plate.

You may also be surprised at how the surgery changes your wants and desires for certain foods. Foods you may have previously loved you may now find you are less interested in.

Seventy percent to 75 percent of all calories consumed should be protein based (eggs, fish, meat, etc). Carbohydrates (bread, potatoes, etc.) should make up only 10 to 20 %, and fats (butter, cheese, etc.) only 5 to 15 % of the calories that you eat. A diet consisting of 800 to 1,000 calories and 75 grams of protein should be the goal for the first 6 months. Protein drinks can be helpful to fulfill your protein requirements. There are many to choose from. Look for protein drinks that are low calorie and low sugar and that have a good taste. There is a nice selection available at St. John's Center for Living located in the lobby of the Prairie Heart Institute.

Avoid foods which contain sugar. Not only will they slow down your weight loss, but they can make you sick! Sugar may cause "dumping syndrome" in patients who have had the gastric bypass procedure. Dumping, in short, is when sugars go directly from your stomach pouch into the small intestine causing heart palpitations, nausea, abdominal pain, and diarrhea. Symptoms may vary among patients. Dumping lasts about 30 minutes to an hour.

To maintain a healthy weight and to prevent weight gain, you must develop and keep healthy eating habits. You will need to be aware of the volume of food that you can tolerate at one time and make healthy food choices to ensure maximum nutrition in minimum volume. A remarkable effect of Bariatric surgery is the progressive change in attitudes towards eating. Patients begin to eat to live – they no longer live to eat. As well, exercise must be part of your daily routine.

Lactose Intolerance

Lactose intolerance is a set of symptoms resulting from the body's inability to digest the cow milk sugar called lactose. Gastric Bypass Surgery can unmask lactose intolerance, but not cause it. Lactose is commonly found in dairy based foods and beverages, and is digested in

the intestines by the enzyme lactase. Lactase breaks down lactose so it can be absorbed in the blood stream. When the body does not produce enough lactase, lactose cannot be digested which may result in lactose intolerance.

Products that contain large amounts of lactose are cow milk and ice cream; smaller amounts of lactose are found in yogurt, cottage cheese and hard cheese. Prepared foods can also contain lactose, so look on food labels for whey, lactose, non-fat milk solids, buttermilk, malted milk, margarine and sweet or sour cream. Some breads, dry cereal and instant soups contain small amounts of lactose. Although there are supplements that you can take, elimination of dairy is the best approach to solving the problems associated with lactose intolerance. You can still enjoy goat milk products without any worry of having lactose intolerance.

Dumping Syndrome

Under normal physiologic conditions, the stomach and pylorus (the opening of the stomach into the small intestine) control the rate at which the gastric contents leave the stomach. That is, the stomach, pancreas and liver work together to prepare nutrients (or sugar) before they reach the small intestine for absorption. The stomach serves as a reservoir that releases food downstream only at a controlled rate, avoiding sudden large influxes of sugar. The released food is also mixed with stomach acid, bile, and pancreatic juice to control the chemical makeup of the food that goes downstream and avoid the “*dumping syndrome*”.



Dumping syndrome is usually divided into early and late phases. The two phases have separate physiologic causes and will be described separately. In practical fact, a patient usually experiences a combination of these events and there is no clear-cut division between them.

Rapid gastric emptying, or early dumping syndrome, happens when the lower end of the small intestine (jejunum) fills too quickly with undigested food from the stomach. After the RNY gastric bypass, patients can develop abdominal bloating, pain, vomiting, and vasomotor symptoms (flushing, sweating, rapid heart rate, light headedness). Finally, some patients have diarrhea. Since with the RNY Gastric bypass the stomach is not being used (hence the name) and a new, small pouch that directly connects to the small intestine is created, there may be dumping. Early dumping syndrome is due to the now rapid gastric emptying causing bowel distension plus movement of fluid from the blood to the intestine to dilute the intestinal contents. These symptoms usually occur 30 to 60 minutes after eating and are called the early dumping syndrome.

Late dumping has to do with the blood sugar level. The small bowel is very effective in absorbing sugar, so that the rapid absorption of a relatively small amount of sugar can cause the glucose level in the blood to rise rapidly. The pancreas responds to this glucose challenge by increasing the insulin output. Unfortunately, the sugar that started the whole cycle was such a small amount that it does not sustain the increase in blood glucose, which tends to fall back down at about the time the insulin surge really gets going. These factors combine to produce hypoglycemia (low blood sugar) which causes the individual to feel weak, sleepy and profoundly fatigued.

Restricting simple carbohydrates (rice, pasta, potatoes and other sweet tasting foods), eating more protein and not drinking liquids during a meal can reduce the symptoms of dumping. Further, avoid foods that are very hot or very cold. These can trigger symptoms.

Eating Techniques

Your new motto: “*slow, small, moist and easy*”.

Especially in the first eight weeks after surgery, you need to change your eating habits to avoid pain and vomiting, rupture of staple lines and to aid in weight loss. At this time, the tissue around the staples and sutures in the stomach pouch is very swollen and needs to heal. You also want to prevent obstruction of the area where your stomach pouch connects to your intestines (stoma).

Swallowing food in chunks may block the stoma and prevent foods from passing into the intestine. It is *CRITICAL* that you eat slowly and chew your food well to lower the risk of getting anything caught in this area.

You may find the following tips helpful:

- ⇒ **Set aside 30 to 45 minutes to eat each meal.** Aim to chew your food 30 times with each bite. Ground or soft foods may be necessary if you have dentures. Slow down – we have a lifelong habit of eating too fast. Slow down, enjoy the food and relax.
- ⇒ **Explain to friends and family why you must eat slowly** so they do not urge you to eat faster.
- ⇒ **Take small bites of food** and, for a visual aid, you may want to use a saucer in place of a plate to help with portion control.
- ⇒ **Pay attention to taste;** learn how to savor your food.

- ⇒ **Eat only at meal times.** Between meals snacking or “grazing” on small amounts of food throughout the day will sabotage your weight loss and result in the inability to lose an adequate amount of weight.
- ⇒ **Never drink liquids when eating solid foods.** Liquids should be avoided for a period of 30 minutes before and 30 minutes after eating solid food or meals. Combining liquids and solids may cause nausea, as well as push foods through the stomach pouch faster, enabling you to eat more.
- ⇒ **Stop eating as soon as you are full** (over-eating even one ounce can make you vomit and can lead to stretching your pouch). Listen to your body’s signals, not the food left in your plate.
- ⇒ **Only eat the best of foods** – after all, if you are going to eat so little, shouldn’t you have the best?

Recognizing Fullness

It is often difficult to understand the meaning of new sensations. Indications of fullness may not feel the same as before surgery. Here are some that are not as obvious, but a sure sign that your pouch is nearly full:

- ⇒ A feeling of pressure or fullness in the center of your abdomen, just below your rib cage.
- ⇒ A feeling of nausea, regurgitation or heartburn.

You may have a feeling of satiety several minutes after you are actually full. If your pouch is 30 cc (one ounce), you can put 30 cc in it, and you will not feel full for about 5 minutes. Try this to help you find out the right portion size:

→ Measure 30 cc of water, drink it, and wait for a few minutes. If you feel full with this amount and are comfortable, measure this amount of food before you eat it. This will prevent stretching of the pouch and the misery caused from over-eating.

Foods that may be difficult to tolerate

- Bread products
- Cow milk products
- Pasta products
- Fatty foods and fried foods
- Candy, chocolate, any sugary foods and beverages
- Carbonated beverages
- Bran cereal and other bran products
- Corn, whole beans, and peas
- Dried fruits and skins of fresh fruit
- Coconut

Food Guide for the First Post-Operative Week (Stage I Diet)

During this very early period it is best to limit your intake to liquids. This will give your new stomach pouch time to heal properly. This diet consists of clear, sugar-free fluids and can usually be started by the next day after surgery once or as ordered by the surgeon. The liquids should not be carbonated or contain alcohol. Sip your liquids slowly and carefully, stopping whenever you feel full. It is normal to have a reduced appetite in the days following surgery. There is no need to finish everything on the hospital food tray.

Clear liquids that are well tolerated are:

- Unsweetened, non-carbonated beverages
- Clear beef, chicken or turkey broth
- Strained Miso soup
- Unsweetened popsicles
- Unsweetened Jell-O®
- Decaffeinated beverages
- Apple, grape or cranberry juice

Food Guide (Stage II Diet)

At this point, your dietary choices start to expand somewhat. It is still very important to adhere to the guidelines, as your new pouch is still healing and you are adjusting to a new way of eating. This diet consists of low-sugar foods that are liquid or semi-liquid at body temperature such as hot cereals and low-lactose products. You should limit your intake to liquids, and very soft foods. This diet permits a gradual transition to more solid foods. Again, only eat until you start feeling full. Remain on this diet until your surgeon allows you to advance to the Stage III Diet.

→ Note: Try adding unflavored protein powder to soups and cereal to increase the nutritional value.

Stage III Diet

This diet includes semi-solid, soft and pureed foods that are easily digested. Limiting a diet to the foods listed in Stage III is necessary to avoid a blockage or other complications. Introduce foods slowly. If you notice a problem, try to identify it and be wary of the speed

and amount you ate. Often foods that are not tolerated well at this stage can be added at a later time without any problem. You may experience occasional vomiting after eating, diarrhea, or cramping during the recovery period. Return to the stage I diet for 24 hours if these symptoms are severe, and contact your surgeon if they don't improve within 12 hours. Remember to always chew your food very well, and don't drink fluids with meals. Sip water and other beverages throughout the day, except at mealtimes.

Gradually, try other sources of protein such as soy products, poultry, fish and seafood, and lastly, meats. Tolerance to foods varies from one individual to the next. Once you are back on a more regular diet, through trial and error, you may find you are able to tolerate some foods better than others. There may be some foods that your digestive system cannot handle well. We advise patients to avoid red meats until their stomach is functioning very well, usually after at least 3 to 4 months. After the gastric bypass, red meats are not well tolerated and can cause vomiting. This is purely a mechanical effect. Steak is much harder to break down so it will be able to fit through the small stomach outlet. If the outlet gets plugged, vomiting will result. Many things can cause discomfort and vomiting. Sometimes the source may be a specific food. Do not avoid a food just because you vomit once after eating it. You may wish to wait a few days, but you should try that food again. Tolerance to food may improve over time. Always be sure to chew your food very well, take small bites and eat slowly. Try only a very small amount at first. Cook foods without added fats.

Lifetime Success: To maintain a healthy weight and to prevent weight gain, you must develop and keep healthy eating habits. Be aware of the volume that you can tolerate and do not try to go beyond that. Make healthy food choices to ensure maximum nutrition and minimum volume. Stay away from empty calories such as starches and sugars. And of course, exercise must be part of your routine.

Fluids

Drink 1 ½ to 2 liters (64 ounces) of water per day, between meals (increase this amount by 20 % if you are sweating). Recommended beverages are water, or if desired, unsweetened, low calorie, and non-carbonated drinks. **Juices are high in calorie, could make you dump and provide very little nutritional value.**

Here are some tips

- **Avoid carbonated beverages**

When the cold beverage is consumed, it warms and releases gases, distending the stomach pouch and stretching the stomach. It then creates undue stress and subsequently causes stretching of the anastomosis.

- **Do not drink 45 minutes before or after meals**

Prevents pouch stretching and vomiting

- **Sip slowly and carefully**

- **Eliminate caffeine**

Many beverages contain caffeine, an appetite stimulant, which is detrimental to initial weight loss and long-term weight control.

- **Sip fluids continually** all day long to prevent dehydration

- **Eliminate high calorie drinks such as milk-shakes, soda, alcoholic beverages and juices.**

High calorie beverages tend to be low in nutritional value and contain simple sugars. Not only do they add additional calories with low nutritional value, they are quickly absorbed into the blood stream, causing a rapid rise in blood sugar levels, and increase hunger. Weight loss can be slowed down dramatically and even be stopped. High calorie liquids are the enemy!

→ **Note: if your urine is dark or your mouth is dry, you are not drinking enough.**

What we have learned from Experience

⇒ Frequent snacks slow down the weight loss. However, you should not go long periods without any food. You will be more prone to overeat later and not meet your protein requirements. Try to eat three, low starch, high protein, nutrient dense meals and one protein snack per day – every day. It is not uncommon to feel full after just a couple of teaspoons of food initially after surgery. Between meal snacking or “grazing” on small amounts of food throughout the day will sabotage your weight loss and result in the inability to lose an adequate amount of weight.

Foods to Avoid

Here is a list of popular foods that are filled with empty calories and that can provoke “*dumping syndrome*”. The products provide mainly calories with limited nutritional value (protein, fiber, minerals and vitamins). Every bite counts after surgery. Avoid foods which contain sugar. Not only will they slow down your weight loss, but they can make you sick! Sugar may cause “*dumping syndrome*” in patients who have had the gastric bypass procedure. Dumping, in short, is when sugars go directly from your stomach pouch into the small intestine causing heart palpitations, nausea, abdominal pain, and diarrhea. Filling up on concentrated sweets and other simple carbohydrates can prevent weight loss and good nutrition.

- Ice cream
- Pudding
- Sweetened, fruited or frozen yogurt
- Dried fruits
- Candied fruit
- Canned or frozen fruit in heavy syrup
- Fruit juice
- Sugar coated or sweetened cereal
- Sweet rolls and doughnuts

- Sports drinks
- Popsicles
- Cakes
- Pies
- Cakes and cookies
- Jellies
- Regular soft drinks/Lemonade
- High fructose corn syrup sweetened beverages
- Sugared ice tea
- Carbonated fruit drinks
- Table sugar
- Honey
- Candy and chocolate
- Sweetened gelatin desserts
- Regular chewing gum
- Molasses
- Syrups
- Sherbet/sorbet
- Jams
- Pancakes and waffles with syrup
- Soup (taken without food)
- Milkshakes and chocolate milk
- Sweet pickles or relish
- Rice, pasta, potatoes

Protein Power

Protein is the essential stuff, of which our muscles, organs, heart and brain are all constructed. Our bodies require a constant supply of protein building materials, to repair and replace tissues which become worn out or damaged. Because the small stomach pouch reduces the capacity of the stomach to a very small volume, protein containing foods should be carefully eaten with each meal. This is crucial to be sure that the body gets enough protein to maintain itself. If the focus of each meal is protein-rich foods, deficiency is very unlikely to occur. The primary source of nutrition should be protein. 70 to 75 % of all calories consumed should be protein based (eggs, fish, meat, etc), carbohydrates (bread, potatoes, etc.) should make up only 10 to 20 %, and fats (butter, cheese, etc.) only 5 to 15 % of the calories that you eat.

It is important to get at least 75 grams of protein each day. Remember that if you have not taken in adequate amounts of protein after three weeks, your body will start to break down its own source of protein – muscle. This will cause you to feel nauseated and weak. It is important to prevent this from happening. Protein also helps with cell tissue repair and helps fight infection. Early on, when you are taking in protein drinks, it is easy to keep track of how much protein you are consuming, but later, when you are eating regular food, it may be a little more difficult. Use the nutrition labels as your guide.

Here is a list of the most popular protein rich foods and their nutritional value in regards to protein:

FOOD NAME:	POR N:	PROTEIN QUANTITY:
Beans, kidney, canned	½	8 grams
Cheese, cottage	½	14 grams
Cheese, mozzarella	1 oz	8 grams
Cheese, Ricotta	¼	8 grams
Chicken, thigh	3 oz	21 grams
Cod	3 oz	21 grams
Crab, steamed	3 oz	17 grams
Egg	1	8 grams
Flounder	3 oz	21 grams
Halibut	3 oz	21 grams
Ham	3 oz	21 grams
Hamburger	3 oz	21 grams
Lobster, steamed	3 oz	16 grams
Peas, chick, canned	½	7 grams
Salmon	3 oz	21 grams

Shrimp	3 oz	18 grams
Soybeans, mame	½	14 grams
Soy flour	¼	13 grams
Soy milk	1	7 grams
Soy nuts	¼	15 grams
Swordfish	3 oz	21 grams
Tempeh	½	16 grams
Texturized Soy ein	½	11 grams
Tofu	½	10 grams
Tuna, canned	3 oz	25 grams
Turkey	3 oz	21 grams
Veal	3 oz	21 grams
Yogurt, plain	1	11 grams

Tofu

Yes, tofu can be a great source of protein. It is easy to prepare and very easy to digest and tolerate. Of course that means that in order to get protein, you actually have to eat it. Don't be alarmed, it can taste wonderful. It's just that many people have no idea how to prepare the tofu.

Here are some helpful hints:

- ⇒ Buy only organic firm tofu, for use in stir frying or cooking as a main dish
- ⇒ There are some really good soy products available at standard (as well as natural) food stores such as tofu, corn dogs, breakfast sausages and frozen products.
- ⇒ Try cooking with tofu as you would your favorite chicken or fish dishes.

- ⇒ Cooking with tofu is like cooking with a blank palate. Whatever you spice the entire dish with the tofu will take the flavoring. Tofu alone has a very mild, bland flavor if you leave it to fend for its own identity.
- ⇒ One tip for cooking with tofu is pressing it. Unwrap uncut tofu, drain water off, and wrap in a clean cloth, placing a weight (like a heavy ceramic dinner plate) on top for about 45 minutes before you add your spices. This gives the tofu a chewier, dryer taste.
- ⇒ Enjoy! (Really, you *are* going to like it)

Other soy products to try: Soy milk, soy shakes, soy granola and flakes, soy cheese alternatives, edamame (in pod or shelled), Garden burgers, Boca burgers, soy flour, soybean butter, soy pasta, roasted soy nuts, tempeh, soy protein powder, Soytzels (soy flour pretzels).

Vitamins and Minerals

TAKE YOUR VITAMINS AND MINERALS (FOREVER) AND SEE YOUR DOCTOR ONCE A YEAR TO HAVE YOUR BLOOD LEVELS TESTED. IT IS A LIFE AND DEATH

PROPOSITION.

After bariatric surgery, the small stomach pouch does not allow you to eat enough to get the proper nutrition as well as the malabsorptive part of the surgery decreases the body's ability to process vitamins and minerals. In order to have a chance of getting enough vitamins, high potency multivitamin and mineral supplements must be taken daily for the rest of your life.

We believe that it is safest to continue the multivitamin intake for the rest of your life.

Chewable or liquid multivitamin and mineral supplements are required twice daily until 12 weeks after surgery. After this, it is recommended that you take a multivitamin is required twice daily for the rest of your life. In addition, you will need to take mineral supplements three times per day. Kids' chewable vitamins do not offer the adequate amount of vitamins

and minerals (particularly iron) needed after surgery, so you have to double the recommended dose.

Even with daily vitamin intake, some people develop deficiency of vitamin B-12. Food sources are any foods that come from any animal (meat, dairy, fish, poultry) B-12 is absorbed in the stomach and the duodenum, which are largely bypassed with Roux-en-Y Gastric bypass surgery. Simple use of a sublingual (under the tongue) tablet or stray dose of B-12 once a week maintains adequate vitamin levels and can prevent deficiency. B-12 can also be administered by injection. B-12 deficiency can develop quickly, with little warning and can become very dangerous. B-12 deficiency can lead to pernicious anemia (megablastic), peripheral neuropathy, paralysis and depression. Make sure to keep in contact with your medical team to have your vitamin levels checked regularly.

Your multivitamin preparation should contain mineral supplements in generous amounts. We recommend that you also take 500 mg of Calcium Citrate three times per day to ensure proper absorption of Calcium. Calcium Carbonate is not readily absorbed after gastric bypass, so it is not a recommended Calcium supplement. Calcium is necessary for healthy bones, teeth, and nerve transmission. Most patients do not get enough through their diet.

Many patients, particularly menstruating women, will require an iron supplement to maintain adequate iron stores and prevent anemia of iron deficiency. Iron is available in many different formulations. The most commonly available form, such as ferrous sulfate, can sometimes be constipating. Ferrous fumarate may be less constipating. Also look for an iron-polysaccharide complex, which is generally well tolerated.

Remember, weight loss surgery is a tool! It is important to use this tool safely, by eating right, taking your vitamins, minerals and other supplements, and exercising appropriately!

Party Talk

Overeating at parties is easy to do - especially when you are having fun and you may be engrossed in a conversation. It is also easy to keep munching beyond fullness. Snacking is considered a bad habit after gastric bypass surgery, since there is nothing that prevents you from eating a tiny amount all day long. Thus, make “party eating” one of your meals for the day. Never munch directly from the bowl, which can make portion control harder to estimate. Instead, place the food directly on your napkin or small plate, and take only the food you are planning to eat. Remember, you cannot eat more than a small child’s portion now. Look for the protein items first. You can then supplement your meal with other choices as you feel fit. Slow down your eating so you can really enjoy the flavors of the food and will not feel deprived as you finish your small portion.

A party is not a good place to try foods for the first time. You do not want to end up ill and have to go home early. Instead, take time at get-togethers to socialize more, have fun and enjoy the people present.

The more events, places and situations that you associate with food, the more often you will feel like eating or perhaps may feel deprived that you can no longer eat amounts like you once did. Learn to focus on other things besides the food. You should eventually feel a sense of freedom from the drive to eat – use this opportunity to find new focus and enjoyments in life.

Learn to eat more slowly, and deliberately to allow your body to feel the fullness and to digest your food better. When you eat too fast, you could overeat or not chew your food well enough which could cause vomiting. Old habits will have to be worked on until your new slow eating is your normal style of eating.

Exercise

First Steps

Your activity will be restricted to no strenuous activity for three weeks after the operation. You may walk and perform light household duties as tolerated upon your return home. Usually, frequent walks of short duration are tolerated better than one or two long walks that go to or past the point of fatigue. Increase the distance that you walk gradually. By the time you are six weeks post-op, you should be walking regularly unless you have specific problems with your weight bearing joints. In the later case, water exercises are recommended. You can start water activities about three weeks after surgery.

Starting an Exercise Program

You are already aware that Bariatric surgery is merely a tool to weight loss. Of course, this means that in order to receive the maximum benefits from your surgery, you must incorporate exercise into your daily routine. Patients report exercise as a key factor in their ability to maintain their weight. If you want to feel good and maintain and build muscle mass, you must exercise. Exercise helps you lose weight and stimulates the production of “the good feeling” hormones called endorphins. Exercise also helps to keep your bone tissue dense and strong, increases strength and balance, boosts energy and improves quality of life. Research has shown that patients who exercise 3 or more times per week for a minimum of 30 minutes lost an additional 12% of their excess weight in 6 months. The mistake that many patients make is that they do not exercise until they feel “all recovered” or try to start exercising when they realize they are not on course to reach their goal weight. Patients who work hard on exercise early after surgery find it very rewarding. As the weight falls off, the capacity for exercise improves dramatically, with significant improvements on a week-by-

week basis. Do not cheat your body of this important aspect of weight loss. Make a long term commitment to exercising!

Yes, exercise is hard. It is difficult to stay motivated. It is not easy to find an exercise that you may like. Try to look into forms of exercise that you may have never tried before. Explore yoga, dancing, roller skating, tai-chi, etc... Exercise does not mean that you have to be in a gym for hours a day. If it has been some time since you have exercised regularly, then it is best to start slowly. Begin with as little as 5 minutes a day and add 5 more minutes a week until you can stay active for 45 minutes per day. We recommend that you make exercise part of your daily routine. Just being an active person is not enough exercise to be able to lose the weight and keep it off.

There are three forms of exercise: cardiovascular, strength-building, and flexibility.

Cardiovascular exercise is also known as aerobic exercise. Aerobic exercise uses your large muscles and can be continued for long periods. For example, walking, jogging, swimming, and cycling are aerobic activities. These types of exercises drive your body to use oxygen more efficiently and deliver maximum benefits to your heart, lungs, and circulatory system. A simple definition of cardiovascular exercise is any exercise that raises your heart rate to a level where you can still talk, but you start to sweat a little. At least 20 minutes of cardiovascular exercise 3 or 4 days a week should be enough to maintain a good fitness level. Any movement is good, even house or yard work. But if your goal is to lose weight, you will need to do some form of cardiovascular exercise for 5 or more days a week for 30 to 45 minutes or longer.

Strength-building exercises are known as **anaerobic exercise**. Anaerobic exercise does not have cardiovascular benefits, but it makes your muscles and bones stronger. Strength-building exercises require short, intense effort. People who lift weight or use any type of equipment that requires weights are doing strength-building exercise. Strength-building exercise makes your muscles and bones stronger and increases your metabolism. Strength exercises also make your muscles larger. Your muscles use calories for energy even when your body is at rest. So, by increasing your muscle mass, you are burning more calories all of the time. If you strength train regularly, you will find that your body looks leaner and you will lose fat. Strength building exercises should be performed 2 to 3 times a week for best results. Always warm up your muscles for 5 to 10 minutes before you begin lifting any type of weight or before performing any resistance exercises.

Flexibility exercises, which are also anaerobic, tone your muscles through stretching and can prevent muscle and joint problems later in life. A well balanced exercise program should include some type of each exercise from each category.

Loss of Bone and Muscle Mass

When the body is in a state of stress, and trying to combat starvation and malnutrition, it hoards its precious fat until any other usable fuel has been burned. Practically, the body will prefer to burn muscle mass, before consuming its precious fat. If muscle is not regularly used for exercise, like *every day*, it will be consumed to meet the energy needs. This concept is similar with calcium stores. Calcium is stored in the bones. Strong bones require calcium, phosphorous and other nutrients in addition to weight bearing exercise. Obese persons tend to have strong bones because of their obesity. When major, rapid weight loss occurs and adequate mineral supplementation is lacking, osteoporosis is more likely.

Loss of muscle mass and osteoporosis are preventable. Follow the nutritional guidelines in the [Diet](#) section to maintain optimal nutritional status. In addition, it is very important during active weight loss to exercise vigorously every day. We recommend at least 20 minutes a day of aerobic exercise and weight bearing exercise. Devote attention to the upper body strength as well. Many persons find, after a few weeks or months of regular exercise, that they actually begin to enjoy it, and start to work out even more! Fairly vigorous exercise, for more than half an hour every day can greatly enhance fat-burning, and hasten weight loss. Our research has shown that patients who exercised at least three times per week for at least half an hour lost 12% more of the total excess weight after surgery. It also builds a healthy and beautiful body.

Seriously obese persons are very strong and powerful – after all, just getting out of bed, you lift more than some people pick up all day long! It would be upsetting to have this muscle power lost, especially when you need it to enjoy life. Save your muscles, keep your energy, eat your protein and EXERCISE!

Common Workout Mistakes

Not Stretching. Stretch before and after aerobic activity. Prior to stretching, warm up cold muscles that can cause injury. Flexible muscles are far less likely to be pulled than tight ones.

Skipping warm-up. Like stretching, muscles need time to adjust to the demands placed on them. Rather than hitting the treadmill running, for example, take a few minutes to walk, build up stamina and then hit your stride.

Skipping cool down. Due to time constraints, many people head straight to the shower after the last repetition. Instead, take a few minutes to lower your heart rate and stretch your muscles again to improve flexibility and help prepare the body for your next workout.

Pretending you are Arnold. Yes, we know, you suddenly have this amazing amount of energy and think you can do anything. Great, but take it slowly in the beginning. Lifting too much weight is the best way to injure yourself. Increasing the weight slowly and steadily over time is a far more effective and safer way to increase muscle strength.

Being as Weekend Warrior. The mistake of the person who tries to fit a week's worth of exercise into a Saturday afternoon. For weight loss, it is more effective to sustain a moderate workout over several periods of time than to exercise intensely for only a few minutes.

Acting like you are a camel. Only camels can go for extended periods of time without water. To the rest of us it is a necessity. Drink plenty of it before, during and after your workout.

Climbing K2 while on the treadmill. What's the point of cranking up the machine to level 10, if you're just going to support your weight on the side rails? It is much more effective – not to mention easier on your wrists and elbows – to lower the intensity to the point at which you can maintain good posture while lightly resting your hands on the rails for balance.

Posing, instead of training. Yes, we have all seen them. They look great on the bicycle, since they are not sweating and are able to entertain a crowd with their stories. They are however, not exercising. Don't become one of them! While it's true that you don't want to overdo it, sitting on a bicycle without pedaling won't burn many calories. You should exercise intensely enough to sweat.

Believing more is better. The most effective way to train is to control the weight – the weight should not control you. When you have to jerk the weight, you are likely to jerk on the muscles, too. This again can lead to strain and injuries, with the muscles of the back being particularly at risk.

Eating for a marathon. If you are trying to watch your liquid calorie intake watch out for most drinks that advertise high energy. High energy often means high calorie. Drink your water and eat high protein foods at your regular meals and snacks.

Ten Tricks for Sticking with the Program:

Look at exercise like a prescription medication. You do not have to like exercise, but you need to do it in order to stay healthy. You also have to do it in order to loose weight. No miracles here. If you have a condition that requires a medication every day, you are going to take this medicine every day. Your body needs exercise every day, so you have to give it what it needs.

Do research. Find out what types of classes your local gym is offering. Does your hospital offer water exercises classes for people with arthritis? Is there a gentle yoga class offered at the community center? You are going to have a greater likelihood to stick to an exercise that is tailored to your needs and that you enjoy. Explore new types of exercise.

Change your routine. So you love to walk, but you are bored with it. Sometimes, just changing the direction of your route can make all the difference. Find new places to go walking, change the time of day, or offer to walk your neighbor's dog.

Find a buddy. Let's face it, without a coach; most athletes would not be where they are now. Why should you be any different? We all need someone to budge us and make us go the extra mile, especially when it comes to exercise. Find a friend, a neighbor and personal trainer to meet you at the gym or in the park.

Find your rhythm. Listen to music or books on tape or meditation while you exercise. 15 minutes on the bike can seem like an eternity without music, but with the right music to occupy your brain, it will not seem so long.

Participate in group sports. You don't need to join the soccer team, but participating in a group activity increases the chances that you will stick to it. Choose water exercise, yoga, or

stretching classes. Choose places and times where there are other people who are actively involved in exercise.

Know what makes you give up the program. If going on vacation throws you off your fitness plan, try incorporating exercise into your vacation. If boredom makes you give up, stay interested by changing types of exercise and times.

Make a schedule. If you don't put exercise into your daily schedule, most likely you will do everything but exercise. Plan in babysitters. Schedule specific activities on specific days, like walking 20 minutes on Monday, yoga class on Tuesday, etc...

Use a workout log. Write down the exercise you do and see how you have improved. Just like weight loss, sometimes one does not see the scale drop, but the inches seem to melt away. It is difficult to keep up with exercise when you do not see the results. Write down the number of repetitions, the weight used, the length of walk, the time, etc.

Stay active between workouts. Walk as much as possible between workouts. Park farther away. Get off the bus a couple of stops early. Always keep a good pair of walking shoes in your car, should you have unexpected time to take a walk.

Overcoming Excuses not to Exercise

- 1. I don't have time.**
 - * Set a time and stick to it.
 - * Watch less TV and turn off the computer.
 - * Remember that exercise is a stimulant and leads to more productive use of time.
- 2. Exercise is work**
 - * Work is work, and most people do it 40 hours a week.
 - * In order to lose the weight and get the most out of your surgery, you only need 4 hours of exercise per week. That's only 2.3% of your week. Think about it!

3. **I'm too tired**
 - * Exercise improves energy levels throughout the day
 - * Exercise improves the quality of your sleep.

4. **I might fail**
 - * Exercise is not a contest!
 - * If you stick with the program, you will succeed no matter what.
 - * Remember to start slowly and gradually increase your intensity and duration.

5. **I hate exercise**
 - * Everyone likes some exercise, you just have not found something you like yet - keep searching!
 - *Try exercising with a friend

Listen to music or a book on tape. At least this way, your focus will not be the exercise.

The Walking Workout

Recent research indicates that walking is one of the best way to be in charge of your life. Besides the well documented health benefits, the beauty of walking is you can do it at your own pace. Walking is the first type of exercise that we recommend both before and after surgery. If you are new to exercise and you are also recovering from surgery, you can walk ten to 20 minutes four or five days a week. As you get stronger, you can increase the distance and the speed to your comfort level.

As with any type of exercise, it is still important to warm up, then stretch. Start by walking for just 5 minutes and then do a few gentle stretches. Your muscles will stretch better if you walked a little first. Ask a fitness professional which stretches are best for you. You can also

order LifeWalk™ Easy Audio coach tape (888-LIF-WALK), which offers practical tips for getting the maximum aerobic, strength, postural and conditioning out of your walking program.

Consistency is probably the most important part of your walking routine. The more time you can devote to walking each day, the healthier you'll be. Remember that short walks are better than none at all. Health, like life, is a journey. What you need to do is take the first step.

Water Fitness

Many patients like water programs. You can start water activities about three weeks after surgery. Water programs are great, since they are non-weight bearing and therefore are gentle to painful joints. Water fitness can improve strength, flexibility, cardiovascular health, decrease body fat, facilitate rehabilitation after surgery, improve functional living and even enhance other sports skills. Water classes today offer more versatility than ever, but how do you find the right class for your goal, interests, needs and skills?

Find the facility first. Look at your local YMCA, community center, health club and hospital. Look for a well maintained pool, adequate locker rooms and life guard on duty. Hospitals usually offer arthritis or heart-disease related classes through their physical therapy program and usually will let you join the class with a prescription from your Primary Care Physician. Those are favorite beginner classes, since it is more of a medical environment and the cost is often covered through the health insurance. Health clubs and YMCA now also offer most specialized classes with different fitness levels. Whichever class you may decide to try, start

with the lowest level and use the smallest water weight at first. Many people make the assumption that because the exercise is in the water, they cannot injure themselves.

Most importantly, you should feel comfortable in the environment. If the water is too cold, find the staff to be lacking empathy or do not feel at ease in your class, then this is not the right class for you. Water exercise, like any other type of exercise, should be done in a relaxing environment. If this is not the case, it is a sign to look for something else.

Choosing a Personal Trainer

There is a reason movie stars and athletes use personal trainers: working with a personal trainer is one of the fastest, easiest, most successful ways to improve your health. In fact, personal training has proved so effective that it has spread well beyond the world of the rich and famous. Today, personal trainers are used by people of all fitness, social and economic levels to help make lifestyle changes that they could not achieve by themselves. **Consider the following things a personal trainer can do:**

- ⇒ **Improve your overall fitness.** A trainer will monitor and fine tune your program as you go, helping you work your way off plateaus.
- ⇒ **Reach a healthy weight.** Remember that the surgery is only one of the tools to weight loss. Body fat reduction, weight reduction and management, body shaping and toning can all be achieved with the aid of a qualified personal trainer who can help you set realistic goals and determine strategies, all while providing the encouragement you need.

- ⇒ **Learn to stick to it.** Sticking with well-intentioned plans is one of the biggest challenges that exercisers face. Qualified personal trainers can provide motivation for developing a plan that places a high priority on health and activity. A trainer can help you brainstorm an agenda to overcome your biggest obstacles to exercise.
- ⇒ **Focus on your unique health concerns.** Most personal trainers are familiar with the special needs of morbid obesity, arthritis and diabetes. Your trainer can work with your physician, physical therapist and with Bariatric Program Services to plan a safe, efficient program that will enable you to reach your health goals.
- ⇒ **Find the right way to work out.** You will learn the correct way to use equipment with the appropriate form and technique for cardiovascular work and free-weight training.
- ⇒ **Stop wasting time.** Get maximum results in minimum time with a program that is specifically designed for you. Workouts that use your strengths and improve on weak points in a matter that is efficient and effective.
- ⇒ **Learn new skills.** Want to learn to skate, golf like a pro or get ready for an adventure vacation? An individualized program can improve your overall condition and develop the specific skills you need.
- ⇒ **Enhance you mind, body and spirit.** A personal trainer can act as a door to personal growth experiences. Many personal trainers provide mind-body activities, such as Tai Chi sessions.
- ⇒ **Benefit from the buddy system.** What could be better than making a commitment to regularly meet with someone who will provide you with individualized attention?

Make sure that your trainer has a college degree in the field of fitness. Ask if the trainer belongs to professional fitness and exercise associations and regularly attends workshops or

conventions. You can find a personal trainer through your local health club or Community Center.

Long Term Success

Follow-up

Follow-up is extremely important with gastric bypass surgery. Read this surgery guide carefully before going to office visits, so that you can have some questions ready for the staff. Lifelong follow-up appointments are expected and need to be scheduled with the office staff. Of course, visits with other specialists are encouraged, should you have any problems. Long-term, the surgeon expects to see you once a year. It is probably a good idea to have your annual physical exam scheduled with your primary care physician before your annual surgical appointment. The primary care physician can have testing done which can then be reviewed with you by your surgeon.

Expected Weight Loss:

Most patients experience a fairly rapid weight loss in the first 3 to 6 months following surgery. The greatest weight loss will occur in the first three months after the gastric bypass procedure. Most studies suggest that patients lose an average of 65 to 80% of excess weight the first 12 to 18 months. After 18 months, the stomach pouch has stretched to hold more food. This stabilizes the weight loss. At this time, is critical to adhere to the low fat, low sugar diet and exercise recommendations outlined in this guide to maintain your weight loss.

After 24 months post-op, studies have shown that most patients keep off at least ½ of the excess weight over 5 to 15 years. Thus, there may be some weight regain. However, patients are much less obese even long after surgery than before the surgery.

Research has shown that weight loss surgery patients who exercise 3 or more times per week for a minimum of 30 minutes lose an additional 12% of their excess weight in 6 months compared to their cohorts who do not exercise as strenuously.

Lifestyle Changes

You cannot lose weight without having a healthy lifestyle. Do you have an unhealthy lifestyle? Here are some simple things you can do right now to keep yourself and your friends and family on track:

- Get rid of all the junk food in your house. (No, the kids don't need junk food). Restock your cupboards with healthy snacks your whole family can enjoy.
- Have allotted time for fun and outside play.
- Have a daily schedule to ease the chaos and decrease some of the stress in your life. This may mean taking some activities out of your schedule or your kids' activities. Often, we plan to do more than we have time for.
- Cut the time you and your family spend each day watching TV or using the computer. Spend more time doing more active things such as playing outside with the kids or going for a walk.
- Plan your social life with activities that do not include food, such as going out dancing rather than going out to dinner.

Maintaining the Weight

We have been referring to the gastric bypass surgery as a tool to help you lose weight. The goal of the surgery is not to allow you to eat more, but to allow you to lose weight with the fewest possible restrictions to your diet. It is not automatic, and your behavior after surgery plays a very large part in your outcome. How you use the tool will affect your weight loss. Please follow the recommended guidelines in this workbook. Your window of weight loss is anywhere from 12 to 18 months. With exercise you can control the weight loss and may see weight loss for up to 24 months.

Gastric bypass works in part by making the stomach much smaller so that one feels full sooner. It also works to curb the appetite because the food goes quickly into the small intestine, and chemical messages are sent to the brain telling the satiety centers that food is present. The surgery will give you a full feeling on a much smaller meal, improve the sense of self-control and help many avoid sugary foods due to dumping syndrome.

By eating only at mealtime and only until you feel full, your daily food intake will be decreased enough to provide weight loss. The weight loss will vary from week to week and may plateau for days and up to two weeks at a time. If you are at a plateau during the first 6 months post-op that lasts longer than two weeks, please call the office. Use your [Pocket Journal](#) to help the staff identify your needs. Gradually, the rate of weight loss will decrease and your weight will stabilize. Your responsibility is to avoid snacking, grazing (continuous nibbling), choosing healthy foods, be active and exercise daily, and nurture the process of recovery from obesity. Participate in group meetings and continue to use this guide to help you through the surgery process. Be sure to keep your regular office appointments so that your weight loss can be maximized and your health monitored.

Again, surgery is a tool, something to help you accomplish your health goals. There will be adjustments that you will need to make. Our staff will be glad to guide, support and motivate you. **We know that you can do it!**

The 8 Rules of Weight Loss

There are eight rules that we have found helpful for weight loss success. All successful patients who have had the gastric bypass have these things in common.

* Consumption of an adequate amount of liquid, preferably water, is crucial. You should consume a minimum of 1 ½ to 2 liters of liquid each day. This can only be done slowly, sipping fluids throughout the day. Never drink more than 2 ounces of liquid over a 10 to 15 minute period. On very hot or humid days, or when exercising, you should drink additional glasses of water. This is necessary in order to prevent dehydration.

* Only eat at mealtimes. Between meals snacking or “grazing” on small amounts of food throughout the day will sabotage your weight loss and result in the inability to lose an adequate amount of weight.

* The primary source of nutrition should be protein. 70 to 75 % of all calories consumed should be protein based (eggs, fish, meat, etc). Carbohydrates (bread, potatoes, etc.) should make up only 10 to 20 %, and fats (butter, cheese, etc.) only 5 to 15 % of the calories that you eat. A diet consisting of 600 to 800 calories and 75 grams of protein should be the goal for the first 6 months.

* Never drink liquids when eating solid foods. Liquids should be avoided for a period of 30 minutes before and 30 minutes after eating meals.

* Avoid foods and liquids which contain sugar or high fructose corn syrup. Not only will they slow down your weight loss, but they may make you sick! Sugar may cause “dumping syndrome” in patients who have had the gastric bypass procedure. Dumping, in short, is

when sugars go directly from your stomach pouch into the small intestine causing heart palpitations, nausea, abdominal pain, and diarrhea.

* Stop eating and drinking when you begin to feel full. Listen to your body's signals. Do not look at the food that is left on your plate. Overfilling your stomach pouch will cause your pouch to stretch and may prevent weight loss success – or worse – causing long term problems and complications.

* It is essential that, within the first 6 weeks after surgery, you begin a regular exercise program. Our research indicates that this will increase your overall weight loss by 12% in 6 months.

* Attend support group meeting and workshops. They will help you stay focused and motivated and help you work through the changes that weight loss brings. Plus, you might just make a few new friends.

Changes

As you lose weight, you may notice other changes in your body. You may experience increased energy levels and you should be able to sleep better at night. You can anticipate resuming a more normal life soon after recovery. As your weight decreases, more physical activity will be possible. Ongoing exercise will be important for calorie burning, muscle tone, and a sense of well-being.

Long term, you can anticipate doing things you were not able to do before. Traveling, eating in restaurants and other pastimes will be more enjoyable. There may be new career and social opportunities, and a more positive self-image.

You may notice excess skin folds and wrinkles where the greatest weight loss has occurred. Reconstructive surgery to improve your appearance should be delayed until your weight loss has been stable for one year. We will be glad to recommend an experienced reconstructive surgeon.

Reconstructive/Plastic Surgery

Patients who lose more than 100 pounds also face another challenge – excess skin. This is especially noticeable on the face, upper arms, breast and abdomen. Skin folds under the arms, breasts, abdomen and legs can cause chaffing, and cutaneous bacterial and yeast infections. Reconstructive surgery is indicated for these patients.

Reconstructive surgery can help give patients more self-confidence and a better body image. It is not unusual that patients that have reconstructive surgery will also loose several pounds of excess skin. This results in better fitting clothing. Reconstructive surgery to improve your appearance should be delayed until your weight loss has stabilized for at least one year. We will be glad to recommend an experienced surgeon.

Emotional Issues

Emotional Considerations

Bariatric surgery has both physical and psychological effects. Please do not take these changes lightly. All patients need to consider this before and after surgery. Some of the feelings that you may experience include depression, frustration, anxiety, anger, disappointment, loss, helplessness, euphoria, excitement, joy and others. Many of these

feelings have their foundation in physiological changes. Short term, the immediate sense of loss of food is often a cause for distress. Along with the rapid reduction in estrogen levels you may experience symptoms of depression, not unlike the “baby blues”. Long term, you may be experiencing changes in body image and further awareness of the social implications of obesity.

Bariatric surgery is not a fix for your everyday problems with your spouse, friends, or family members, employment, or social life. This surgery will allow you to begin to gain control over one aspect in your life: your weight.

Although you have elected to have weight loss surgery to resolve your obesity, weight loss also changes the life style you knew so well. Even with its problems and tensions, obesity was comfortable, simply because it was known. Now, that life is gone. When the reality of the new situation confronts you, it is natural to begin a longing for your old way of life.

This expresses itself in several stages. These stages include denial, anger, bargaining, depression, and finally, acceptance. Different people go through these stages differently. It is natural for some patients to experience denial before they have surgery, because they focus on the positive. They seem to understand the risks and complications, but often do not recall hearing about the emotional and physical stress that follows. After surgery is performed, some patients try to bargain for extra space in their stomach pouches. They overeat, experience the painful consequences, and may become angry for getting into this situation. This anger may also surface when other discomforts or complications develop throughout the recovery period. These feelings are difficult to accept or express openly, and depression may follow. Feelings of sadness and crying episodes can be common occurrences. These emotional responses to surgery are completely understandable. They cannot be eliminated, but must be experienced and worked through. Adapting to the changes taking place in your

body and your relationship to food can take many months. The final stage of acceptance will occur when you feel at peace with the changes brought about by surgery.

In the past, one of the best methods for you to cope with life stress may have been for you to eat. This method will no longer be useful, especially while your new stomach pouch is at its smallest. One of the keys to success of this surgery is to learn to replace those comforts with healthy activities. Replacement methods for coping will need to be learned, but this will take time. Try not to sabotage yourself. The experience of such rapid bodily change will likely be accompanied by many emotional up and downs, depending on your age and sex.

There are many things that you can do to help yourself through the recovery and adjustment period. One of the most important aspects is the recognition and understanding of the experience of loss. Expect to have ups and downs as the weeks go by. If you are feeling teary and depressed, have a good cry. Do not suppress your emotions. They will surface again anyway. Use the journal in this guide to get you started. Going for a walk or adding other physical activities will help you manage this changing phase of your life.

Your adjustment and acceptance will also be eased by the realization that bariatric surgery, with resultant weight loss, will not solve your personal or relationship problems by itself. You cannot expect a perfect body or a perfect life after the weight loss. In fact, many new problems will develop because of the many new opportunities. These will need to be recognized and attended to. Try to be as positive as possible. As new challenges pop up, recognize them and develop a problem solving approach.

Adjust your expectations. Set realistic goals and stay occupied with work, hobbies and exercise. You will also feel more positive if you look your best. Pay attention to hygiene, hairstyle, clothes ---women may want to experiment with make-up. Take a walk, listen to

music, meditate or pray. Do things you always wanted to do. Enjoy the process of rediscovery. Talk to your spouse, family doctor, friends, other patients for support. We are here to support you through the changes with personal consultations, support groups and workshops. Use your [Pocket Journal](#) and the [Journal section](#) in this guide to help you express your experience. If, at any time, you feel overwhelmed or otherwise need more assistance, please contact us. We will be glad to take the necessary steps to refer you to the best possible resolution.

Counseling

Occasionally, personal adjustment or relationship problems will persist after surgery. These should be addressed in professional counseling. Emotional counseling may be needed during the phase of adjusting to the new physique and the many changes that follow the surgery for clinically severe obesity. We can help recommend counselors who are qualified and experienced in working with people who have had weight reduction surgery. Do not hesitate to request this. Major changes can cause new problems to emerge or old ones to intensify. Our experience has shown us that in the period of stress, starvation and weight loss that occurs following surgery, mild to severe depression is common. You and your support person should look for the signs of depression: persistent sad, anxious or empty mood, loss of interest or pleasure in activities (including sex), restlessness, irritability or excessive crying, feelings of guilt, worthlessness, helplessness, hopelessness, changes in sleep patterns, decreased energy, fatigue, “feeling slowed down”, thoughts of death and suicide, difficulty concentrating, remembering or making decisions, persistent physical symptoms that do not respond to usual treatment. Effective drug and psychological treatments are available. With treatment, patients can improve and return to normal quickly. Unfortunately, most depressed persons do not recognize their depression. You and your support person need to be aware of the risks of depression in the recovery period and if present, we need to discuss

possible treatment. Professional counseling can be a positive step toward a healthier adjustment.

Family and Friends

You can expect your family and friends to have varying reactions to your surgical experience and to the weight loss that follows. Although you hope your loved ones will be supportive and helpful during your ups and downs, this may not always be the case. First of all, your partner or spouse has become adjusted to you and your obesity. This may result in a resistance to the change, taking form of disagreement, mood swings, or refusal to support your dietary or exercise regimen. Keep communication channels open, recognize signs of distress in your partner, adjusting to the changes in your body and behavior. These changes will require your partner to relate in new ways to you. This takes time, effort and patience. If you are experiencing serious ongoing problems in your relationships, some short-term professional counseling may be helpful.

Friends and extended family members also must adjust. Many of them will be positive and genuinely delighted for you. They will stick with you through highs and lows, and relate to you as the lovable, unique person they have grown to appreciate. Others have become secure in your obesity and will have difficulty adjusting to the new body you are developing. If they are also obese, they will be constantly reminded of their continuing problem as you lose weight. They may be quick to point out sagging skin, wrinkles and other disadvantages. They may envy your courage or physical health. Be open about your appreciation of them and their concerns for you. Recognize their ambivalence and talk with them about their own feelings. And finally, let people pull away if they need to for a while. Some time may need to pass before they sort it out for themselves. Your main responsibility is to care for yourself.

Others are responsible for their own feelings and actions. Hopefully, most close family members and friends will eventually adjust.

Body Image

Keep in mind that as your body undergoes changes in weight and size, it is likely you may not see your body as others may view it. It takes time for your mind to catch up with what your body is doing. It is similar to the phantom limb phenomenon, where a person who has lost a limb continues to experience pain or feeling from the missing part, and in fact, feels they still have a limb. As you lose weight, you may actually be surprised when you see your reflection in a store window or mirror. You may not feel like this person is you! It is normal to feel like you are still the same size as you were before, but there are some definite ways to help you work at this.

Here are some examples:

- ⇒ Take a picture of yourself every few weeks during your weight loss and compare the changes.
- ⇒ Try on clothes in a smaller size. You'll be surprised how quickly you will be changing sizes.
- ⇒ Have someone point out a person in a public place who is about the same size as you. This helps you have a new frame for reference.
- ⇒ Take measurements of yourself every few weeks and record the results.
- ⇒ Save an outfit from your pre-op size and try it on every few weeks or whenever you need a lift.
- ⇒ Accept compliments graciously. Don't minimize or qualify your weight loss. You have worked hard for the outcome you have been complimented for. Simply say, "thank you".

The Internet

We greatly encourage support, both before and especially after surgery. Group support and being connected to other patients is vital to a successful surgical result. The internet is a way to help fill the void between group meetings. For this and many other reasons, we encourage utilization of the internet.

Beware that typing is not considered exercise. We also want to stress the need to maintain a cautious, objective approach to what you read, especially when it does not agree with your own intuition. Try to stay on chat groups recommended by our staff. We urge you to ask us directly if you have any questions about the surgical process. Please feel free to contact our staff with any concerns or questions – we'll either have the answer or do our best to find it for you.

Group Meetings

We consider group meetings to be mandatory. We know realistically we cannot make you attend these meetings, but they are for you: for education, support, nutritional and medical advice. Group meetings provide peer support, allow you to learn about the surgery first hand from others who have had gastric bypass, let you share your experiences and provide periodic guest speakers to expand your knowledge on obesity surgery related topics. They are great for problem solving. These support groups are a wonderful opportunity to make new friends and be with people who share what you are experiencing. It can be reassuring to hear other's viewpoints on common concerns and to get additional information from the group leader or guest speaker. Research has shown that patients who attend support groups regularly are more successful with their weight loss and mental adjustment than people who do not, especially long term. You will find these meetings helpful in many ways. Family and friends are always welcome to attend.

→ Note: Every person attending a support group signs a confidentiality agreement. We are very interested in your feedback to better serve your needs. Suggestions forms will be provided at all support group meetings.

Stress Eliminators

- **Love yourself.** Add yourself to your list of “loved ones”. Make taking care of your physical, emotional, social and physical needs a priority.
- **Listen to music.** Let the rhythms drain away your stress.
- **Breathe deeply.** Inhale through your nose and exhale through your mouth slowly and imagine that you are inhaling calmness and exhaling stress.
- **Laugh often.** Have a giggle. Watch a comedy on video, listen to a tape or read the Sunday funnies. Laughter is the best medicine.
- **Speak up for yourself.** People who feel they have some control over some aspects are less subject to stress. If you don’t like the way something is going, say so politely. In order for change to occur, you must take action.
- **Let go.** Learn the difference between what you can control and what you cannot. Stop worrying about things that are beyond your control. Use that energy to make changes you can. Focus on your own happiness.
- **Manage your time.** To avoid feeling rushed, plan out how much time you will need to accomplish tasks, to get ready to go places, to travel, to eat, etc...
- **Get a hug.** Humans are social beings and we require some safe, nurturing physical contact.
- **Practice meditation.** Spend at least 15 minutes a day relaxing your mind. Sit comfortably, breathe calmly, perhaps listen to some soft music, and just clear your mind.

- **Treat yourself with compassion.** Give yourself permission to make mistakes, to play without feeling guilty, to change your mind, and to set aside time only for you.