

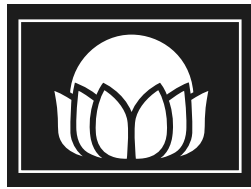


# SURGICAL WEIGHT LOSS PROGRAM

*at Northwest*

## Patient Education Handbook

**NAME:** \_\_\_\_\_ **PHONE:** \_\_\_\_\_



# SURGICAL WEIGHT LOSS PROGRAM

*at Northwest*

## Patient Education Handbook

Northwest Medical Plaza

6200 N. La Cholla Blvd.

Tucson, Arizona 84741

**Website:** [LoseWeightTucson.com](http://LoseWeightTucson.com)

***Bariatric Surgery Coordinator***

**Phone:** (520) 469-8760





# CONGRATULATIONS!

Congratulations on your decision to have weight loss surgery and thank you for choosing Northwest Medical Center. Our Surgical Weight Loss Team is proud to have been recognized as an ASMBS Bariatric Surgery Center of Excellence.

Our staff is committed to helping you take this first step to your new life, and this is why we've compiled this handbook. Please use this handbook as a guide both before and after your surgery.

Should you have any questions pre-surgery or after your surgery, please do not hesitate to ask anyone on your surgical team. We're here to help and want to assist you in any way we can so you are successful and meet your weight loss goals.

Thank you again for choosing Northwest Medical Center.

Sincerely,

*Your Surgical Weight Loss Team*



# TIPS FOR YOUR UPCOMING SURGERY

- Review all your current medications with your surgeon. Ask the surgeon which medications you should take the morning of surgery.
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- Your surgeon will write a prescription for an anti-nausea medication to take the day prior to surgery.
- Your surgeon will write prescriptions for the medications you need when discharged from the hospital.
- Ask your surgeon if you will need a Bowel Preparation the day before surgery?
- Based on your surgeon's preference and the type of surgery you will need to purchase an 8.3 oz. (powder form) bottle of Miralax or generic Glycolax **AND** a 64 oz. Gatorade. **(Only applies to Gastric Bypass/Duodenal Switch patients)**

**Have all these prescriptions filled prior to your surgery. The pharmacy will require time to prepare the liquid form medications you will need.**

## THE DAY BEFORE SURGERY

- At 2 p.m. the day before surgery (as instructed by your physician), mix the Miralax with 64 oz. of Gatorade and drink entire contents within 4 hours. **(Only applies to Gastric Bypass/Duodenal Switch patients)**
- NPO status is per your surgeon's recommendations and will be discussed at your pre-op visit.
- If the physician gave you a prescription for anti-nausea medication to take the day before surgery, take this medication as prescribed.
- Take your pre-op measurements and document in your journal.
- In shower, use preoperative body scrub given to you at your pre-procedural appointment — once in the morning and again in the evening.

## SUGGESTED ITEMS TO HAVE AVAILABLE AT HOME AFTER DISCHARGE

- Adult strength acetaminophen
- Heating pad/Icepack
- Gauze squares and tape

## MORNING OF SURGERY

- Use preoperative body scrub in shower before going to the hospital.
- Arrive at hospital **two hours** before your scheduled surgery. Surgery scheduled at \_\_\_\_\_.
- If you use a CPAP machine at home, bring your orders, settings and mask. Do not bring the CPAP machine, the machine will be supplied by the hospital.
- Bring **non-petroleum** lip balm.
- Bring loose clothing to wear home.



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# WHAT TO KNOW BEFORE YOUR SURGERY

## Introduction

You have already begun the long process of preparing for your operation. You have devoted many hours to learning all you can about obesity, nutrition and the surgical operations used to treat obesity. You have taken much care in making an informed decision about having weight loss surgery.

You should have already attended an educational seminar with your surgeon, reviewed the information presented on our website, [northwestmedicalcenter.com](http://northwestmedicalcenter.com), carefully reviewed and completed the materials provided to you in the Northwest Medical Center (NMC) Surgical Weight Loss Program Information Packet and attended at least one meeting of the Southern Arizona Center for Minimally Invasive Surgery (SACMIS) post-op program. By now you should have a complete understanding of the nature of obesity surgery, along with its risks and benefits. You should also carefully review this book in its entirety to be sure you are fully prepared for your operation and the lifestyle changes you must make following surgery.

Your surgery is now scheduled — you are on the path to a new life.

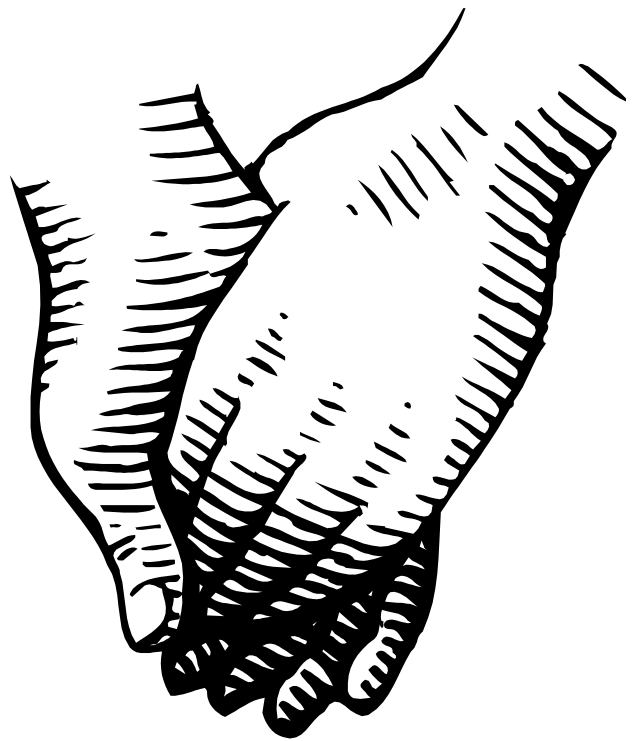
## Helping Your Family and Friends Understand and Support Your Decision

Most patients want their weight loss surgery to be a private and personal matter. This needs to be acknowledged and respected.

It's important to identify a dedicated support person to be at your side for the upcoming surgical events and future life changes. Choose someone you want to be with you on your day of surgery, throughout your hospital stay and someone who will take you to your first follow up appointments when it will be difficult to drive. Once you identify this support person, share your plans for surgery with him or her now and enlist a pledge of commitment.

What you need to realize is the importance of having a loving, supportive network of family and friends who not only help you through your surgery, but who provide you with a valuable support network as you transition to your new lifestyle after surgery. This network is just as critical to your success as your actual ability to follow your post-surgery nutrition, exercise and psychological programs.

Be proud of your decision by asking for their understanding and support. When your family and friends ultimately realize you have made a decision to take control of your obesity, they will see it as a careful decision for your future health and life longevity.

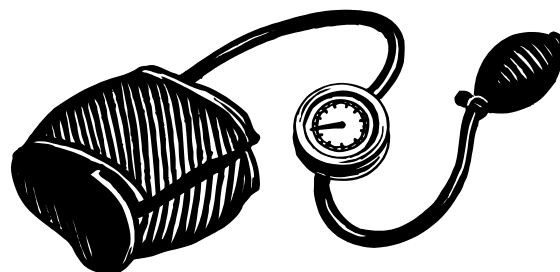


# WHAT TO KNOW BEFORE YOUR SURGERY

## Health History and Physical Examination

Obtaining your health history and a physical examination is essential preparation for your surgery. When you meet with your surgeon he will go over your history and you will have an opportunity to ask any questions or express any concerns which have not been discussed. Please have any questions ready — it is important you know and understand everything.

- Inform your physician of any medications you are taking including herbal medicines, vitamins, nutritional supplements, prescription or over-the-counter medications.
- Inform your physician of any type of appetite suppressant/weight loss medication, either prescription or over-the-counter, you are or have been taking. These medications pose a dangerous risk when combined with anesthetic medications. Patients must discontinue use two weeks prior to surgery.
- If you take blood pressure or heart medications, diuretics, coumadin, or if you are diabetic, ask your physician what medications you may take with a small sip of water the morning of surgery.



## Pregnancy Caution

Female patients SHOULD NOT BECOME PREGNANT for 18 months post surgery and until your weight has stabilized. Becoming pregnant prior to the 18 month guideline could result in injury to the unborn child.

## Stop Smoking 30 Days prior to Surgery

### *Why do we want you to stop smoking?*

There are a number of reasons smoking cessation is important to your recovery. The chemicals in cigarette and pipe smoke irritate the lungs and this causes a thick liquid secretion to form and slows the ability of the lungs to clear those secretions. Pneumonia can develop without proper clearing of the lungs. Stopping smoking helps you heal faster. Some problems, such as blood clots and infection of your surgical incision, can be avoided if you stop smoking. In addition, nicotine of any sort (smoked or chewed) damages the lining of the blood vessels and causes the lining of the blood vessels to narrow. This narrowing can prevent enough blood from reaching the areas where the surgeon operated on your stomach. If this blood supply is damaged, there is a higher chance of having problems such as a leak at the connection site. The poor blood supply can also cause ulcers to form after surgery in patients who have started smoking again. These ulcers can erode the intestine and cause serious problems.

# WHAT TO KNOW BEFORE YOUR SURGERY

## *What can you do to stop smoking permanently?*

Quitting smoking permanently can add years to your life. It reduces your risk for lung cancer, emphysema and heart disease. It will also benefit your loved ones by keeping them from the dangers of second-hand smoke. There are many helpful places you can consult for help in stopping smoking.

- Ashline.org
- 1-800-548-8252 (American Lung Association Help Line)
- <http://www.lungusa.org/stop-smoking/>
- 1-800-quit-now (sponsored by The Society of Thoracic Surgeons)

## **Pre-Hospital Preparation**

### **Pre-Procedural Screening**

As soon as your surgery date is scheduled, please call Central Scheduling at 469-8810 to set up your pre-procedural visit.

Your pre-procedural appointment will last one to two hours during which the following tests will be performed:

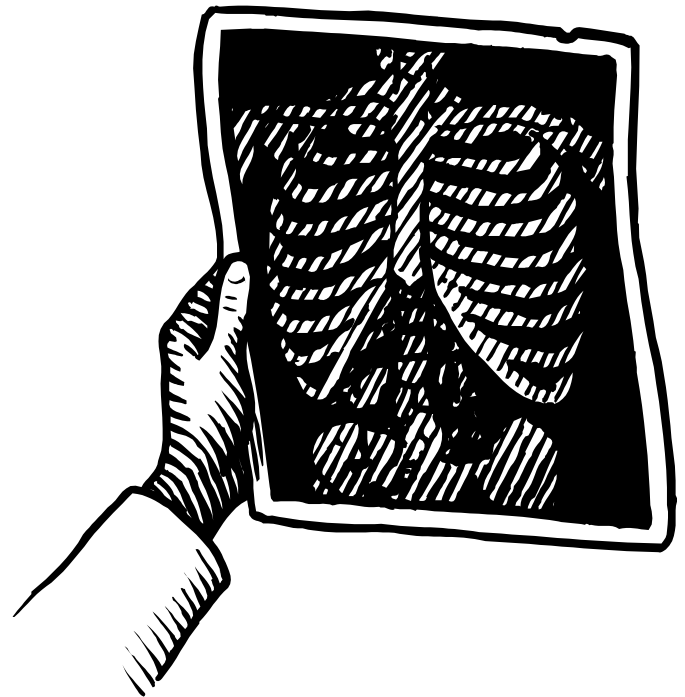
- CBC & BMP (blood tests)
- EKG
- Chest X-ray

### **Exercise**

In the weeks before your surgery, try to exercise daily for 20 minutes. Practice deep breathing and coughing. After your surgery, your ability to do both of these respiratory responses will play an important role in preventing any collapse of your lungs. Use this breathing technique:

1. Take a deep breath, trying to fill your lungs completely.
2. Hold the breath for three seconds, then exhale forcefully while keeping your lips pursed tightly — as if you were blowing out a candle. Keep exhaling until your lungs feel completely and totally empty.
3. Take another deep breath and repeat the exercise. Try to do this exercise 40 to 50 times per day.

Practice coughing by taking a deep breath and holding the air in your lungs so pressure is allowed to build up in your chest before coughing forcefully. Take care to observe yourself and the steps you take as you work through this exercise. Committing this exercise to memory will be very helpful as you may have trouble remembering following surgery.



# WHAT TO KNOW BEFORE YOUR SURGERY

## Preparing Your Body for Surgery

As your surgery approaches, there are important steps you need to complete so you prepare your body to be in the very best possible condition for the operation.

- Pre-Op Diet — All patients will be on a two week, 1,000 calorie per day, high protein, low-carb diet.
- If you take ginkgo biloba, feverfew, garlic, ginger, ginseng or vitamin E regularly, you will need to stop taking these supplements 14 days prior to surgery.
- Your stomach and bowel need to be empty of food residues at the time of surgery, so please take care to follow the bowel preparation instructions. **(Only applies to Gastric Bypass/Duodenal Switch patients).**

## Preventing Surgical Site Infections

One risk of having surgery is an infection at the surgical site (any cut the surgeon makes in the skin to perform the operation). Surgical site infections can range from minor to severe or even fatal.

### What Causes Surgical Site Infections?

Germs are everywhere. They're on your skin, in the air, and on things you touch. Many germs are good. Some are harmful. Surgical site infections occur when harmful germs enter your body through the incision in your skin.

### What Are the Risk Factors for Surgical Site Infections?

Anyone can have a surgical site infection. Your risk is greater if you:

- Are an older adult.
- Have a weakened immune system or other serious health problem such as diabetes.
- Smoke.
- Have certain types of operations, such as abdominal surgery.
- Are malnourished (don't eat enough healthy foods).
- Are very overweight.

### What Are the Symptoms of a Surgical Site Infection?

The infection usually begins with increased redness, pain, and swelling around the incision. Later, you may notice a greenish-yellow discharge from the incision. You are also likely to have a fever and may feel very ill. Symptoms can appear any time from hours to weeks after surgery. Implants can become infected a year or more after the operation.

### How Are Surgical Site Infections Treated?

- Most infections are treated with antibiotics. The type of medication you receive will depend on the germ causing the infection.
- An infected skin wound may be reopened and cleaned.
- If an infection occurs where an implant is placed, the implant may be removed.
- If you have an infection deeper in your body, you may need another operation to treat it.

# WHAT TO KNOW BEFORE YOUR SURGERY

## Preventing Surgical Site Infections:

### What Hospitals Are Doing

Many hospitals take these steps to help prevent surgical site infections:

- **Handwashing:** Before the operation, your surgeon and all operating room staff scrub their hands and arms with an antiseptic soap.
- **Clean skin:** The site where your incision is made is carefully cleaned with an antiseptic solution.
- **Sterile clothing and drapes:** Members of your surgical team wear medical uniforms (scrub suits), long-sleeved surgical gowns, masks, caps, shoe covers, and sterile gloves. Your body is fully covered with a sterile drape (a large sterile sheet) except for the spot where the incision is made.
- **Clean air:** Operating rooms have special air filters and positive pressure airflow to prevent unfiltered air from entering the room.
- **Careful use of antibiotics:** Antibiotics are given no more than 60 minutes before the incision is made and stopped shortly after surgery. This helps kill germs but avoids problems that can occur when antibiotics are taken longer.
- **Controlled blood sugar levels:** After surgery, a patient's blood sugar level is watched closely to make sure it stays within a normal range. High blood sugar delays wound healing.
- **Controlled body temperature:** A lower-than-normal temperature during or after surgery prevents oxygen from reaching the wound and makes it harder for your body to fight infection. Hospitals may warm IV fluids, increase the temperature in the operating room, and provide warm-air blankets.
- **Proper hair removal:** Any hair is removed with clippers, not shaved with a razor. This prevents tiny nicks and cuts through which germs can enter.
- **Wound care:** Incisions are closed with Dermabond.

## Preventing Surgical Site Infections:

### What Patients Can Do

- Ask questions. Learn what your hospital is doing to prevent infection.
- If you smoke, stop. Ask your doctor about ways to quit.
- Take antibiotics only when told to by a healthcare provider. Using antibiotics when they're not needed can create germs harder to kill. Also, finish all your antibiotics, even if you feel better.
- Be sure healthcare workers clean their hands with soap and water or with an alcohol-based hand cleaner before and after caring for you. Don't be afraid to remind them.
- After surgery, eat healthy foods.
- When you return home, care for your incision as directed by your doctor or nurse.

# YOUR EMOTIONAL & SOCIAL CHANGES

## Plan Ahead for Challenging Situations

There will always be challenges to face. Being accountable and self-responsible will be important. Being responsible supports our goals, health, and overall well-being. Plan your food for the day to avoid pitfalls. Become familiar with new ways of handling situations. Be mindful of your intentions.

The greater number of events, places and situations you associate with food, the more often you will feel like eating or perhaps feel deprived you can no longer eat like you once did. You should eventually feel a sense of freedom from the drive to eat — use this opportunity to find new focuses 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 get your food pulverized enough, which could cause you to vomit. Old habits will have to be worked on until your new slow eating is your normal style of eating.

Overeating at parties is easy to do. Snacking is not allowed, so make “party eating” one of your meals for the day. Never munch directly from the bowl, instead, place the food directly on your napkin or small plate and take only the food you are planning to eat. Remember, you can’t eat more than a small child’s portion.

Look for the protein items first and supplement with the other choices after you’ve eaten some protein. Slow down your eating so you will really enjoy your food and won’t feel deprived as you finish your small portion. A party is not a good place to try a new food for the first time. You don’t want to end up sick or sleepy and have to go home ahead of schedule. Take time at get-togethers to socialize more and enjoy the people present.

Stress is your reaction to something you consider a threat or a challenge. Many must let go of the belief that you are helpless victims of circumstance. It will be important to find ways to deal with stress not eating related.

If you are lonely, plan to join family or friends in an activity you enjoy. If you are bored, get involved in a new activity to add variety and increase your self-esteem. When faced with situations likely to trigger emotional eating, it may be helpful to consider how best to care for yourself. Replace negative thoughts with positive ones. Negative emotions are not the only ones which lead to unwise food choices. There is also a tendency to overindulge at celebrations. It is desirable to feel positive and joyful in life and you can do so without sabotaging yourself. Think first about what actions you can take to best care for you.

# YOUR EMOTIONAL & SOCIAL CHANGES

## *Grief and Anger*

Grieving over the loss of food is not uncommon among weight loss persons. Food has been a good friend, lover, comforter, and supporter. Food has been there in the dark of night. It no longer plays the role it did before surgery. A large amount of food will not make you feel better because you are physically unable to consume the same amounts. You might miss using food for support and feel overwhelmed when you realize you need to find other ways to deal with your emotions.

Anger, one of our most common emotions, is often linked to eating. Anger is a powerful emotion and can produce physical sensations such as “simmering”, “stewing” and “boiling”. When you feel angry, ask yourself what’s “eating” you? What is bothering you when you want to eat? If possible, release your anger physically, such as by walking around the block, going to the gym or swimming some laps. Alternatives such as these leave you feeling more relaxed and better about your healthier choices.

## *Depression*

Patients can feel frustrated, weepy and even depressed after surgery. This is a common occurrence and a normal part of the physical and emotional healing process. For a very long time you have focused on having this life-altering procedure. You may feel an emotional let down as your energy reserves are drained. Be positive; this too will pass, and in a few weeks or months your energy and positive attitude will return. Psychological support, counseling and / or medications may be helpful for some.

## *Self Esteem*

Self-esteem is your estimate of your personal worth. It is a reflection of your body image, your life experiences, personality traits, values, beliefs and your perception of how others see you. Having a good body image can be difficult, especially in the American culture. Much emphasis is placed on youth, beauty, fitness and a small size. You can easily fail if you measure your self-worth by a standard which is unhealthy and unattainable to most. If you have unrealistic expectations about how life will be after surgery, when you are thin, when you are fit, when you have (fill in the blank), you may have difficulty improving your self-esteem. Having unrealistic expectations are actually ‘self-esteem busters’.

Learning to recognize and abstain from the negative, critical self-talk you engage in can improve your self-esteem and overall success. Drop self-abusive language and do not call yourself anything you would not call a friend.

## *Body Image*

Healthy and attractive bodies come in all shapes and sizes. Make friends with the body you have. Acknowledging your current body image, coming to terms with your new appearance and gradually adjusting to a thinner you are important steps in managing your weight and life style changes. You are more attractive when you accept who you are and how you look, even if you are heavier than you want to be. Focus on improvements in your fitness level and quality of life rather than what is lacking. Positive affirming statements increase your self-confidence and self-esteem.



# YOUR EMOTIONAL & SOCIAL CHANGES

## ***Skin Issues***

Perhaps you are having trouble with sagging skin. If plastic surgery is out of the question, consider taking your clothes to a tailor or take a sewing class and learn to do your own alterations. You have a new smaller body, you may now stop hiding under large clothes. Garments of elastic or spandex help to strap yourself in and give you a smoother silhouette. Although exercise will help your weight loss, it will do little for the sagging skin. Exercise will give you nice, well-defined muscles under that skin. Toned muscles and adequate hydration help fill in the sag.

## **What About Success?**

Sometimes the thought of reaching your weight loss goal can be frightening or even terrifying. Some people are surprised to find they feel vulnerable and feeling smaller, they feel less powerful than they did at a bigger size. Power does not come from physical size, but from setting and working toward goals, hard work, and in the case of weight loss, improved health. As your physical space takes up less space, your personal space, the space between you and others, may also decrease. At times you may feel crowded. You may feel people are getting too close or your personal space is off balance. As you become more accustomed to your size, those feelings will lessen.

Not knowing the new image you see in the mirror can be frightening, and not recognizing yourself can make you feel as though you have lost your identity. Some people find the way to regain their sense of self, their identity, is to regain weight. Stop. Take a good look at how unhappy you were before surgery. Remember what took you to the surgeons' office. Remember your desire to have an improved quality of life, decreased health issues and less medication. Appreciate all the movements your body can do now it could not do before surgery. Make a list of how your life has improved, such as being able to cross your legs, not worry if you will fit in the seat, and being able to get down on the floor. Better yet is getting back up again!

## **Problem Solving**

Solving the problem is the best way to end the discomfort and distress of emotional eating. The following steps might be useful to effectively solve a problem:

1. Define the problem.
2. Decide what part of the problem you can fix. (It is important to remember we only have control over our own thoughts, feelings and actions. We can attempt to influence others, but we do not have control over what others think or feel or how they act.)
3. Develop an action plan to implement the solution, including thoughts, actions, skills, and support needed.
4. Implement the solution.
5. Assess the outcome
6. Adjust – or replace – the action plan as needed until the problem is solved.

Get outside help when needed.

# YOUR EMOTIONAL & SOCIAL CHANGES

## Believe in Yourself

It might be difficult initially to believe you are losing weight and surgery might actually work. Only time will convince you of your success. As you are able to sustain a weight loss, the belief will settle in. What accomplishments are you proud of? Make and keep a list handy to help remind and inspire you of what you are capable of accomplishing.

## Points to Remember

Remember to focus in on your internal assets, accomplishments, abilities and honorable qualities. You are not just your physical body.

Take time out for yourself and your body. Listen to your favorite music, read, start a garden, choose a hobby — these types of activities will enhance your quality of life. Keep a journal of your thoughts, feelings and dreams. These will assist you in targeting your great accomplishments. It feels good when dreams and goals are met. Journaling your weight loss experience may help you appreciate it more when you reach your new weight.

Relaxation techniques provide relief from stress. Take time out for yourself each day. Soft music, a walk or watching your favorite comedy are just a few ways to relieve stress.

Exercise is a great stress reducer. It not only helps with toning and cardiovascular fitness, it will also improve how you feel about yourself. Your skin will love it too!

Communication is the key for maintaining close, healthy relationships. Share yourself with those around you. Allow others to share their feelings too.

Support groups are a great way to share common experiences, meet new friends and problem-solve together.

This surgery has been the investment of a lifetime. Congratulate and reward yourself for all your hard work!

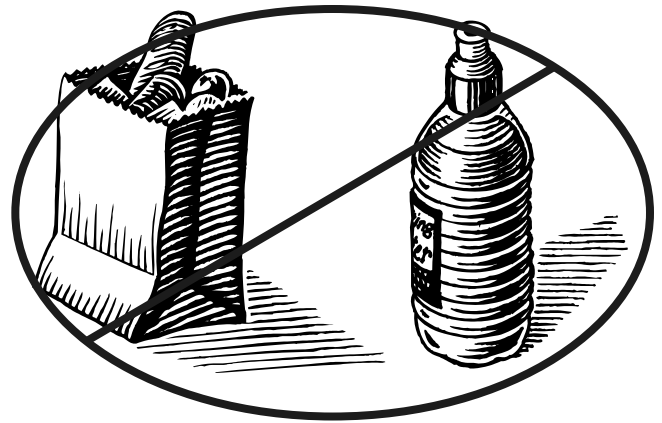


# YOUR SURGERY & HOSPITAL STAY

## Review of Preparations

NPO status is per surgeons recommendations and will be discussed at the pre-op visit.

If you have any questions regarding these preparations, please call your surgeon's office, the Surgical Weight Loss Program Coordinator at 469-8760, or the NMC Pre-Procedural Staff at 469-8668.



## Hospital Admission

Your surgeon will give you a time to check in at Surgery Admissions at Northwest Medical Center. Typically this time allows a two-hour window to perform specific preparations prior to the start of your surgery. These preparations may include starting an intravenous infusion and administering antibiotics and blood thinners. The anesthesiologist will have ordered some sedative medications to help you relax before surgery.

- Upon arrival at the hospital, check in at the front desk in the surgery lobby.
- Each person responsible for your care will ask questions. They will go over your record and confirm your consent for surgery. You may be asked the same questions five or six times, so be patient — they are performing a cross check to make sure all of the information in your record is correct.
- A pre-operative nurse will greet and escort you to the pre-operative area.
- Do not wear makeup, hairpins or jewelry to the hospital.
- An intravenous line for fluids and medications will be started. You may receive medication to make you drowsy and may also make your mouth dry. For your safety, please stay on your stretcher (or “gurney”) with the side rails up. If you need anything after receiving the medication, use your nurse call light button.
- An operating room nurse will take you to the operating room and direct your family or friends to the waiting room.
- After your surgery, your physician will call or visit with your family or friends in the surgery waiting area.

# YOUR SURGERY & HOSPITAL STAY

## **Anesthesia**

An anesthesiologist will speak with you in the pre-operative area before your surgery. The anesthesiologist will plan your anesthesia care. General anesthesia will make you sleep and unable to feel pain.

## **Ready for Surgery**

Now you are ready for surgery and you will be taken into the operating room (OR). In the OR, the nurse and physicians will explain what they are doing, but you should always feel free to ask questions.

When all preparations are complete, you will be asked to slide off your stretcher and onto the operating table. The nurse will put a safety belt across your upper thighs as a precaution. It may seem bright in the room with its large lights and equipment. If the room seems cold, ask the nurse to give you a warm blanket.

You will be asked to breathe oxygen through a mask used to administer the anesthesia. When you are ready, the anesthesiologist will inject some medicine into your IV and you will drift off to sleep. The anesthesiologist will then have you inhale some anesthetic gases to keep you completely unaware as a tube is inserted through your mouth directly into your airway. The anesthesiologist will administer medicines to relax your muscles while your breathing is continued for you with a ventilator (an automatic breathing machine).

Following the completion of your surgery, the breathing tube will be removed once you are able to safely breathe on your own. On occasion, it may be determined you need to be supported or assisted with your breathing. In these instances, the tube may be left in place until you are awake or at least strong enough to breathe on your own. These situations can occur in patients of excessive weight, who have sleep apnea or other respiratory abnormalities. The tube can be uncomfortable when you are awake. It will be removed as soon as possible, but only when it is safe to do so.

## **The Operation**

After you are asleep, the nurses and technicians will position you on the operating table and will prepare the area of your skin to be affected by the surgery. A special antiseptic will be used to decrease the chance of infection. Sterile surgical drapes will then be placed over your body leaving only a small window over the upper abdomen through which the operation is performed. A Foley Catheter may be inserted into your bladder to allow your bladder to drain properly and efficiently during your surgery and while in the recovery room.



Laparoscopic surgery begins by making a small incision within or above the navel and inserting “ports” allowing the surgeon to see and to operate inside your abdomen. The surgery is performed laparoscopically by using a camera, telescope and different instruments that make it possible to do the surgery without a big incision.

It is important to note with laparoscopic surgery, the surgeon may encounter a situation which requires converting the laparoscopic procedure to an open surgery.

# YOUR SURGERY & HOSPITAL STAY

To conclude the surgery, your incisions are closed with very strong sutures, using a suturing pattern precisely restoring the anatomy of the skin to minimize the chance for hernias to form. The skin is then closed with an absorbable suture, hidden just below the skin level, and then the skin edges are closed with surgical glue, staples or sutures. The sutures underneath provide a margin of extra strength. Sometimes a drain will be placed under the skin to prevent any fluid from accumulating in the fatty tissue beneath the skin. This drain is usually removed within 48 hours following surgery.

## Your Liver

Sometimes the liver is found to be enlarged with deposits of fat within its cells. This is so common it is not considered to be abnormal and a liver biopsy is not performed for this finding. However, the liver may be so large it makes performance of the laparoscopic surgery impossible, and may dictate conversion to an open surgery. If the liver should look or feel different, as a result of scarring or local abnormalities, a liver biopsy may be done. In some cases the pathologist comes to the operating room to do a “frozen section” so immediate information can be made available to your surgeon to allow judgments to be made quickly.

On very rare occasions, a liver condition is encountered called cirrhosis, in which the liver is already scarred as a result of hepatitis, or from the effects of obesity. This is a very serious condition and when found unexpectedly, increases the risk of continuing the surgery. In this setting, depending on the surgery procedure planned, the surgeon may stop the surgery and return on a different day for a different procedure.

## Recovery

When your surgery is complete, you will be taken to the Post-Anesthesia Care Unit, or recovery room, where you will be closely watched by nurses until you are wide awake. Although your surgery may take several hours, you will begin to awaken after what will seem like just an instant. Visitors are not permitted in the recovery room.

Many people have little or no recollection of being in the operating room, and this is a normal side effect of the medicines given to you during anesthesia. You may have some awareness of the breathing tube being in your throat, but this is normally removed as soon as you begin to awaken — usually before you are fully conscious of its presence. The recovery room nurses will also administer pain medication as you begin expressing discomfort.

After leaving the recovery room, patients are usually moved to the Medical/Surgical Unit to spend the night. If it is determined you require a higher level of observation, you may be cared for in the Medical/Surgical Intensive Care Unit (MSICU). In the MSICU, you will receive frequent monitoring.

The nurses will repeatedly remind you to breathe deeply and to cough, as well as to use the “Incentive Spirometer” hourly while you are awake to keep your lungs clear. Remember those pre-surgery breathing exercises? It is very important you begin doing these respiratory exercises immediately to prevent any collapse of your lungs and the potential onset of pneumonia. Within four hours post surgery, you will be asked to move about in bed and to stand by the bedside – even take a few steps. Beginning this process of movement needs to be continued hourly while you are awake.

# YOUR SURGERY & HOSPITAL STAY

## Family and Visitors

The following are estimated time frames for your surgery experience:

- Preoperative Holding Area — 1 hour
- Operating Room — 1 hour
- Recovery Room — 2 hours

After you arrive in the Recovery Room, your surgeon will speak to your family in the waiting room. Please inform your family that they will be able to visit once you are made comfortable in a patient room.

The Visitation Policy at Northwest Medical Center allows for two visitors in a patient room at a time. On the day of your surgery, visits should be limited to your support person who you will want to be present to help you with your breathing and movement exercises. Other concerned family members and friends should wait until the next day before visiting.

## The First 24 Hours Post Surgery

You may continue to have the following interventions: IV or oral meds for pain control and hydration, SCD's (sequential compression devices) to prevent blood clots, and you may or may not have a foley catheter.

You may also have a **Gastrograffin Swallow** done. This procedure is designed to check your new stomach for any leaks. This procedure is done in the Radiology Department. You will be asked to swallow a small amount of fluid which is tracked through your stomach and intestine using x-ray.

# YOUR SURGERY & HOSPITAL STAY

Your mission during your inpatient stay is as follows:

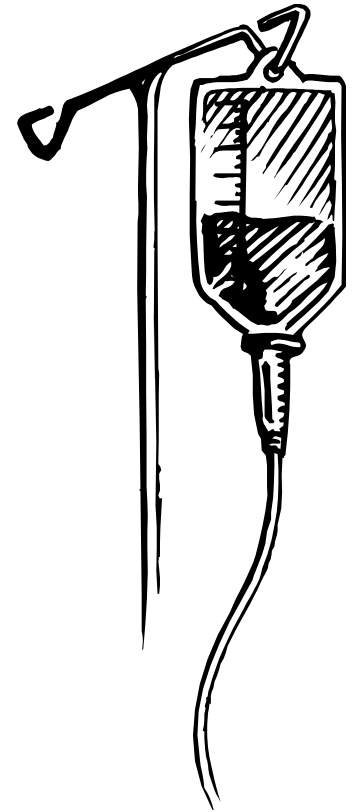
## **Inpatient Daily Responsibilities**

Walk every 1-2 hours  
Use your Incentive Spirometer every 1-2 hours while awake  
Cough and deep breathe every 1-2 hours while awake

Later on this first day after surgery, your stage 1 diet will begin. Take small sips of water to help relieve your thirst. You will try a small, one ounce portion of high-protein sugar-free Jell-O and broth by. Take only as much as your body wants and be sure to swallow slowly — your new stomach pouch is very small. Just one medium-sized swallow will fill it up and it will also drain very slowly. So it is important to wait about five minutes before taking another swallow. It's OK to sip steadily, but if you feel full or nauseated you are going too fast. This is your first lesson on living with your new stomach, so observe your reactions.

Your IV should be discontinued in preparation for your discharge from the hospital. If you are drinking 64 oz. of water and taking in protein, you do not have a fever, and you are walking and breathing well, you should be able to go home by the afternoon the day after surgery. If you have Dermabond, you can shower. Don't use ointment on your incisions.

Remember the importance of water intake throughout the day. This will keep you from becoming dehydrated. You may find it helpful to take small sips of water throughout the day in order to drink your required amount of water.





# RECOVERY & STARTING YOUR NEW LIFE AFTER SURGERY

## Discharge Instructions

Standard hospital discharge time is 10 a.m., but your actual discharge time may vary based upon your condition as determined by your physician. Please be prepared for discharge by having transportation arranged for as early as 10 a.m.

These instructions will serve as a general guideline to assist you in your recovery from surgery. If you have a question or encounter difficulties, do not hesitate to call your surgeon's office or the Program Coordinator.

- Check your temperature twice daily for the first week — call your surgeon if your temperature exceeds 101°F and you cannot bring it down with Tylenol.
- You may shower, but no swimming or tub baths until 14 days after surgery. Notify the surgeon's office of any redness or drainage from an incision.
- Contact your surgeon's office for any nausea/vomiting or abdominal pain which persists beyond four hours. It is **not** unusual to have diarrhea for up to one week after surgery.
- Use your Incentive Spirometer four times daily for 5 days.
- Walk daily to build your endurance. Your goal is to walk for 30 to 60 minutes at a time.
- Increased gas is common for the first three to six weeks. It is recommended that you take Gas-X or Digel for relief.
- **DO NOT** take anti-inflammatory pain medication unless approved by your surgeon (i.e. ibuprofen, Advil, Motrin, Aleve, etc.).
- If instructed by your surgeon, take an antacid (i.e. Prevacid) daily starting the day you get home (does not apply to Band or VSG patients).
- Take vitamin and calcium supplements daily, beginning two weeks after surgery.



## Activity

IF IT HURTS, DON'T DO IT — Activities causing pain are too strenuous and could cause harm. Avoid lifting and straining, such as carrying luggage. Vigorous physical effort will be uncomfortable and is unwise for approximately 10 days.

Go for short walks about five times daily, just as you did in the hospital. Try to go for slightly longer walks each day. Walk further and faster each day. A morning walk in the sunshine will really help to make you feel better. It is not uncommon to tire quickly at first.

If you want to do your walking at a shopping center, go for it. Walk where it will be fun for you. Just remember you will have reduced endurance. It is good to shower daily so you can wash your incisions and the site of any tubes. There will be a small amount of goeey discharge around tubes, and it is best to wear a small gauze dressing to protect your clothing.

## Follow Up

Once you are at home, call the surgeon's office to schedule your first follow-up appointment for about 10 days following surgery if you did not schedule at the pre-op visit. During this visit, the surgeon will check your incisions and answer any questions you may have.

# RECOVERY & STARTING YOUR NEW LIFE AFTER SURGERY

## Potential Problems

Call your surgeon's office if you are experiencing any problems, such as:

- Pain or swelling of the legs
- Shortness of breath
- Temperature over 101°F, or shaking chills
- Swelling of the abdomen
- Pain, swelling, redness or drainage of the incision
- Pain and burning with urination
- Nausea/vomiting or abdominal pain

## Post-Operative Recovery Expectations

Every person heals differently. Don't compare your progress to another person's. Don't compare your pain level, weight loss or amount you can eat. You will all end up at the same place in one year, at approximately 80% less of your excess weight, providing you follow **The Four Rules** (see page 27).

## Nausea and Vomiting

It is very common for post-operative patients to feel nauseated at times during the first few months. If this nausea causes frequent vomiting, call your surgeon's office for management of the problem.

The new healing stomach is similar to a chamois, the leather cloth that dries a car. Early on the new stomach is irritable. For the gastric bypass/sleeve/duodenal switch, your surgeon needed to staple and cut the stomach to complete the operation, so it is not likely to expand or accept solids or fluids comfortably.

At approximately 8-12 weeks, this pouch becomes less irritable, like a semi-moist chamois. It is able to move better but still can't expand very well. This is why for the first few months, two or three bites at one time is all the new pouch can tolerate. This is OK.

Approximately three to six months following surgery, the new stomach is pliable, like a wet chamois, and patients tolerate foods better and at a more normal volume. In fact, patients are sometimes terrified because they can eat so much more...a whole egg! The pouch can now tolerate a normal small amount (i.e. 1/2 chicken breast which is 2 to 3 oz., two broccoli florets).

Also remember nausea can be caused by not taking the prescribed amount of protein.

Initially following surgery, the patient is virtually living off stored fat for energy and replacing muscle with oral intake of protein food. We have a lot of fat to live off of for a short period of time. This is why the "protein first" rule is so important.

# RECOVERY & STARTING YOUR NEW LIFE AFTER SURGERY

## Frothing

As the new pouch heals, mucous sometimes is excreted to help break down the food. With some patients this mucous backs up into the esophagus and causes frothy clear vomiting. This is short lived and usually resolves itself by the third month following surgery. Frothing is not a complication. Try drinking hot water a half hour prior to your meal to emulsify the mucous so the meal is tolerated better.

## Follow-up Expectations

Surgery is only one portion of the bariatric tool; follow up is the other. Appointments with your surgeon are frequent for the first year, then become yearly for five years or any time you are having a problem.

What is involved with follow up?

- Review lab results
- Review the **Four Rules**
- Review emotional changes
- Review medications and co-morbidities
- Evaluate your progress and weight loss
- Give encouragement and referral to a psychological/nutritional professional if necessary

## Lab Requirements

Prescriptions for labs will be provided. Depending on your particular insurance, you may either take the request directly to the lab draw station or request an order from your Primary Care Physician.

A lab panel (CBC, lipid panel, Vitamin A, D, and B12 levels and comprehensive metabolic panel) will be done at the discretion of your surgeon. If you are diabetic, you will also require a HGB A1C. These lab values help to evaluate your body systems. Often they are a wonderful reflection of how healthy you are becoming.

## First Week Post Surgery

It is important to realize your strength and stamina are decreased as you continue your recovery from major surgery. You may have episodes of feeling sick or exhausted; this is normal. Most persons experience no difficulties, but occasionally, unexpected new symptoms such as vomiting, fever or pain can develop. Often a simple phone call to the surgeon's office or the Program Coordinator can solve the problem, but from time-to-time, it is necessary for a patient to return to the hospital for additional treatment.

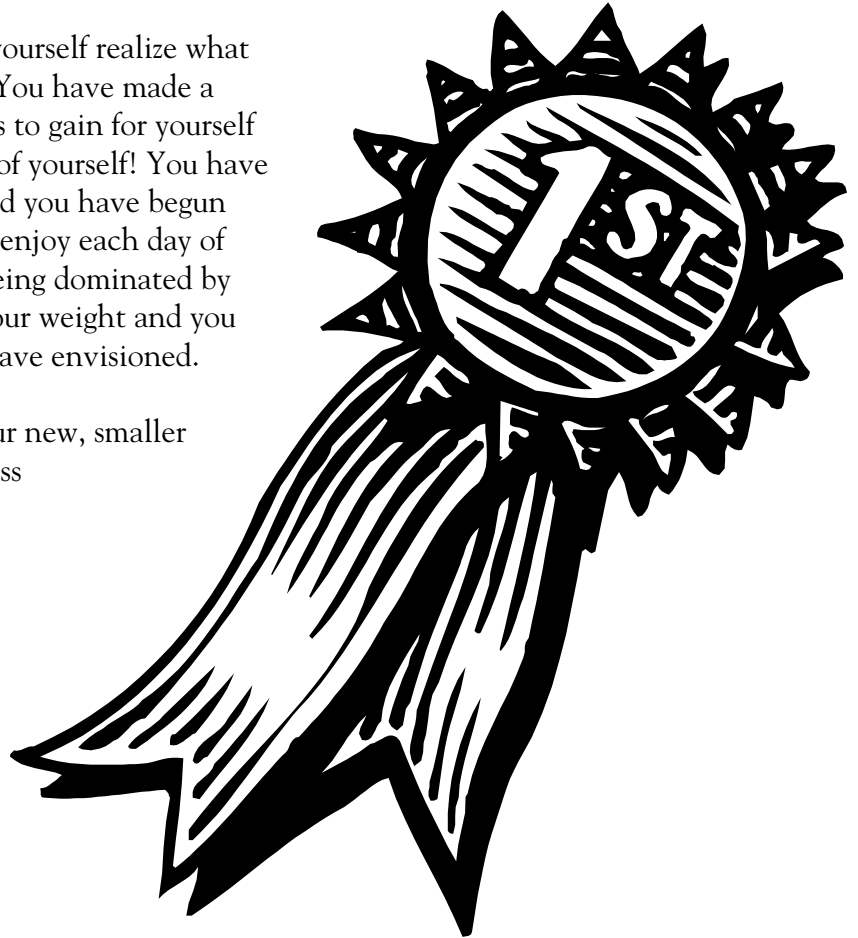
You will receive a follow-up phone call during your first week post op. During this first week, your daily activities should continue to be getting out of bed, walking, continuing with your deep breathing and coughing exercises, and using the Incentive Spirometer. If you are from out-of-town and staying in a local hotel, you may even feel up to getting out and taking in some of the sights around Southern Arizona. Just be sure not to plan any long excursions or strenuous activities.

## RECOVERY & STARTING YOUR NEW LIFE AFTER SURGERY

### CONGRATULATIONS!

You have made a wonderful decision to help yourself realize what it is like to have a healthy, normal-size body. You have made a courageous decision to take the necessary risks to gain for yourself what you need. You can and should be proud of yourself! You have successfully completed a difficult operation and you have begun a new and exciting time in your life. Learn to enjoy each day of freedom from dieting and the freedom from being dominated by food and hunger. You are now in control of your weight and you possess the power to become the person you have envisioned.

Have a wonderful time as you change into your new, smaller body. Take time to share the joy of your success with others!





# THE FOUR RULES

## The Four Rules

The **Four Rules** are very simple. These rules were developed so that you won't count another calorie, fat or carbohydrate gram, or have another diet bar or diet drink again. Follow the rules faithfully and the weight will come off and stay off. Break the rules consistently and you will gain weight. Don't follow any other program off the Internet or from any other surgical office. Your surgery is a tool to be used in conjunction with these **Four Rules**. Your surgeon cannot predict any weight loss results unless you follow them.

### 1. Protein First

**Eat protein first at every meal.** At least 50-percent of your meal needs to be protein. Vegetables or fruits come second. Most weight loss patients tolerate one to two meals very well. The body **DOESN'T NEED** three meals per day, so listen to your hunger cues, not the clock.

### 2. Drink water (a minimum of 64 oz. per day)

**Drink water!** Not tea, soda, coffee or juice. You may drink other fluids in addition to water, such as Crystal Light or Sugar-free Kool-aid. Your surgeon acknowledges that right now you can only tolerate a mouthful at a time- this is normal. Eventually the amount will increase to possibly two to four ounces at one time. **DO NOT DRINK SODA!!! NOT EVEN DIET SODA!!!**



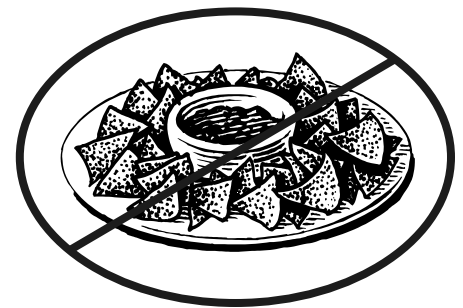
### 3. Exercise

**Reach your goal of exercising daily for 30 - 60**

**minutes.** Your surgeon recognizes that today you may be struggling with a simple walk down the hall and that your energy is at an all time low. You are only being asked to move your body a little more every day. For the most part, you will feel back to normal six weeks after surgery; however, everybody is different.

### 4. NO Snacking/Mindfulness

Our brain lives off of glucose (sugar) and oxygen only. Our brain remembers how good it felt with the shot of glucose it just got from the snack, and when that glucose is gone (about one to three hours later) it sends you another message to snack again. Snacking actually makes us hungrier! Don't open the door to snacking. Snacking will slow down or even stop your weight loss and can cause weight gain, depending on how much and how often you snack. Your surgeon altered your digestive system, not your eating habits. You need to commit **today** to a "no snacking" policy.



# THE FOUR RULES

## The Rest of Your Life

Follow the **Four Rules!** As you approach your weight goals, you must be careful to monitor your progress daily and continually observe your behavior and your choices. It is important to weigh yourself daily and to be conscious of any weight fluctuations in relationship to your eating. You must choose to eat healthy and avoid irregular eating patterns. Remember — NO SNACKING and NO EATING SWEETS.

The process of losing weight and maintaining your weight loss is not complicated or difficult. The information provided in the post-operative section that follows describes the simple and necessary steps in detail. Be sure to read it carefully and re-read it frequently so the new behaviors you must follow become a part of your daily habits.



# YOUR NEW LIFESTYLE

## Introduction

After surgery, you are not “on a diet.” You will eat small portions of food and find that you are completely satisfied and you don’t want to eat any more. Nevertheless, if you eat healthy foods, your weight loss will proceed rapidly and safely, and you will avoid discomfort.

## Eat Only at Meal Time

A “meal” is not just what and when you eat, but also how you eat. For at least the first few months following surgery, you should only eat two or three meals per day. You need to establish a pattern of eating so your body grows accustomed to the amount of food in each meal and the time of day. This keeps you from becoming excessively hungry. It is best to make a rule in your mind regarding the designated time and place for each meal. For example, establish your kitchen or dining table as the place to eat, and make it a rule you normally do not eat anywhere else except when away from home. When you leave your place for eating, all eating should cease. Avoid eating on the run or when doing something else, such as watching TV, working on the computer or reading a book.

In the same way, a meal is to be eaten from start to finish, in one place, and cannot be continued later, even if some of your usual food portion is left over. Once you feel satisfied and you have left the table, the meal is over. Any food eaten elsewhere or later on is considered a **snack**, and snacks are very **addictive** and are to be avoided.

## *Each Meal Needs to Contain Protein*

When you eat, make sure you start each meal with protein. Protein is the main source of irreplaceable building materials our bodies require to repair and maintain our organs. Without a consistent intake of protein, your body will heal more slowly, and your skin will not be able to shrink and remodel. Although you may lose weight, you will also lose the benefits of good health. Eating your protein first is also a key to achieving rapid weight loss in the first 12 months post surgery. By eating protein first, your body’s requirement for protein calories will be satisfied. Remember, the amount of food you are consuming is greatly reduced from your pre-surgery eating habits. Your body will go in search of additional calories by breaking down your fat stores and not take it from your muscle tone which is a protein source.

Another important benefit from eating generous amounts of protein first is that you will experience earlier and better satisfaction from the foods you eat. Protein appears to be the best stimulant of the body’s reaction that makes you feel *satisfied*.

## *Eat Slowly*

Enjoy and savor your food. Take time to prepare your food so that it looks and tastes good, even though you are eating smaller amounts. Eat slowly and chew your food very thoroughly. Try to pay attention to each bite to get the maximum enjoyment from it.



# YOUR NEW LIFESTYLE

When you begin to eat, the food initially enters your small new stomach then begins to gradually squeeze out into your small bowel. As the food enters the intestine and is digested, your brain begins saying you are satisfied. If you eat more slowly, you will actually eat less (and lose more weight) when you receive the satisfied message. When you are satisfied, you are finished. Don't become trapped in the belief you have to eat everything on your plate, or you can't possibly get by with such a small meal. Your meals will be small, and they are supposed to be small. If you feel full and satisfied, but you try to eat more, you will begin to feel nauseated and you may throw up. The point is not to see how close you can come to nausea. Learn to eat until you are satisfied and avoid getting sick.

## ***Chew Your Food Well***

You will derive more satisfaction and enjoyment from your food if you chew it thoroughly before swallowing. More importantly, your food will leave your stomach through the small opening at the bottom and help you feel full and satisfied. If you swallow a large chunk of food it may plug the opening. Then you will not be able to eat or drink anything until the plug goes away, either by being gradually digested or by vomiting.

Red meats are especially difficult to chew completely, and they cause many patients a lot of trouble. It is better to avoid red meats during the first six months after surgery, and be especially cautious when you do try them in a meal. Purchase the best cuts of meat, such as filet mignon or double-ground sirloin. Cut your meat in very small pieces and chew each bite very carefully and thoroughly.

## ***No Sweets or Sugars!***

Foods containing sugar, such as sweet fruit, juices, candy and some salad dressings and barbeque sauce, can make you feel very strange if you eat them, particularly on an empty stomach. This is because they contain high amounts of sugar, and with your smaller stomach and shorter pathway to your small intestine, the sugar is absorbed much more rapidly into your blood stream. Since sugars also can make you fat, or keep you from losing weight, it is probably best to avoid them.



## ***Dumping Syndrome (Gastric Bypass only)***

“Dumping Syndrome” or “Post-Prandial Syndrome” are names for a reaction which occurs when sugar is rapidly placed into the small intestine and absorbed into the blood stream. Most patients experience cramps, weakness, lightheadedness and may have diarrhea. These conditions can make you want to lie down or leave the table. Fortunately, the syndrome lasts for about 30 to 40 minutes. As explained by your surgeon during the educational seminar, it is actually helpful when patients endure a bout of dumping syndrome because it will reinforce positive behavior later on. It's a good way to learn your new limits after surgery. Still, you are better off if you don't try to find out if you are intolerant of sugar in this way. Because sugar is absorbed rapidly, it not only has the potential to make you feel very sick, it will also slow your weight loss! Your best decision is to simply avoid fruit juices, candy and sugary desserts.

# YOUR NEW LIFESTYLE

## ***Drink Lots of Water***

Drink at least 64 to 72 ounces of plain water each day depending upon how far out you are from your surgery. Drink it frequently throughout the day whether you are thirsty or not. If you are thirsty, you are already behind in your water intake. You will not be able to drink large gulps or chug-a-lug a glass all at once. Take a mouthful at a time, and allow time for your small stomach to empty.

Do not drink water with your meal. Begin drinking water again about 30 minutes after you finish eating and keep up a steady intake until shortly before your next meal.

## ***Vitamin Information***

Vitamins are essential to the proper functioning of your body's chemical "enzyme" systems, which enable all your cells to work properly. Your body cannot make them and must obtain them by consuming foods that contain adequate amounts of these special chemicals. Because your intake of food is limited, you are unable to receive enough vitamins from the normal process of eating. You must take supplemental vitamins and some minerals regularly to avoid serious nutritional problems.



You will be taking an iron supplement following your surgery and then depending on your lab results, your surgeon may also prescribe supplemental iron to be taken daily. Some patients may be diagnosed as anemic. If iron is prescribed, it should be in a special form called Ferrous Fumerate which promotes absorption and reduces irritation of the stomach and intestine. Most over-the-counter formulations of iron are called ferrous sulfate and are not absorbed well through your altered anatomy.

**(Gastric Bypass and Duodenal Switch patients only).**

Calcium supplementation is also important because you may not take in enough calcium through the foods you eat to meet your body's needs. This can be remedied by taking a calcium supplement. You will start taking your vitamins two weeks after surgery when you start eating regular food. It is best to get into the habit of taking them every day.

## ***Carbonated Beverages***

It's not the fizzle in carbonated beverages that's the problem; it's the flavor and the tendency these drinks have to make you want to eat or snack. A small amount of sparkling water without flavoring is OK.

## ***Fats***

Fats are very high in calories. Any significant intake of fats, such as cooking oils, salad dressing, mayonnaise or butter seriously decreases the rate of your weight loss. Learn to avoid fats and become aware of the ways they sneak into your mouth while hiding in other foods. Nearly all foods now list the fat content in grams on the package, but the portion size and the percentage of fats can still trick you. When preparing foods, try to broil, bake, poach or boil rather than fry, especially deep-frying.

# YOUR NEW LIFESTYLE

## *Alcohol*

For a patient with a gastric bypass or sleeve, alcohol can be dangerous, mainly to your liver. It is absorbed much more quickly into your blood stream, and as a result, much higher levels of alcohol flow to the liver. You will also feel the effects on your brain with greater intensity. Remember alcohol went through your liver before it got to your brain. The simple rule is: never more than two drinks (standard size bar drinks) within a 24-hour period – and only on special occasions such as your anniversary or birthday. **Alcohol should be avoided for the first year after surgery.**

## *Daily Exercise*

Exercise provides the key to maintaining your body's conditioning, muscle mass and strength as the rapid weight loss begins following your surgery. When your body lacks enough energy, it must select something to burn for fuel. We want it to burn the extra fat, but it has a natural tendency to burn unused muscle first. If you are not using your muscles, your body will consume muscle mass to meet its energy needs since your surgery now limits your calorie intake. To prevent this from happening, your goal is to gradually increase the amount of time you can spend exercising until your endurance reaches 60 minutes daily. It is **very important** to exercise daily.

Remember in the hospital how you began getting up and moving almost immediately after your surgery? It is best to progressively work up to the 30 to 60 minute goal (about 1.5 miles) by walking briskly and breathing hard. You should feel your heart beating forcefully. This is aerobic exercise and it is exactly what your body needs to maintain and improve your conditioning.

Other forms of aerobic exercise, such as low-impact aerobics, cycling, swimming and exercise machines, are equally effective. Exercise is easier to do early in the day or at lunchtime, when you probably won't want to eat anyway. Many people find the early morning exposure to light, sunshine, and fresh air helps them feel better all day. If you miss your exercise, don't feel guilty, just do it tomorrow!

Aerobic dancing and jogging are healthy, but may be very hard on your joints; therefore, it is not recommended until you have lost most of your excess weight and you have tried these types of exercise carefully.

# YOUR NEW LIFESTYLE

## Summary: Simple Guidelines for Achieving Life-Long Weight Control

- Choose foods high in protein, moderate in carbohydrates and low to moderate in fat.
- Eat slowly in a relaxed setting and chew food very well.
- Eat no more than three small meals per day. The first half of each meal is to be protein.
- Stop eating when you first notice the sensation of fullness!
- **Do not snack!**
- Drink a minimum of 64 ounces (2 quarts) of water every day.
- Do not drink liquids with your meals or 30 minutes after meals.
- Avoid sugar. Sugar will only sabotage your success.
- Avoid greasy, spicy foods and fast foods.
- Avoid carbonated beverages and alcohol.
- Take the nutritional supplements as prescribed.
- Exercise aerobically for 30 to 60 minutes every day.

# YOUR NEW LIFESTYLE

## DRUGS THAT CAN DAMAGE THE NEW STOMACH:

|                    |              |               |
|--------------------|--------------|---------------|
| • Advil            | • Oruval     | • Tandearil   |
| • Motrin           | • Anthra-G   | • Azolid      |
| • Aleve            | • Equagesic  | • Ketoprofen  |
| • Clinorial        | • Pamprin-IB | • Bufferin    |
| • Nalfon           | • Arthropan  | • Lodine      |
| • Amigesic         | • Feldene    | • Tolecin     |
| • Darvon Compounds | • Percodan   | • Butazolidin |
| • Naprosyn         | • Ascriptin  | • Meclomen    |
| • Anacin           | • Fiorinal   | • Uracel      |
| • Disalcid         | • Ponstel    | • Midol       |
| • Nayer            | • Aspirin    | • Voltaren    |
| • Anaprox          | • Ibuprofen  | • Celebrex    |
| • Dolobid          | • Rexolate   | • Mobic       |
| • Orudis           | • Asproject  |               |
| • Ansaid           | • Indocin    |               |

ALL NSAIDS are also included in the above list. These are to be avoided for life in Gastric Bypass.

Starting eight weeks after surgery it is OK to take 81 mg daily of enteric coated aspirin and/or NSAIDS for patients who have had Band/Sleeve/Duodenal Switch.

I want to help everyone understand the reason NSAIDS are dangerous for us. Contrary to popular belief, it is not just that they are “pouch burners” as the industry wants us to believe. It goes much deeper than that. According to an article published in the June 1999 New England Journal of Medicine, NSAIDS, once absorbed into the blood stream cause a chain of chemical reactions that affect the prostaglandins and this in turn reduces the production of mucus in the GI system. The mucus is what lines our GI systems and protects our pouch and intestines from damage.

If the mucus production is reduced, this would allow ANYTHING, including eating something with too sharp an edge or food that is too spicy, to inadvertently begin a marginal ulcer. The best answer is to avoid NSAIDS at all costs. Taking H2 receptor drug, such as Prilosec, Prevacid or Nexium is only a band aid and no guarantee it will protect you.

— By Michael Van Hook-Troesch, RN

## DRUGS THAT ARE CONSIDERED SAFE:

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| • Benadryl               | • Dimetapp               | • Fleet Enema            |
| • Glycerin Suppositories | • Milk of Magnesia       | • Phazyme                |
| • Safetussin             | • Triaminics (all)       | • Tylenol Cold Products  |
| • Colace                 | • Dulcolax Suppositories | • Gas-X                  |
| • Imodium AD             | • Peri-Colace            | • Robitussin             |
| • Sudafed                | • Tylenol                | • Tylenol Extra Strength |

# MEAL PLAN & LISTS

**DIET STAGE:** Stage 1

**TIME FRAME:** Post-op day 3-14

**FLUIDS/FOODS:** Clear liquids such as noted above plus full liquids to include high protein shakes. The best choice of shakes have 25 to 30 grams of protein a serving.

Women: 2 to 3 protein shakes/day plus water, broth, diet gelatin or Crystal Light

Men: 3 to 4 protein shakes/day plus water, broth, diet gelatin or Crystal Light

Patients should aim for a minimum of 64 oz. water/day

**DIET STAGE:** Stage 2

**TIME FRAME:** Post-op day 15 to 30 (2 to 4 weeks)

**FLUIDS/FOODS:** Addition of 1/4 to 1/2 cup soft protein foods: cottage cheese (low fat/fat free), yogurt (low fat/fat free/sugar free/Greek), soup (bean, egg drop, miso), beans, boiled, refried with no fat), scrambled, poached or lightly fried egg, 1 oz. low fat cheese (string cheese), pureed or ground meats and poultry, soft moist fish, thin-sliced chicken or turkey deli meat, cooking spray and a small amount of low fat mayo to moisten foods

Women: 2 shakes/day plus 1/4 cup soft protein food plus any allowable clear fluids

Men: 2 shakes/day plus 1/4 to 1/2 cup soft protein food plus any allowable clear fluids

Patients may only be able to tolerate a few tablespoons of food at each meal. It is OK to continue 3 shakes per day is unable to tolerate food.

Now aim for at least 64 to 75 oz. fluids/day

**VITAMINS AND MINERALS:** Start on Day 15 (Stage 2) — take as prescribed by surgeon.

## For Duodenal Switch Patients Only:

**FAT SOLUBLE VITAMINS:** ADEK tablets should be taken twice a day. ADEK tablets can be purchased from Bariatric Advantage. If you purchase from Bariatric Advantage, women should take 2 tablets per day and men should take 3 tablets per day.

**VITAMIN A:** 5,000 to 10,000 IU/day

**VITAMIN D:** 400 to 800 IU/day

**VITAMIN E:** 400 IU/day

**VITAMIN K:** 1 mg/day

# MEAL PLAN & LISTS

**DIET STAGE:** Stage 3

**TIME FRAME:** Post-op 30 to 60 days (4 to 8 weeks)

**FLUIDS/FOODS:** Diet may now include well-cooked soft vegetables and soft and/or peeled fruit, soft low fat cheeses, ground or diced meats, canned fish or chicken, thin-sliced chicken or turkey, tofu and any style egg, cooking spray and a small amount of low fat mayo to moisten foods

Women: 2 shakes/day plus 1/4 to 1/2 cup protein food and 1/4 cup soft vegetable or fruit

Men: 2 shakes/day plus 1/4 to 1/2 cup protein food and 1/4 cup soft vegetable or fruit

Sample menu: Breakfast — protein shake; Lunch — protein shake; Dinner — 1/4 to 1/2 cup allowable protein food plus 1/4 cup vegetable or fruit

Patients may only be able to tolerate a few tablespoons of food at each meal.

Now aim for 72 oz. fluids/day for women and 100 oz. fluids/day for men. (Shakes plus allowable clear liquids)

**DIET STAGE:** Stage 4

**TIME FRAME:** Post-op 60 to 182 days (8 to 26 weeks)

**FLUIDS/FOODS:** Diet should progress according to the patient's tolerance of foods. Continue with 1 to 2 protein shakes a day and drink adequate fluids. Now two meals may consist of a protein food plus 1/4 cup vegetable plus 1/4 cup fruit.

Sample meal plan: Breakfast — protein shake; Lunch — 1/4 to 1/2 cup allowable protein food plus 1/4 cup vegetable plus 1/4 cup fruit; Dinner — 1/4 to 1/2 cup allowable protein food plus 1/4 cup vegetable plus 1/4 cup fruit

In time, one may add one or two tablespoons of whole grains like brown rice or oats each meal.

Sample meal: 2 to 4 oz. chicken plus 1/4 cup steamed green beans plus small piece banana plus 2 to 4 tablespoons whole grain starchy food like brown rice

# MEAL PLAN & LISTS

## How to eat

1. Protein goals are based on height. Please refer to chart below. It is important to start every meal with protein, then move on to vegetable and fruit.
2. Starchy foods like rice, pasta, bread, tortillas and potatoes should be avoided until the patient can comfortably eat their recommended amount of protein plus vegetables and fruit.
3. Patients may tolerate only a few tablespoons of food at each meal, to start, and are encouraged to do their best.
4. Patients should wait 30 minutes after a meal to drink any fluids and refrain from drinking fluids with meals.
5. Patients may need to supplement their regular foods intake with protein shakes and/or powders to ensure they meet their protein needs.
6. Patients should strive for plenty of high quality protein a day, such as lean meats, poultry, fish, eggs or a combination of protein foods plus protein shakes and/or powders.
7. Dehydration is a major concern after surgery. The Institute of Medicine recommends a total fluid intake (water plus other beverages) of 9 cups a day (72 oz.) for women and 12.5 cups a day (100 oz.) for men in temperate climates. In southern Arizona, where temperatures and humidity readings can be extreme, additional fluids may be needed.
8. Practice eating slowly and mindfully, chewing your food until it is the consistency of applesauce in your mouth.
9. It is recommended that patients try just one or two new foods each day, once they are beyond the first few stages of the diet.
10. Protein takes priority. Start your meal with the protein, then move on to the vegetable and fruit.
11. Practice portion control by using small plates, bowls and utensils. You may wish to use measuring cups and spoons on a regular basis to ensure that your portions remain within the guidelines.
12. All liquids, other than protein shakes, should be calorie-free. Examples of acceptable liquids include water, herbal or decaf tea, and Crystal Light.
13. Patients should get all the nutrition/calories from food and protein shakes. Milk, juice, soda and alcohol are all sources of calories.
14. Carbonated beverages may cause gas and bloating, and therefore should be avoided.



# MEAL PLAN & LISTS

15. Caffeine containing beverages are appetite stimulants and cause diuresis. All coffee and coffee-containing drinks should be avoided for six months after surgery. By six months, patients may try a small amount of decaf coffee (1/2 cup), then progress to no more than one cup of regular coffee a day. Since sugar and milk can be sources of additional calories, the use of artificial sweeteners is advised. For some people, caffeine can be mildly dehydrating.
16. Alcohol should be avoided for the first year after surgery. After that time, a small amount of a couple of ounces may be acceptable for special occasions such as birthdays and anniversaries.
17. Refrain from eating processed foods and concentrate on real food instead. If something comes in a can, box or bottle, you can be sure it's been processed.
18. Once the diet is normalized, bake, broil or grill meats instead of frying. Crockpot cooking is good for tender meat.
19. Consider keeping a food/mood/exercise/weight journal to track your progress. Research has shown that those who use this method to track progress are more accountable and may be more successful at weight loss.
20. Once the patient can easily eat the recommended amount of protein and vegetables, very small portions of whole grain products may be slowly introduced back into the diet. For example, start with one to two tablespoons of brown rice or oats.
21. Regular exercise is imperative for successful weight loss after surgery. Incorporate daily exercise into your routine. Using a pedometer every day can be a motivating force to walk more each day.
22. **Special note for gastric bypass patients about dumping syndrome, also known as rapid gastric emptying:** After gastric bypass or other surgery that removes all or part of the stomach, a condition called dumping syndrome may occur. This happens when foods bypass the stomach quickly and enter the small intestine incompletely digested. The symptoms may happen after eating foods that are high in concentrated sweets and/or fats, so these items should especially be avoided. Dumping syndrome symptoms may include nausea, vomiting, bloating, light-headedness, upset stomach, abdominal cramps and/or diarrhea.

# MEAL PLAN & LISTS

## Protein Needs

### WOMEN: 50 TO 75 GRAMS/DAY

60 inches tall: 50 to 60 grams/day

65 inches tall: 60 to 65 grams/day

70 inches tall: 65 to 75 grams/day

### MEN: 70 TO 100 GRAMS/DAY

60 inches tall: 70 to 75 grams/day

66 inches tall: 75 to 80 grams/day

77 inches tall: 80 to 90 grams/day

# MEAL PLAN & LISTS

## DRUGS THAT CAN DAMAGE THE NEW STOMACH:

|                    |                |                |
|--------------------|----------------|----------------|
| • Advil            | • Erythromycin | • Indocin      |
| • Motrin           | • Oruval       | • Tandearil    |
| • Aleve            | • Anthra-G     | • Azolid       |
| • Clinorial        | • Equagesic    | • Ketoprofen   |
| • Nalfon           | • Pamprin-IB   | • Tetracycline |
| • Amigesic         | • Arthropan    | • Bufferin     |
| • Darvon Compounds | • Feldene      | • Lodine       |
| • Naprosyn         | • Percodan     | • Tolecin      |
| • Anacin           | • Ascriptin    | • Butazolidin  |
| • Disalcid         | • Fiorinal     | • Meclomen     |
| • Nayer            | • Ponstel      | • Uracel       |
| • Anaprox          | • Aspirin      | • Midol        |
| • Dolobid          | • Ibuprofen    | • Voltaren     |
| • Orudis           | • Rexolate     |                |
| • Ansaid           | • Asproject    |                |

ALL NSAIDS are also included in the above list (see remarks listed below for explanation of NSAIDS dangers). These are to be avoided for life in Gastric Bypass.

I want to help everyone understand the reason NSAIDS are dangerous for us. Contrary to popular belief, it is not just that they are “pouch burners” as the industry wants us to believe. It goes much deeper than that. According to an article published in the June 1999 New England Journal of Medicine, NSAIDS, once absorbed into the blood stream cause a chain of chemical reactions that affect the prostaglandins and this in turn reduces the production of mucus in the GI system. The mucus is what lines our GI systems and protects our pouch and intestines from damage.

If the mucus production is reduced, this would allow ANYTHING, including eating something with too sharp an edge or food that is too spicy, to inadvertently begin a marginal ulcer. The best answer is to avoid NSAIDS at all costs. Taking H2 receptor drug, such as Prilosec, Prevacid or Nexium is only a band aid and no guarantee it will protect you.

— By Michael Van Hook-Troesch, RN

## DRUGS THAT ARE CONSIDERED SAFE:

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| • Benadryl               | • Dimetapp               | • Fleet Enema            |
| • Glycerin Suppositories | • Milk of Magnesia       | • Phazyme                |
| • Safetussin             | • Triaminics (all)       | • Tylenol Cold Products  |
| • Colace                 | • Dulcolax Suppositories | • Gas-X                  |
| • Imodium AD             | • Peri-Colace            | • Robitussin             |
| • Sudafed                | • Tylenol                | • Tylenol Extra Strength |

# KNOW YOUR PROTEIN

## The Importance of Protein

1. Protein assists in helping maintain lean muscle mass. Without adequate protein intake, our bodies favor burning muscle tissue in place of fat.
2. Protein helps you feel full for a longer time after a meal.
3. Protein is important for wound healing and hair growth. Without protein, hair loss that occurs during the period of rapid weight loss can be significant.

## Foods Containing Protein

| <u>FOOD</u>                     | <u>SERVING SIZE</u> | <u>PROTEIN GRAMS</u> | <u>CALORIES</u> |
|---------------------------------|---------------------|----------------------|-----------------|
| Anchovies – canned              | 5                   | 6                    | 42              |
| Bacon – cooked                  | 3 strips            | 6                    | 109             |
| Bass – striped, baked           | 3 oz                | 9                    | 105             |
| Beans – baked beans             | 1/2 cup             | 6                    | 118             |
| Beans – black beans             | 1/2 cup             | 8                    | 114             |
| Beans – refried                 | 1/2 cup             | 8                    | 134             |
| Beef – brisket, lean braised    | 3 oz                | 21                   | 309             |
| Beef – chuck pot roast, lean    | 3 oz                | 23                   | 282             |
| Beef – corned beef brisket      | 3 oz                | 15                   | 213             |
| Beef – corned beef, canned      | 3 oz                | 10                   | 85              |
| Beef – ground beef              | 3 oz                | 21                   | 46              |
| Beef – porterhouse steak        | 3 oz                | 21                   | 260             |
| Beef – roast beef               | 3 oz                | 16                   | 105             |
| Beef – short ribs, lean         | 3 oz                | 18                   | 400             |
| Beef – T-bone steak, lean       | 3 oz                | 21                   | 253             |
| Black-eyed peas                 | 1/2 cup             | 7                    | 99              |
| Bluefish – baked                | 3 oz                | 22                   | 135             |
| Broccoli – cooked               | 1/2 cup             | 3                    | 25              |
| Butterfish – baked              | 3 oz                | 19                   | 159             |
| Carp – baked                    | 3 oz                | 19                   | 138             |
| Catfish – breaded               | 3 oz                | 15                   | 194             |
| Cheese – most types             | 1 oz                | 8                    | 100             |
| Cheese – ricotta                | 1/2 cup             | 14                   | 200             |
| Chicken – boneless breaded      | 4 oz                | 17                   | 300             |
| Chicken – breast, broiler/fryer | 1/2 breast          | 35                   | 364             |

# KNOW YOUR PROTEIN

| <b>FOOD</b>                       | <b>SERVING SIZE</b> | <b>PROTEIN GRAMS</b> | <b>CALORIES</b> |
|-----------------------------------|---------------------|----------------------|-----------------|
| Chicken – canned w/broth          | 2.5 oz              | 16                   | 117             |
| Chicken – roasted breast          | 2 oz                | 11                   | 60              |
| Chicken – wings                   | 4 pieces (5 oz)     | 15                   | 230             |
| Chicken – deli thin smoked breast | 2 oz                | 11                   | 60              |
| Chickpeas                         | 1 cup               | 6                    | 142             |
| Clams – cooked                    | 20 small            | 23                   | 133             |
| Cod – baked                       | 3 oz                | 20                   | 90              |
| Cottage cheese – creamed          | 1/2 cup             | 20                   | 108             |
| Cottage cheese – low-fat          | 1½ cups             | 14                   | 82              |
| Cottage cheese – nonfat           | 2½ cups             | 15.5                 | 101             |
| Crab – king, cooked               | 3 oz                | 16                   | 82              |
| Crab – blue, cooked               | 3 oz                | 17                   | 87              |
| Crab – crab cakes                 | 1 (2 oz)            | 12                   | 93              |
| Cream cheese                      | 1 oz                | 2                    | 99              |
| Deli meats/ bologna beef          | 1 oz                | 4                    | 88              |
| Deli meats/salami                 | 1 oz                | 4                    | 71              |
| Deli meats/ Spam                  | 1 oz                | 3.5                  | 85              |
| Duck – without skin               | 4 oz                | 26                   | 222             |
| Eel – smoked                      | 3 oz                | 18                   | 300             |
| Egg – hard cooked or poached      | 1                   | 6                    | 75              |
| Egg – Egg Beaters                 | 1/4 cup             | 5                    | 25              |
| Falafel                           | 2 oz                | 4                    | 105             |
| Fava beans – canned               | 1/2 cup             | 7                    | 90              |
| Fish cake                         | 1 (4.5 oz)          | 18                   | 166             |
| Flounder – cooked                 | 3 oz                | 21                   | 99              |
| Great Northern Beans              | 1/2 cup             | 8                    | 105             |
| Grouper – cooked                  | 3 oz                | 21                   | 100             |
| Haddock – cooked                  | 3 oz                | 21                   | 95              |
| Halibut – cooked                  | 3 oz                | 23                   | 119             |
| Ham – deviled ham, canned         | 3 oz                | 14                   | 200             |
| Ham – boneless, cooked            | 3 oz                | 14                   | 90              |
| Ham – honey ham                   | 3 oz                | 15                   | 150             |
| Herring – Atlantic, cooked        | 3 oz                | 20                   | 172             |
| Hummus                            | 1/3 cup             | 4                    | 140             |
| Kidney beans – cooked             | 1/2 cup             | 8                    | 100             |

# KNOW YOUR PROTEIN

| <b>FOOD</b>                       | <b>SERVING SIZE</b> | <b>PROTEIN GRAMS</b> | <b>CALORIES</b> |
|-----------------------------------|---------------------|----------------------|-----------------|
| Lamb – lean braised               | 3 oz                | 29                   | 190             |
| Lamb – ground boiled              | 3 oz                | 21                   | 240             |
| Lamb – loin chop, lean            | 3 oz                | 19                   | 225             |
| Lentils                           | 1/2 cup             | 9                    | 115             |
| Lima beans – canned               | 1/2 cup             | 6                    | 93              |
| Liver – beef or chicken           | 3 oz                | 23                   | 184             |
| Lobster – cooked                  | 1/2 cup             | 15                   | 71              |
| Mackerel – cooked                 | 3 oz                | 20                   | 223             |
| Meat substitutes – Harvest Burger | 3 oz                | 18                   | 140             |
| Milk – 1%                         | 1 cup               | 8                    | 102             |
| Milk – 2%                         | 1 cup               | 8                    | 119             |
| Milk – buttermilk                 | 1 cup               | 8                    | 99              |
| Monkfish – baked                  | 3 oz                | 16                   | 82              |
| Mussels – cooked                  | 3 oz                | 20                   | 147             |
| Navy Beans – cooked               | 1/2 cup             | 20                   | 296             |
| Octopus – steamed                 | 3 oz                | 25                   | 140             |
| Oysters – steamed                 | 1 medium            | 5                    | 41              |
| Oysters – canned                  | 3 oz                | 10                   | 100             |
| Peanut butter                     | 2 tablespoons       | 8                    | 188             |
| Perch                             | 3 oz                | 21                   | 99              |
| Pike – cooked                     | 3 oz                | 21                   | 96              |
| Pink beans – cooked               | 1/2 cup             | 7                    | 125             |
| Pinto beans – cooked              | 1/2 cup             | 5                    | 90              |
| Pollack – baked                   | 3 oz                | 21                   | 100             |
| Pompano – Florida cooked          | 3 oz                | 20                   | 179             |
| Pork – center loin                | 3 oz                | 24                   | 265             |
| Pork – pork roast                 | 3 oz                | 15                   | 105             |
| Pork – spare ribs                 | 3 oz                | 26                   | 338             |
| Quiche Lorraine                   | 1 slice (3 oz)      | 15                   | 352             |
| Rabbit – roasted                  | 3 oz                | 25                   | 167             |
| Red beans – canned                | 1/2 cup             | 6                    | 160             |
| Roughy – Orange, baked            | 3 oz                | 16                   | 75              |
| Salmon – baked                    | 3 oz                | 22                   | 155             |
| Salmon – canned, pink             | 3 oz                | 17                   | 118             |
| Salmon cake                       | 1 (3 oz)            | 18                   | 241             |

# KNOW YOUR PROTEIN

| <b>FOOD</b>             | <b>SERVING SIZE</b> | <b>PROTEIN GRAMS</b> | <b>CALORIES</b> |
|-------------------------|---------------------|----------------------|-----------------|
| Salmon – smoked         | 3 oz                | 15                   | 99              |
| Sardines – in oil       | 2                   | 6                    | 50              |
| Scallops                | 2 large             | 6                    | 67              |
| Shark                   | 3 oz                | 16                   | 145             |
| Surimi mix              | 3 oz                | 13                   | 84              |
| Shrimp – canned         | 3 oz                | 20                   | 102             |
| Shrimp – cooked         | 4 medium            | 5                    | 22              |
| Smelt – cooked          | 3 oz                | 19                   | 106             |
| Snails – cooked         | 3 oz                | 41                   | 233             |
| Sole – cooked           | 3 oz                | 21                   | 99              |
| Soy milk                | 1 cup               | 7                    | 79              |
| Soybeans – cooked       | 1/2 cup             | 15                   | 150             |
| Soybeans – dry roasted  | 1/2 cup             | 34                   | 387             |
| Soybeans – sprouts      | 1/2 cup             | 5                    | 43              |
| Spinach – cooked        | 1/2 cup             | 3                    | 21              |
| Squid                   | 3 oz                | 15                   | 149             |
| Sturgeon – smoked       | 3 oz                | 27                   | 147             |
| Swordfish – cooked      | 3 oz                | 22                   | 132             |
| Tofu – firm             | 1/2 cup             | 20                   | 183             |
| Tofu – soft             | 4 oz                | 12                   | 120             |
| Tongue – beef           | 3 oz                | 19                   | 241             |
| Trout – baked           | 3 oz                | 23                   | 162             |
| Tuna                    | 3 oz                | 25                   | 160             |
| Turkey – bologna        | 3 oz                | 12                   | 165             |
| Turkey – breast         | 3 oz                | 20                   | 92              |
| Turkey – ground cooked  | 3 oz                | 20                   | 188             |
| Veal – cutlet, lean     | 3 oz                | 31                   | 172             |
| Veal – ground broiled   | 3 oz                | 21                   | 146             |
| Venison                 | 3 oz                | 26                   | 134             |
| White beans             | 1/2 cup             | 9                    | 100             |
| Yogurt – fruit, low-fat | 4 oz                | 5                    | 113             |
| Yogurt – plain, low-fat | 4 oz                | 6                    | 65              |

# KNOW YOUR PROTEIN

## Food Labels

Read all food labels carefully to determine the nutrient content and be on the lookout for hidden sugars. Be careful when reading labels at the market. Quoted protein amounts are based on certain serving sizes and you may not be able to have a whole serving. So a product that appears high in protein may not be all that high.

Check the label for other nutrients also. A food high in protein but also high in carbohydrates or fats would not be a good choice, as the proportion of protein is not as good as it looks.

## Protein and Your Meals

**Protein is the first part of every meal. Half of each meal must consist of protein.**

Eat all your protein foods first. Move on to vegetables and fruits second. Finish with the grains and cereals.

## What's so Important about Eating Protein?

Protein provides healing and energy, so you can get into trouble without it. Your body needs the amino acids and other body-building nutrients found in protein foods. If you aren't eating enough protein, you are very likely not getting enough iron. Every now and then a SWL patient will get into trouble with ankle swelling (edema), fatigue, lethargy and feeling cold. They will have poor lab results for iron, albumin and hemoglobin. There will be a frantic call about it. Upon questioning the patient, it will be discovered that poor nutrition and nonexistent compliance with supplemental iron are the reasons for the iron-deficiency or anemia.

Anemia literally means "low red blood cells." Red blood cells carry oxygen throughout your body. When you have anemia, you are light-headed and in severe cases, your pulse rate increases, blood pressure decreases and you feel dizzy and weak. These symptoms show up when your blood lacks enough oxygen-carrying red cells. As a result, every tissue and organ becomes starved for oxygen. People with anemia are slowly smothering from within. The most common cause: **not enough iron**. Without sufficient iron, the body can't manufacture enough new red blood cells packed with hemoglobin — the red-cell protein that transports oxygen through the body.

Even mild anemia is an advanced symptom of iron deficiency, since the body will deplete its store of iron before cutting back on blood formation. Look at this condition another way — it's possible to be iron-deficient without being anemic.

One cause of iron-deficiency anemia is blood loss. Women's iron reserves — which are lower than iron reserves in men — can be strained to the limit by menstruation. Men are rarely anemic, but when they are, the cause is usually an ulcer or hemorrhoids.



# KNOW YOUR PROTEIN

## The Diet Factor

When your recovery reaches the stage where you may add red meat to your diet, choose only lean meats. One of the most easily absorbed types of iron comes from lean red meat. The iron in meat isn't hiding in the fat. So moderate-sized portions of lean, red meat will give you an abundance of iron without tons of fat. Don't eat tough, cheap cuts of meat because they cannot pass through your little stomach opening. Chew, chew, chew red meats or eat ground meat. Chicken and fish are also good sources of iron. Iron from these and other non-meat iron sources, such as dried beans and dark green and yellow vegetables, is better absorbed when eaten with foods rich in Vitamin C, like broccoli.

Not only does red meat contain iron – it has the kind of iron most useful to your body. Dietary iron occurs in two forms, heme and nonheme. Heme iron is the type that forms hemoglobin. It comes only from animal sources and it is readily absorbed by the body. Nonheme iron is any other form of iron; it's found in plants, but it's not as easily absorbed. So you see, protein is important because iron is so important to your body. That is why we prod you to eat one half of your meal from protein sources and eat it first. We don't want you getting full on your baked potato or other foods before you have eaten your protein food.

# VITAMIN & MINERAL SUPPLEMENTS

## Taking Your Daily Vitamins

Take as prescribed by your surgeon — starting on day 15.

Calcium is vital through your mid-20s for building bones — bone density peaks at about age 20. After that, the skeleton doesn't grow, so calcium is vital to keep your body from tearing down those bones. Calcium is also needed for other processes like nerve transmission and muscle action.

When there isn't enough calcium circulating in the blood from the diet, your body goes right to the next best source, the skeleton. Keep that up long enough and you set the stage for the "bone-thinning disease," osteoporosis. Most cases occur due to age in women over 70 and men over 80 years old. However, it is a real danger for women past middle age and menopause, when lower hormone levels contribute to the process. Not only does this type of osteoporosis lead to the unsightly "dowager's hump" where the spinal column is compressed and bent, but the chances increase for bone fractures of the hip and wrists.

A new study says that extra calcium in the diet may also help relieve water retention, menstrual cramps and premenstrual moodiness. During the five and a half month study, researchers recorded the menstrual and premenstrual symptoms of 10 women who took 1,300 milligrams of calcium a day for two and a half months and 600 milligrams for the remaining time. The results: while on the high-calcium regimen, nine of the 10 women had fewer mood swings, eight had less water retention and seven had less pain.

**Note:** You may purchase your vitamins and meal replacements at a health food store (see resources list, Page 81), or the surgeons have pre-packed kits available through their office and website.



# EXERCISES

## Get Yourself Moving

Weight loss surgery has given you an enormous advantage in reducing your weight once and for all. The surgery is only a tool, however, to help you to eat less food. Achieving maximum health benefits from your weight reduction efforts requires you to increase your physical activity as your decreasing weight allows.

*Physical activity regimens should incorporate these three components:*

- Aerobic Activity – your heart rate is up, you've broken a sweat and you are breathing harder.
- Anaerobic Activity – exercise that builds muscle tissue, i.e. strength training.
- Stretching – flexibility exercises.



### *Benefits of Aerobic Activity – Cardiovascular Exercise*

- Reduces the risk of cardiovascular disease
- Reduces high blood pressure
- Reduces the risk of developing high blood pressure
- Reduces circulating triglycerides
- Improves cholesterol ratio
- Improves circulation
- Lowers resting heart rate
  
- Improves quality of sleep and alertness
- Improves short term memory
- Burns fat and maintains weight loss
- Helps preserve lean body tissue – improves body's ability to use fat as energy
- Improves ability to recover from exertion
- Reduces risk of developing osteoporosis – retards bone loss
- Reduces anxiety and stress – helps manage stress effectively
- Improves physical appearance and self esteem
- Improves immune system
- Helps maintain independent lifestyle
- Decreases appetite for short while
- Reduces likelihood of low back pain

### *Benefits of Anaerobic Activity – Resistance Training*

Anaerobic activity improves the ease of performing daily tasks, such as: climbing stairs, carrying heavy loads, lifting children, etc. It maintains and increases lean body mass – improves body composition, increases resting metabolism, reduces the risk of injury, improves body posture, improves appearance, improves self esteem, reduces stress, reduces chances of lower back pain and helps maintain an independent lifestyle.

# EXERCISES

## Guidelines for Stretching

- Don't stretch cold muscles. WARM UP using a SLOW walk or jog before stretching.
- Stretch slowly and with control. Do not bounce.
- Stretch ONLY to the point where you feel tightness or slight resistance. Stretching should not be painful.
- Static stretching is most highly recommended. Hold each stretch for 10 – 30 seconds.
- DO NOT HOLD YOUR BREATH during stretching. Use deep abdominal breathing whenever possible.
- Increase in range of motion will be specific to those muscles/joints being stretched.
- PAIN is an indication that something is wrong and should not be ignored.
- AVOID overstretching the ligaments and muscles.
- Exercise CAUTION when stretching the low back and neck.
- Stretch muscles that are tight and inflexible.
- Stretching should be done both before and after exercise sessions to improve one's flexibility.

## Stretching for Flexibility

### 1. NECK

- a. Tilt your head to the side, trying to touch your ear to your shoulder. Apply gentle pressure on your head with your hand. Hold stretch for 10 seconds. Repeat to other side.
- b. Turn your head to look sideways. Use your hand on your chin to hold the stretch for 10 seconds. Repeat to other side.

### 2. UPPER BACK

- a. Reach your arms out straight with your fingers interlocked. Turn your palms outward. Reach and hold for at least 10 seconds.

### 3. BACK STRETCH

- a. Reach one hand behind your head to touch your back. Use the other hand to apply a gentle pressure on your elbow to maintain the stretch. Hold for 10 seconds.

### 4. TRUNK

- a. Reach your arms straight overhead with finger interlocked and your palms facing up. Hold stretch for 10 seconds.
- b. With arms extended, grab your right wrist with the left hand and pull overhead to the left side. Hold for 10 seconds. Switch your grasp and repeat.

### 5. QUADRICEPS STRETCH

- a. Use a chair or wall for balance. Bend one knee, bringing your foot toward your buttocks. Grasp your foot with opposing hand to support your leg. Keep your trunk upright to maintain the stretch through the hip and quadriceps region.
- b. Modified – Use a chair or table at a comfortable height to support your leg behind you. Increase the stretch by bending the support leg at the knee.

### 6. STANDING HAMSTRING STRETCH

- a. Rest one leg on a support at a comfortable height. Keep your lower back straight as you bend at the hips to bring your chest toward your raised leg. Once you feel a stretch in the hamstring, hold the position for 10 seconds. Switch legs and repeat. CAUTION: Keep your lower back straight!

# EXERCISES

- b. Sit on a flat surface with one leg out straight and toes pointing upward. Bend the other leg bringing your foot to the inside of the straight leg. Slowly bend at the hips to bring your chest toward your knee, stopping as soon as you feel a stretch. Hold for 10 seconds. Switch legs and repeat. **CAUTION:** Keep your lower back straight.
7. **CALF STRETCH**
  - a. Stand with one foot in front of the other. Keep your back leg straight, heel down and toes pointed straight ahead. Slowly lean forward bending the front knee to obtain a stretch in the calf of the back leg. Hold for 10 seconds. Repeat with other leg.
8. **LOWER BACK**
  - a. Laying flat on your back, bend your legs bringing both knees toward your chest. Hold for 10 – 30 seconds.
  - b. Trunk Flexion – Partial Sit-up: Lie on back, knees bent and feet flat. Reach hands to knees. Raise shoulder blades only. Keep feet on mat.

## Exercise Program Guidelines

**MODE:** Method of exercise you will be using, i.e., walking, pool walking, water aerobics, stationary bike, treadmill or other low-impact activity. You want to do weight bearing exercises, but be easy on your feet, ankles, knees and hips.

**FREQUENCY:** Aim for seven days a week. That way you will probably get in at least five sessions on average.

**DURATION:** Work to increase your exercise duration. Start with whatever amount you can handle at first, 5 minutes, 10 minutes, 20 minutes; it will vary by individual. Work toward a duration of 30 minutes at one time. You'll be surprised at how nicely the body responds to fitness training.

**INTENSITY:** Start at a low-to-moderate level of exertion.

Our goal is to increase your duration; therefore, you may need to maintain a lower level of intensity to achieve the 30 minute duration goal. Once the 30 minutes becomes easy, you can increase your exertion. You will probably increase your walking pace or exertion level naturally as your fitness improves.

## Lifetime Goal of 60 Minutes Per Day

Establishing a regular exercise routine is critical to both weight loss and good health in the long term. In addition, we want you to focus on the activities that you are doing when you are not exercising, called “non-exercise” related activities.

With respect to establishing an exercise routine, we ask you to put aside at least one hour every day for exercise. It is important to keep in mind that it is very hard to have a successful routine in less time than that if you consider the time it takes to go to the gym, change, exercise, shower, and get back to your life. So this practice has to be a priority.

# EXERCISES

Initially, we want you to start walking (if you are able to). For some patients, that may mean walking five minutes at a time 10 times per day. For other patients, it may be no problem to walk one hour continuously right away. Once you are able to walk an hour continuously, then the second goal is to walk faster (three miles in one hour). Once you have reached this goal, then you are fit enough to engage in more vigorous activities. Find something that you love to do; something that makes you get your heart rate up and makes you sweat. Not everyone loves to go to the gym. For some patients, this may be swimming or going to a Zumba class. For other patients, this may be as simple as using a Wii Fit for a daily dance class. At the end of the day, if you are not doing something that you love, you will likely not do it at all. So now is the time to look into your soul and find out what makes you tick!!

With respect to your “non-exercise” related activities, we want you to purchase a pedometer in order to measure your steps every day. The concept is that the number of steps you take in a day can act as an objective measurement for how busy you really are. Once you start to see a pattern emerge for the number of steps that you take daily, then you will begin to try to increase the number of steps to be more active. Obviously, this means that you will need to change your behavior to obtain more steps.

Reach your goal of exercising daily for 60 minutes. We recognize that today you may be struggling with a simple walk down the hall and your energy may be at an all-time low. You are only being asked to move your body a little more every day. Everybody’s fitness level is different. The important thing is to commit to daily exercise that focuses on elevating your heart rate as well as strengthening your muscles and working on your balance. Exercise is a must!

## Determining Your Target Heart Rate

Your Target Heart Rate (THR) is the range of heart beats per minute you should maintain during exercise. The low end of this range is 60% of your maximum heart rate, and the high end is 80% of your maximum heart rate. Your maximum heart rate is calculated by subtracting your age from the number 220. Find your THR using the calculations below:

1. Determine your maximum heart rate:

a.  $220 - \frac{\quad}{\text{your age}} = \frac{\quad}{\text{max HR}}$

2. Calculate 60% and 80% of your maximum heart rate:

a.  $\frac{\quad}{\text{max HR}} \times .6 = \frac{\quad}{\text{60\% of max HR}}$

b.  $\frac{\quad}{\text{max HR}} \times .8 = \frac{\quad}{\text{80\% of max HR}}$

# EXERCISES

3. Your THR is \_\_\_\_\_ to \_\_\_\_\_ beats per minute (bpm).  
                                 60% max HR                                80% max HR
4. Calculate how many beats in 10 seconds is equivalent to your THR beats per minute by dividing by six:
- a. \_\_\_\_\_ / 6 = \_\_\_\_\_  
    60% max HR (bpm)                                60% of max HR (in 10 seconds)
- b. \_\_\_\_\_ / 6 = \_\_\_\_\_  
    80% max HR (bpm)                                80% of max HR (in 10 seconds)
- c. Your THR is \_\_\_\_\_ to \_\_\_\_\_ beats per 10 seconds.  
                                 60% (in 10 seconds)                                80% (in 10 seconds)

The easiest way to check heart rate is by gently pressing your third and fourth fingers against the side of your neck, next to your Adam's apple, or two fingers on the thumb side of your wrist. Count the number of pulses you feel in ten seconds and adjust your level of exertion as needed to stay within your THR range.

## Monitor Your Target Heart Rate

| AGE | MAX HEART RATE | 60% (MAX HEART RATE x 0.6) | 80% (MAX HEART RATE x 0.8) |
|-----|----------------|----------------------------|----------------------------|
| 20  | 200            | 120                        | 160                        |
| 25  | 195            | 117                        | 156                        |
| 30  | 190            | 114                        | 152                        |
| 35  | 185            | 111                        | 148                        |
| 40  | 180            | 108                        | 144                        |
| 45  | 175            | 105                        | 140                        |
| 50  | 170            | 102                        | 136                        |
| 55  | 165            | 99                         | 132                        |
| 60  | 160            | 96                         | 128                        |





# EXERCISES

## Monitoring Your Perceived Exertion

The Talk Test: If you cannot carry on a conversation while exercising, you are probably exerting too much and will have difficulty keeping the pace for the necessary duration. The “Talk Test” is also known as “Rate of Perceived Exertion” or RPE. RPE is a subjective measurement of the physical intensity of your exercise or activity. A rating of fairly light to hard (11 – 15) is equivalent to 65% - 85% of your maximum heart rate. The intensity of your exercise should be in this range for you to achieve the most benefit from your exercise.

### *Ratings of Perceived Exertion*

|    |                 |
|----|-----------------|
| 6  |                 |
| 7  | Very, Very Easy |
| 8  |                 |
| 9  | Very Easy       |
| 10 |                 |
| 11 | Fairly Light    |
| 12 |                 |
| 13 | Somewhat Hard   |
| 14 |                 |
| 15 | Hard            |
| 16 |                 |
| 17 | Very Hard       |
| 18 |                 |
| 19 | Very, Very Hard |
| 20 |                 |



### **Guidelines for Walking**

**WEAR GOOD WALKING SHOES** — soft soles, good arch support, good heel support.

**DON'T OVERDRESS** — wear layers of clothes that you can remove as you heat up during your walk.

**WALK ON SOFT SURFACES** — dirt, grass, running track, asphalt, beach. Concrete is the worst choice.

**SWING YOUR ARMS IN RHYTHM WITH DEEP BREATHING.**

# EXERCISES

## Strength Training Program

Strength training is based on the overload principle. This simply means you are requiring the muscles to exert more force than they are accustomed. When this is done properly, your muscles will respond and adapt to the stimulus by strengthening. A beginning strengthening program should consist of 6 – 10 exercises for the larger muscle groups. Choose from the following list of exercises:

- Chest press, Bench press
- Chest fly
- Lat pull-down
- Seated row
- Biceps curl
- Lateral raise (shoulders)
- Leg press
- Leg extension
- Leg curl
- Squat

### *Technique Tips*

1. Get proper instruction before you use free weights or weight machines for the first time.
2. Use proper posture and lower back support during the exercises.
3. Emphasize SLOW AND CONTROLLED movements. Use a count of 2 to lift the weight and 3 to lower the weight. You will be working the muscle both directions this way, which increases the benefits of the exercise.
4. Achieve a complete range of motion. Do not sacrifice technique to add more weight.
5. DO NOT HOLD YOUR BREATH. Exhale when lifting weight, inhale when returning the weight to its original position.
6. Allow 1 – 2 minutes between sets and exercises. Starting with a minimal weight, perform each movement 10 – 15 repetitions. Strength training exercises should be performed 2 – 3 days per week with a day of rest between so the muscle worked can repair itself. Increase to 2 sets of 10 – 15 reps after 2 weeks. When 15 repetitions is EASY and you feel like you could do more repetitions, add resistance by increasing the weight 1 – 5 lbs. You should be able to perform at least 10 – 12 repetitions at the new, heavier weight with proper technique. Congratulations, your muscles are stronger and they can carry a heavier load!

## Keep Track of Your Progress

Keeping a log of your post-operative exercise and activity, as well as other patient compliance factors, will maximize the benefits you get from your weight loss surgery. Your surgeon will monitor your weight, your lab results, your side effects and your overall health. Only YOU can manage your daily meal decisions, your vitamin compliance, your water drinking, your exercise regimen, etc.

Getting you to optimal health is a team effort — the surgery is only one tool. A training log can be an adjunct tool for you because it helps you record not only what you are doing but also your progress. This can be a powerful motivator. A training log is provided on the next page. Use the journal to record the type of exercise you are doing, as well as your heart rates and any problems you encounter.

# EXERCISES

## Exercise & Activity Journal

Name: \_\_\_\_\_

| Date | Time | Exercise Performed<br>How Long? | Heart Rate |        |                   |                 |               |
|------|------|---------------------------------|------------|--------|-------------------|-----------------|---------------|
|      |      |                                 | Before     | During | Immediately After | 3 Minutes After | Any Problems? |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |

Name: \_\_\_\_\_

| Date | Time | Exercise Performed<br>How Long? | Heart Rate |        |                   |                 |               |
|------|------|---------------------------------|------------|--------|-------------------|-----------------|---------------|
|      |      |                                 | Before     | During | Immediately After | 3 Minutes After | Any Problems? |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
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|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |
|      |      |                                 |            |        |                   |                 |               |

# RESOURCES

## Protein Shakes

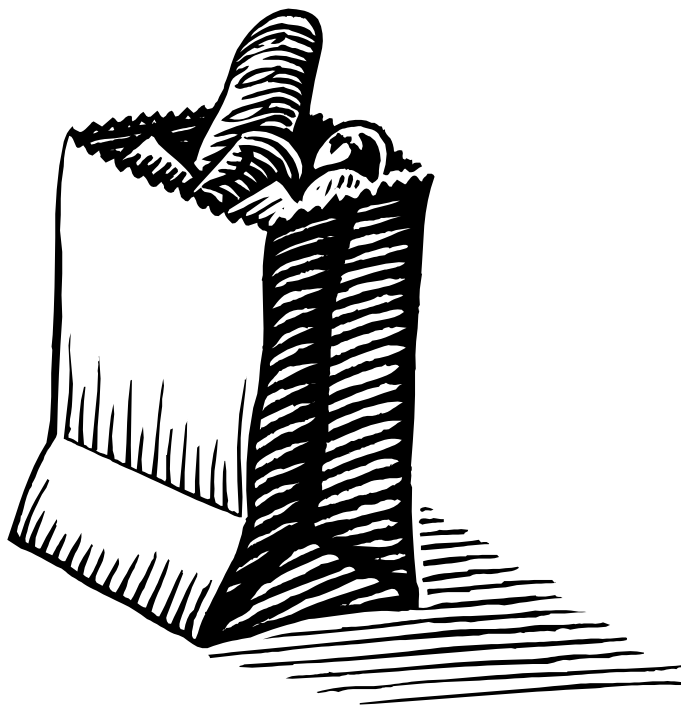
- Surgeon's office – [www.tucsonlaparoscopy.com](http://www.tucsonlaparoscopy.com)

## Sugar-free Flavorings

- [www.capellaflavordrops.com](http://www.capellaflavordrops.com)
- [www.jrwatkins.com](http://www.jrwatkins.com)
- [www.worldmarket.com](http://www.worldmarket.com) (Torani syrup)

## Additional Resources

- Bariatric Advantage
- Costco
- GNC
- NuLife
- Sprouts
- Trader Joe's
- Vitamin World
- Wal-Mart



*(Northwest Medical Center does not endorse any of these providers.)*

# RESOURCES

## **Cosmetic Surgery after Weight Loss**

Patients often experience rapid weight loss after bariatric surgery which not only reduces many health risks, but can ultimately have a significant positive impact on one's body image and self-esteem. People who have had such drastic weight loss can experience sagging or loose skin. Many people consider body-contouring cosmetic procedures by plastic surgeons to help with these issues.

A wide range of procedures are available to help tighten loose skin. Plastic surgery can target sagging skin around the face and chin, breasts, abdomen, hips, buttocks, thighs or arms. Many men consider surgery to contour their pectoral muscles while many women get breast lifts or augmentations to "fill in" loose skin. Abdominoplasty contours the skin around the abdomen, hips and buttocks. A consultation with a plastic surgeon can help you learn more about what options may be appropriate for you.

You can learn more about plastic surgery by visiting The American Society of Plastic Surgeons website at [plasticsurgery.org](http://plasticsurgery.org).

## **Plastic Surgeons at Northwest Medical Center**

The following physicians are independent members of the medical staff at Northwest Medical Center specializing in Plastic Surgery.

Richard Hess, M.D.  
7436 N. La Cholla Blvd  
(520) 297-3300

Jeffrey Nelson, M.D.  
7416 N. La Cholla Blvd  
(520) 575-8400

Sven Sandeen, M.D.  
7436 N. La Cholla Blvd  
(520) 297-3300

## **Weight Loss Surgery Post-Op Program**

**Education • Support • Connection**

This program is offered by the Southern Arizona Center for Minimally Invasive Surgery (SACMIS) and is uniquely designed to provide education, support and connection in achieving and maintaining a healthy weight and a healthy lifestyle. Presentations draw from our team of diverse experts focusing on healthy eating, fitness, inner exploration and health maintenance after this life-changing surgery.

*For more information call (520) 219-8690.*

# RESOURCES

## FAQs — Frequently Asked Questions

1. If I am instructed to drink and eat only water, broth, sugar-free Jell-O, Profect, or comparable protein such as New Whey or Protein Shots just after my surgery, does this mean I can also have Diet Coke?

**NO!! Water, ice chips, broth, sugar-free Jell-O, and high protein shakes means just that — Nothing more!**

2. If my bowel function has not returned by the time I leave the hospital, when can I expect to have my first bowel movement?

***If no bowel movement by day 2 post discharge, add 1 capful of Miralax to your water. If no bowel movement after one dose, call the surgeon's office.***

3. I don't think I can exercise, even slowly walk, for 30 to 60 minutes the first week after surgery. Is that OK?

***You may not be able to walk for 30 to 60 minutes for some time after your surgery — it depends on many factors. The important thing is to go out and try to do a little more each day.***

4. Is nausea a common problem after a weight loss surgery?

***Nausea is a complex problem involving receptors from the stomach and the brain, as well as emotional mediators. People who get motion sickness or women who experienced "morning sickness" during a pregnancy seem to get post-operative nausea more often. You will also feel sick if you eat too fast or take too large of bites.***

***A more common problem is to "spit up" white, frothy fluid. It may seem as if it lasts forever, but it generally goes away in a few weeks or so. Be patient, follow the Four Rules and keep your intake of liquids up. Avoid your vitamins for a little while, as well as anything that might aggravate the situation. If it goes on for too long, call your surgeon. He may want to provide you with some medication. Medication is not often used because it can have ill effects. Nausea usually resolves itself in time.***

5. How much pain should I expect after the operation?

***Everyone is different, but there are some general guidelines. The scars from your incisions continue to change and mature for months. Even when your incisions are fully mature, the skin won't be the same as the normal tissue that was originally there. Some scars can hurt, although most do not. Rubbing any type of lotion into a tender scar may act to desensitize it. Massage it several times a day. Obesity puts quite a strain on abdominal wounds, so don't add more stress before the wound heals over a four to six week period.***

6. Will I be able to eat normally again?

# RESOURCES

*“Normally” is now a relative term. After six months or so, most weight loss surgery patients don’t feel like social outcasts at parties or when they go out for dinner. Keep the Four Rules in mind. Make the first half of your meal only protein, then the other half can be “normal meal food.” Eat slowly and chew very well. Don’t revert back to your old habits of social eating or gulping big bites rapidly.*

7. When can I drive?

*Driving is a medical and a medical/legal situation. Obviously, if you are on mind-altering drugs, including narcotics, or if you have inadequate mobility due to pain, you are not safe to drive. Beyond those two factors, it generally takes between one to two weeks before you are safe to drive. Generally, patients can drive when they are off pain medication. That’s provided you were safe to drive before your surgery.*

8. What do I do if constipation becomes a problem?

*Since you now eat much smaller amounts of food, your body will form smaller amounts of stools. This can lead to constipation. Some people find it handy to take two or three tablespoonfuls of Milk of Magnesia every few days to help the process or Miralax or Benefiber on a daily basis. Certainly drinking plenty of water is very important — nothing works well for constipation if your water intake is poor. It is not uncommon to have a bowel movement every 2 to 3 days once you get regulated.*

9. What about my other medications? When do I start them?

*Your surgeon will inform you as to if and when medications should be started. Be sure to discuss this issue with him during your follow-up appointments.*

10. Will staples used in surgery interfere with special tests I might need later?

*The short answer is no. The staples are very small and often can’t even be seen on a regular x-ray. The small pieces of metal staple are very non-reactive and they get imbedded in scar tissue. Tests like CAT scans, MRIs, Upper GI series and Ultrasounds are not a problem.*

