

CENTRAL VALLEY BARIATRICS' PATIENT WORKBOOK

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COMPLICATIONS OF ANESTHESIA AND GASTRIC REDUCTION DUODENAL SWITCH (Doc-02)

There are potential complications associated with this surgery for the obese patient. The overall complication rate of surgery is approximately 10%. Complications are listed below but are not limited to this list. Complications range from the simply treated tract infection to possible re-operation for a leak at a suture line. Some of the complications may not surface for months after surgery. The **Mortality rate** for surgery is approximately 1% (1-2 in 200 patients).

- Pneumonia
- Atelectasis
- Deep Vein Thrombosis (can form up to 3 months post-op)
- Pulmonary Embolism (can form up to 3 months post-op)
- Stroke
- Urinary Tract Infection
- Phlebitis (IV site irritation)
- Wound infection
- Gastric or intestinal perforation
- Hernia
- Sepsis
- Abscess formation
- Bleeding/Splenectomy
- Biliopancreatic Tree trauma (the ducts from the liver and pancreas)
- Leak from the suture sites of stomach, small bowel, and duodenum
- Bowel obstruction due to scar tissue forming around the small bowels possibly necessitating surgery to open the obstruction.
- Inadequate or Excessive weight loss necessitating re-surgery possibly years later

OUT OF TOWN PROGRAM (Doc-03)

Central Valley Bariatrics has a very detailed and personal program tailored for our out of town patients. Our goal is for the out of town patient to receive continuity of care during the critical post-operative period. We feel that continuity of care is vital to the progress of the patient, decreases complications, and promotes excellent long-term success.

We attempt to consolidate consultative visits, pre-operative education, and follow-up appointments to allow for the best outcomes for the patient. Each patient is viewed individually based on pre-operative history, overall health, surgery course, post-operative care and family/home situation.

Generally, depending of the previously mentioned items, the out of town patient will need to stay within a close proximity to the surgeon's office during the immediate post-operative period. This immediate post-operative period is generally 7-10 days after discharge from the hospital. However, your surgeon will ultimately decide the time frame upon reviewing your case. We have a variety of options for housing during this time period, such as, a reduced rate hotel, room leasing, and in some cases extended care facilities. You will need to arrange for lodging and transportation during your stay. We have no affiliation with any motels in the area, however the motels used by most patients are as follows:

		Hertz	800-654-3131
Best Western Liberty	661-725-0976	Enterprise	661-721-0700
Comfort Inn	661-725-1022	Berreth Limousine	661-725-7438

Most of these will provide you with a discounted rate if you inform them that you are here for surgery with Dr. Keshishian or Dr. Zahriya

Recliners, wheelchairs, hospital beds for the hotel rooms and additional abdominal binders can be arranged for by you through Berreth Medical at 661-725-7438.

Gastric Reduction Duodenal Switch (GRDS) procedure is an extensive surgery and therefore patients will need a support person with them during the entire process. It is most important, during the post-operative period, for the support person to assist with activities of daily living and hygiene. Out of town patients will need a support person that is capable, both emotionally and physically, of assisting them after surgery. Depending on patient preference the support person may or may not stay in the hospital room with the patient while hospitalized, but it is required after discharge that a support person stay with the patient.

Upon release by your surgeon from the post-operative period, we will work closely with the patient's primary care physician within the patient's residential location to maintain continuity of care. Due to the nature of weight loss surgery it is essential for the patients well being that a long term working relationship between doctors is established and maintained.

PATIENT PRE-OPERATIVE PREPARATION INSTRUCTIONS (DOC-04) GASTRIC REDUCTION/DUODENAL SWITCH

Two days before surgery: Full liquid diet—Creamy soups, milkshakes, liquid protein shakes, ice cream, and pudding.

Day before surgery: clear liquid diet—coffee, tea, broth, Jell-O, clear sodas (no milk or orange juice) Please remember to drink a LOT of fluids today—NO alcohol. Please shower with attention to scrubbing all parts of your body and especially in any skin folds and shampooing your hair. Please drink plenty of water all day long to prevent dehydration.

Before 3 PM: Day before surgery drink one full bottle of magnesium citrate. This “beverage” may be purchased at any drug store without a prescription. It is known to be more delicious served cold. Once consumed it is advisable to stay within close proximity of bathroom facilities.

After midnight: **NOTHING** to eat or drink

Medications: to be discussed with your surgeon.

Day of surgery: Please shower again paying close attention to scrubbing all parts of your body, especially in any skin folds and shampooing your hair. If you have long hair please pull it back in a ponytail low on your neck. Please do not use any lotion or talc powders after showering.

You will be admitted 1 1/2 to 2 hours before your surgery time. Your family members can be with you until you actually go to the operating room. Your family can then wait in the waiting area outside the cafeteria or in your surgical pavilion room. Your surgeon will come and update them when your surgery is over.

PRE OPERATIVE SECTION (DOC -05)

The long and frustrating "waiting" has come to an end. This is an exciting time and now it is time to get ready for surgery. Read this section carefully for helpful hints on how to get ready for the day of your surgery. This is a big undertaking and requires a life long commitment. Please study this workbook carefully. We want you to get the most out of your surgery and following these guideline will help.

Aspirin/Alcohol/Tobacco/Herbal medications: The following medications should be stopped 10 days prior to surgery because of their blood thinning properties: Aspirin, St. John's Wort, Gingko Biloba, and Ginseng. Kava Kava and Valerian Root are known to interact with anesthesia and should also be stopped 10 days prior to surgery.

If you smoke you will have to stop smoking at least 6 weeks prior to surgery. Smoking can increase your risks of complications such as deep vein thrombosis (blood clots in the legs), which also increases risk of pulmonary embolism (blood clot to the lungs), pneumonia, and atelectasis (collapsing of the tiny air sacs in the lung).

The liver is very sensitive to toxins after surgery, partially due to the rapid weight loss. It is therefore imperative that you refrain from consuming alcohol of any type at least for the first year post operatively. You will continue to be alcohol sensitive for an extended period of time due to the limited absorptive properties of this procedure. Alcohol, after the first year, can be tolerated in small quantities. Also for the first year you need to check with your surgeon regarding any medications (either prescriptions or over the counter) that you may start taking.

Exercise: Now is a great time to get your body prepared for surgery. The sooner you start exercising the easier it will be after you have had surgery. You need to start moving more than normal, however, we also want you to take care in that you don't injury yourself prior to surgery. This increase in exercise will help prevent complications. You need to prepare for the surgery by doing the following:

Start walking if you can. Walking is the best way to prevent deep vein thrombosis, pulmonary embolism and improve your lung and heart function.

If you are unable to walk then use the tubing sections and directions provided to get your muscles in shape. This is also a great idea even if YOU CAN WALK!

Start an arm and upper body program by using soup cans, or bottles filled with water, or small weights to do arm curls and other upper body strengthening work out. This will help in your ability to move in and out of bed after surgery using the trapeze on your bed. You need to do the above to avoid soreness in your upper body that can occur from relying on your arms more to move.

Swimming is also a great resistant exercise that works the entire body. There are some facilities, such as YWCA, gyms, and public pool, centers that offer water aerobic classes if you don't have a swimming pool at home.

Start immediately using the balloon provided to exercise your lungs. Blow the balloon at least 5-10 times each day for 10 blows at each time. This will help you to ward off complications of the lungs, such as pneumonia, and atelectasis that can happen during and after surgery. Remember that obese patients are at greater risk for complications involving the lungs following anesthesia.

Home health care: Give some thought to your living environment. Are there many steps in your house? Is your bedroom upstairs? Climbing stairs may be difficult after surgery and you may need to move to one level of your home if possible. How accessible is your bathroom? A rubber showerhead with a hose and the purchase of a long sponge stick can be very helpful for personal hygiene. Baby wipes are gentler for personal hygiene, however, are not flushable. Renting a toilet lift is very helpful after surgery. Waterbeds are not tolerated well the first month. The use of a recliner the first few nights at home is often more comfortable than a bed. It is helpful if someone can be with you at home for the first night or two. Is there someone who can check in with you? Have you cleaned out your cupboards of food items that you know you can't have after surgery? Have plenty of food items in your house so you do not have to go grocery shopping after surgery.

Items to bring to the hospital and/or Hotel: You may want to bring a few items to the hospital for your convenience and comfort. Some things you may want are: **Calling card, Protein Powder**, blender, cups, bathrobe, slippers, sanitary pad (stress may change your cycle), clothing to wear home (open front top and easy to get in and out of bottoms and shoes) Chap stick, pillow, glasses, special soothing toiletries such as shampoo, shower gel or lotions, your patient workbook, peri bottle, electric razor, sponge stick or wooden spoon with baby wipes for those hard to reach areas and most important your SUPPORT PERSON!

Do not bring valuables to the hospital! You will not be able to wear jewelry or contacts during the surgery so it is best if they are left at home. Please take off all jewelry before coming to the hospital. There is a significant amount of swelling that takes place after surgery and we do not want to cut off any rings that may be compromising blood flow to your fingers.

You may want to start a diary or journal of your surgery, your weights, measurements, thoughts and feelings. This is a great tool through out your weight loss. It can give encouragement and comfort in down times and also be a good exercise into your feelings throughout this journey. At the end of your workbook is the start to this endeavor; there is a table for you to document your weights and measurements throughout your weight loss and maintenance.

Nutrition and Vitamins: It is important that you look around your home to sort out the foods that you know are not of good nutritional value. It is also a good idea to remove the items that may be high in sugar or that may be a temptation to you. Prior to surgery is the time to purchase the items needed after you come home from surgery.

Start reading food labels to become familiar with the content of protein, fats, vitamin levels, and lactose. The following website will give your detailed nutritional values for all types of food items. www.ag.uiuc.edu/~food-lab/nat/maintnat.html Start paying close attention to adequate intake of protein. You will need to take in **at least 80 grams of protein** daily after surgery. Protein is an important component in tissue repair and healing. Protein also helps to fight infection and dehydration. After surgery the rapid weight loss can also start to cause loss of muscle mass if your protein levels are not maintained. It is just as easy for the body to break down your muscle cells, as it is fat cells.

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If you are not taking vitamins at this time, please start! Any type of general vitamin along with at least 1500mg calcium of your choice will work. You will need to continue this life long. The limited absorption component of the surgery will also affect the absorption of vitamins. Vitamins and Minerals are important in almost all functions of the body, down to the individual cells. Calcium and Vitamin D is important to maintain strong and healthy bones. Vitamin D can easily be made within our own bodies if we get a few minutes of sunshine on bare skin daily.

Birth Control Methods: Patients on Birth Control pills and Depro Provera shots need to stop taking these forms of birth control for at least 2 weeks prior to surgery or as the doctor orders. Please be sure to inform us if you are taking either of these types of birth control. The above forms of birth control increase your chances of forming deep vein thrombosis (blood clots) and pulmonary embolus. You will need to ask the doctor when you may start taking the pill or the shots for birth control after surgery.

You will need to use at least **TWO forms of birth control** from the point of stopping the pills or shots **until your weight stabilizes** and your doctor says that it is appropriate for you to stop using **two** methods of birth control. It is imperative that you **DO NOT become pregnant** during the weight loss period after surgery. It could be detrimental to you and the fetus. You will not have the nutritional level needed to sustain a healthy fetus and this could lead to birth defects in the fetus.

OPERATIVE AND HOSPITAL SECTION (DOC-06)

Preoperative Registration: Hospital preoperative registration takes place in the Medical Office building 1205 Garces Hwy in Suite #105. There you will need your insurance card and driver's license. It is possible if you have not had your preoperative blood work, x-ray, or EKG that this will also be done at this time. After you have completed the paperwork necessary in Suite #105 you will need to proceed to Out Patient Surgery in the main hospital building. The Registered Nurse in Out Patient Surgery will discuss with you what your pre-op preparation will be and the time you are to report back to Out Patient Surgery the day of surgery. Remember that the prep in your workbook is what your doctor wants you to do. The Anesthesiologist will also come and speak with you to ask about your medical/surgical history and look at your airway.

Day One (Surgery Day): You will need to report to Out Patient Surgery 1 ½ to 2 hours prior to your surgery time. When you arrive the staff will put you in a room and have you change into a hospital gown. They will then have you lay on a gurney, start an IV, wrap your legs in ace wrap or TED hose (to prevent deep vein thrombosis DVT), give you a dose of antibiotic through your IV, draw lab work, and give you a dose of Heparin via a very small injection in your abdomen (Heparin is a blood thinning medications also to prevent DVT). The staff will also have you sign consent for surgery. Your family can be with you in Out Patient Surgery.

Thirty minutes prior to your surgery time the nurse from the Operating Room will come and take you to the OR suite on a gurney. Your family can wait in the waiting room next to the cafeteria or in your surgical pavilion room. The waiting room or surgical pavilion room is where your surgeon will come to speak to your family after the surgery is complete.

The surgery can take between 2 and 3 ½ hours. The nurse will take you directly to the OR suite where you will be helped onto the OR table and a safety strap will be put across your thighs. They will also put your arms straight out on arm boards and a Velcro strap will be place on them to prevent your arms from falling. The anesthesiologist will put an oxygen mask on you. He/She will have you take deep breaths. The anesthesiologist will tell you when he is ready to sedate you. After you are sedated the anesthesiologist will put a breathing tube into your trachea. The OR nurse will put a foley catheter into your bladder to monitor your urine output during the surgery and after. They may also start a second IV. If we cannot insert IV's into your arms, we may need to put a larger IV into your neck. The staff will put foot pumps on your feet to simulate walking (to prevent DVT). A nasogastric tube will be put through your nose down to your stomach. The nasogastric tube is to decompress your stomach and after surgery will drain off gastric juices that may form and make you nauseated. You will have the nasogastric tube in for approximately two to three days. The procedure will then begin.

Most patients wake up in the OR suite. If you do, then the anesthesiologist will take out the breathing tube. In some case patients do not wake up enough in the OR and need to go to the recovery room on a breathing machine. They will give you time to wake up there and then take out the breathing tube. In some cases patients do not wake up enough in the OR or the recovery room and need to go to ICU over night on a breathing machine. If this happens we will take out the breathing tube as soon as you are awake enough and breathing well.

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After surgery you will have two drains in your abdomen to drain extra fluid and to tell us, once you are eating, if you have a leak (Leaks can happen from the stomach suture line or from the connections of the duodenum and/or small bowel). You will also have an abdominal binder on to keep the incision secure and prevent stretching the incision. You will need to wear this throughout your hospital stay except when showering and for the first 6 weeks after surgery. You will continue to have the Foley catheter, nasogastric tube, an oxygen mask, and the two IV's.

In addition, you will have a PCA machine (patient controlled analgesic). You will be shown how to use this button to control your pain. Because this is a major surgery there will be some discomfort that the pain medicine will not be able to take away. However, you need to keep your pain level tolerable so that you can use your Incentive Spirometer (breathing exerciser), cough, and deep breath (all important to prevent pneumonia and atelectasis) and walk after surgery. If the PCA is not controlling your pain please let the nurses know.

You will also possibly have nausea. It is common when having surgery on the stomach and after anesthesia for patients to become nauseated. Again please let your nurses know and we can give you medications to help. You will stay in the recovery room 1- 2 hours until you are awake and stable enough to be transferred to your private room.

You will then be moved to your room. Most patients go to the Surgical Pavilion where the rooms are private with private bathrooms. There is also space for a cot or the rooms have Murphy beds for a family member to stay with you. If you should have to go to ICU family members may visit but not stay. You will be getting up to walk 4-5 hours after surgery. If you would like to get up sooner you may. The more you are up moving and walking the better you will feel and the more you decrease your risk of complications such as DVT and pulmonary embolus. You also need to start using your Incentive Spirometer (breathing exerciser) and coughing and deep breathing at least every hour while you are awake the entire time you are in the hospital and for the first month after surgery. This is an important task that your support person can help remind you to do.

Day 2 through 3 or 4: The second day will be filled with more walking and breathing exercises. It will hurt to get up but the more you move the easier it will get and the less pain you will have. Walking can also help relieve gas pains and soreness of your back.

You may experience nausea and odd tastes in your mouth. You may have ice chips. Your surgeon may have you drink a blue colored drink in the afternoon of the second day. Drinking the blue drink can give us information about the possibility of leaks at the stomach and duodenal anastomosis. If you tolerate the drink he may have the nasogastric tube taken out. However, this may not happen until the third day. You may start eating a clear liquid diet then advance to bariatric diet as you tolerate it. It is your responsibility to know your dietary limitations and to follow the guidelines within this workbook.

If at any time you experience shortness of breath, severe sharp abdominal pain, pain in your legs, bleeding or any unusual symptoms you need to tell the nurse IMMEDIATELY!

You will be showering in the hospital, usually the second or third day depending on when your surgeon feels you are ready. During your shower you should get your incision wet and wash it with soap and water and then dry it well. There may be drainage from the incision and you may need gauze dressings to cover it. The nurses will help you in the shower and with your dressing.

**CENTRAL VALLEY BARIATRICS' DIET GUIDELINES (DOC-07)
HOSPITAL NUTRITION**

Allowable food items DURING HOSPITAL STAY you may also be discharge from the hospital on one of the following diets. Do not vary from your discharge diet until progressed by your surgeon. Nothing red until your drains are removed. **FIY hospital uses Isopure protein product.**

CLEAR LIQUID DIET:(BARIATRIC I)

(2-3 ITEMS PER MEAL)
GATORADE (1) PER DAY
APPLE JUICE (1) ONLY EA. MEAL
POPSICLE-SUGAR FREE (1) ONLY EA. MEAL (NOT RED)
TEA AND COFFEE
BROTH
JELLO (NOT RED)
DIET SNAPPLE
CRYSTAL LITE DRINKS
BOTTLE WATER IF REQUESTED

FULL LIQUID DIET: (BARIATRIC II)

(2-3 ITEMS PER MEAL)
LOW FAT YOGURT (NO FRUIT CHUNKS)
CREAMY SOUPS (NO MILK)
SMALL AMOUNT OF CRAKERS IF NAUSEATED
OATMEAL
CREAM OF WHEAT
MALT-O-MEAL
APPLESAUCE
PROTEIN SUPPLEMENT
ALL ABOVE ITEMS FROM CLEAR LIQUID LIST

SOFT DIET: (2-3 ITEMS PER MEAL)

EGGS, SOFT BOILED OR SCRAMBLED
MASHED POTATOES/LOW FAT GRAVY
RICE/PLAIN OR WITH LOW FAT GRAVY
SOUPS/LOWFAT CREAMY
NO BREAD
APPLESAUCE

RESTRICTIONS

**SMALL PORTIONS ONLY / NOTHING RED COLORED PLEASE
NO CARBONATED BEVERAGES
NO CHUNKY, CRISPY OR FRIED FOODS
NO LACTOSE OR MILK PRODUCTS
NO EXCEPTIONS UNLESS ORDERED
BY DR. KESHISHIAN OR DR. ZAHRIYA**

CENTRAL VALLEY BARIATRICS' DIET GUIDELINES (DOC-08) POST OPERATIVE NUTRITION

First Month: Once you are progressed off of the hospital diets you should eat 3 small meals per day. If you are feeling hungry between the 3 meals you may have a protein shake. A Protein shake is considered a meal in itself. You may want to mix your protein powder with half of the required fluid in the instructions.

If you are feeling nausea try eating something such as a cracker or a teaspoon of yogurt in your stomach between meals.

Your stomach size is approximately 4-6 ounces (1/2C to 3/4C) at the stretched point so it may take you longer to eat and drink. You should only be able to eat 1-2 teaspoons of food at a time or drink 1-2 sips at a time.

You **DO NOT** want to stretch your new stomach! It may take you several hours to drink or eat a meal. Eat slowly and allow at least 30 minutes or more to eat and chew each bite thoroughly. Stretching your stomach can cause suture lines to break or to slow your weight loss.

Your foods should be soft, lactose-free, low fat, with low sugar content and limited carbohydrates. Sugar & Carbohydrates will slow your weight loss because sugar & carbohydrates are easily absorbed right from the mouth. Avoid meats, anything fried or crispy, raisins, and nuts. Remember to achieve a minimum of **80 grams of protein intake per day. Read the nutritional labels on the food products. You want to make the best nutritional choices for the volume of food that you will consume; i.e. lowest carbohydrate/sugar and fat content with the highest protein content for the smallest portion.** You may be surprised to find that similar food products have much different nutritional contents.

Fluids must be continually sipped all day long to prevent dehydration. **DO NOT GULP** or take large drinks of fluids, **your small stomach CANNOT tolerate** this and you may vomit. You should try and consume 40- 64 ounces of fluids a day. You should not drink 30 minutes before and after a meal. We want you to fill your stomach with protein first and if you drink you will fill your stomach with the fluids and not get enough protein. **No carbonated beverages**, until cleared by us.

Stay away from sugar of any kinds, including fruits and juices. If you eat too much you will vomit. It can be difficult to get use to your smaller stomach size.

Acceptable Food Items upon discharge from hospital's list up to the 2nd or 3rd Month

The first month you must adhere to the food list below or the in hospital list depending on the doctor's orders.

- 1 Egg=8 Gm. Protein.
- Lactose-free protein powder=24 Gm. Protein/Tb. (Mix in blender with ice, soy milk, water, or add to other foods. Replaces a meal or can be a snack.
- Protein Bars (Low carbohydrates)
- Mashed potatoes add mashed tofu or unflavored protein powder for extra protein

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- Morningstar soy products: chicken less nuggets, buffalo wings, breakfast sausage
- Tempeh (soy vegetable product)
- Healthy-Choice Soups or any other low fat type soups—no pasta or large chunks of meat, add tofu, add **pureed** chicken breast or unflavored protein powder for extra protein.
- Tuna, moist fish such as salmon, orange roughy, mackerel, imitation crab, shrimp, etc.
- Bake chicken breast or dark meat in broth or fat free, milk free sauce (**you may only be able to eat ½ of a single chicken breast**)
- Peanut butter on crackers (be very careful with this, it is dry and can be hard to swallow)
- Turkey Bacon
- Tofu and Tofu Rella cheese products (no lactose). Remember to use Tofu As you would rice. Tofu is a great source of protein.
- Low-fat crackers—may help with nausea.
- Yogurt—Light, no fruit. Add unflavored protein powder for extra protein. **YOU WILL NOT BE ABLE TO EAT A WHOLE CONTAINER.** Try the small 4 ounce cup; however, you still may not finish it.
- Adding plain yogurt (instead of sour cream) to rice and mashed potatoes.
- Oatmeal, cream of wheat, grits add mashed tofu or unflavored protein powder for extra protein; Wheat Germ sprinkled on any food can add extra protein.
- Soymilk, rice milk, Lactaid milk use in protein shake for added protein.
- Cottage Cheese if you can tolerate it.
- WATER-is your fluid of choice! Diet Snapple, Crystal Lite, or small Amounts (high sugar content) of Gatorade.

You may find some of the suggested items above in specialty stores such as Trader Joe's, Whole Foods, and Gelson's. You can find some great protein shake recipes at the Pro Blend 55 MD Labs website. <http://www.mdlabs.com/mdlabs.html> click on free samples then on that screen there is a bullet to click for recipes. **Remember no carbonated drinks**, you can let them go flat and then use them with your shakes **FLAT DIET SOFT DRINKS ONLY!**

Read nutritional labels! You want to look for low calorie, high protein, low carbohydrate, and low fat. Get the most benefit out of the foods that you choose to keep your body healthy and in balance.

Vitamins: One general multivitamin (any brand) and at least 1500mg of Calcium **every** day for the rest of your life. You do not want to deplete your vitamin or mineral stores and especially Calcium. Please read the additional information on vitamin and minerals provided on Pages 35-40 of this workbook. Immediately post op your surgeon may have you take a children's chewable vitamin until you can tolerate a regular general multivitamin. Taking your vitamins and calcium is important in keeping your body and bones healthy and strong. If you do not take your calcium you may develop bone density loss.

2nd Month Post Operatively and on

- Gradually add one new food item at a time to see if it agrees with you. Continue to stay away from lactose, sugar and high fat and eat 3 small meals a day. Tastes and odors may change after surgery—sour or tart may taste particularly good. This is an excellent time to LISTEN to your body and re-learn how it is communicating to you the signals for fullness, hunger and satiety.

- Portion size needs to continue to remain small. You do not want to stretch your stomach size prematurely. You also do not want to graze or eat in between meals. Both of these actions can slow weight loss. If you do not make life long dietary and nutritional changes you can and will re-gain weight. GRDS is not a cure for bad eating choices and will not be effective if you are eating unhealthily, eating larges amounts, over stuffing yourself, eating between meals, snacking or grazing during the day. Having surgery **DOES NOT** give you license to eat as much as you want whenever you want. If you choose to eat in this fashion you **WILL GAIN WEIGHT**.
- Protein remains important up to nine months post op during the rapid weight loss. Meat may take some time—many people tolerate this after a few months. Anything “dry” may cause discomfort—white chicken or turkey may need low fat sauce with it. Healthy Choice Deli slices--Low fat ham, chicken, or turkey are well tolerated. Imitation crab and fish that is not dry, is generally well tolerated. Beef or turkey jerky sticks flavored with Teriyaki are all popular. Remember Common Sense works!!

Remember Protein! : *If you have not taken in adequate Protein over the first few months, your body will start to break down its own source of Protein—muscle. It is just as easy for the body to break down muscle, as it is fat cells. It can also cause problems with adequate healing and tissue repair. Inadequate protein levels will cause you to feel nauseated and weak. The lack of protein can also cause dehydration to become more of a problem and cause swelling of extremities. It is important to prevent this from happening.*

Dehydration: will occur if you do not drink enough fluids. It is the most common problem after surgery. *Symptoms include fatigue, dark colored and or strong smelling urine, dry lips, and dryness inside the mouth, light-headedness when standing, dizziness, and fainting.* Call the office immediately if you have any of these symptoms (661) 725-4847. **The best treatment is prevention. Continually sipping fluids** is the best way to prevent dehydration. Remember DO NOT GULP OR TAKE LARGE DRINKS OF FLUIDS AT ONE TIME. Your new stomach is only 4-6 ounces in size. Blood work should be done if dehydration persists. Dehydration may lead to bladder and kidney infections. In some cases you may need to be admitted to the hospital so that fluids can be given to you via an IV.

Loose Stool: Remember your stool will be soft until the food you eat becomes more solid. Lactose intolerance and fat intake are generally the culprits. Again listen to the clues your body is giving you. High fat diet and MSG may cause increase gas and loose stools, even long term. You may want to try Devrom www.parthenoninc.com (similar ingredient as Pepto-Bismol in tablet form and safe for long term use) or try Pepto-Bismol to help with gas and loose stools if it persists past the initial 2 weeks. These products can turn your stool a dark color. Always look at what you are eating, if the loose stools continue, add rice to your diet, go to a bland diet and temporarily eliminate any fruits and vegetables you may be eating. Banana, which is a good source of minerals will usually not cause diarrhea. If cramping and loose stool persists for more than 2 days, please call the office.

Flatulence: For most people gas is a problem because it causes (sometime painful) bloating and (often mortifying) odors. Everyone has gas. The average person generates 1 to 3 pints a day. But some people produce a lot more than others. Certain foods are gassier than others. But gas-producing food for one person may not be for the next. Extremely flatulent foods (more than 40 passages per day) vary from one person to another. Carbohydrates are largely to blame for large volumes of gas due to sugars, starches, and fiber that reach the colon (large intestine) without being digested or absorbed. Once in the colon the colonies of harmless bacteria eat them and give off by products of hydrogen, carbon dioxide, and in some people methane. These are the "good bugs" (bacteria) that are wiped out with antibiotics and may need to be replaced by taking Ultra Dolhilus, Ultra Bifidus, Reuteri lactobacillus and Lactobacillus acidophilus. Devrom is also another good medication that can be taken to reduce the odor.

1. One of the most common sources of gas is lactose, which is a sugar that occurs naturally in milk products. Many people don't have the enzyme (lactase) to digest lactose.
2. Another source is soluble fiber, like the pectin in fruits and the beta-glucans in oat bran.
3. Researchers have shown that gas-producing bacteria feed off small amount of starch that escapes digestion by enzymes in the small intestine. So far, wheat, oats, potatoes, corn, and virtually every starchy food has been implicated, even innocuous foods like bread and pasta made with white flour can cause gas. The worst offenders are any processed white flour products. These products contain Sorbitol and the bacteria react with the Sorbitol and cause gas.
4. The fourth and most infamous source of gas is the family of raffinose sugars found (large amounts) in beans, and smaller amounts in many vegetables and grains. No one has the enzyme Alphagalactosidase to break them down. When they hit the large intestine, our bacteria have a feast.

Some products you may find helpful in preventing or deodorizing gas:

- Devrom: available over the Internet at www.parthenoninc.com or by telephone 1-800-453-8898.
- Gas-Ex: over the counter in most drug and grocery stores. Take with your meals.
- Beano: over the counter in most drug and health food stores. Take with your meals.
- Pepto Bismol
- Natural Chlorophyll (Alfalfa Chlorophyll) by Natures Plus helps with gas odor and is found in most health food stores.
- Lactaid tablets: found in most grocery and drug stores
- Reuteri lactobacillus Nature's Sunshine found in most health food stores
- Lactobacillus acidophilus found in most health food stores

DISCHARGE AND POST OPERATIVE SECTION (DOC-09)

Immediate Hospital Discharge: You will also receive a discharge form when you leave the hospital.

1. **Follow up appointment:** On the day of discharge the doctor will let you know when your first post op appointment will be. You are responsible for calling the office to set the date and time 1-661-725-4847.

2. **Medications:** You will receive any needed prescriptions and be told which pre-op medications to take before you leave the hospital. You may have been taking other medications prior to your operation but after your discharge from the hospital, take only those recommended by your surgeon. Over the counter medications should be cleared by the doctor before taking.

3. **Incision Care:** Your incision may or may not have a gauze dressing over it. If you do have a dressing over your incision, remove it daily and wash over the incision with soap and water in the shower. Dry it well after you shower. The general principal is to keep it clean and dry. The incision should be left open to air to prevent infection. There may be some drainage from the incision, however, it should be clear or pink, and in this case you may put clean gauze dressing over the incision. If there is any drainage other than clear or pink, such as green, white, yellow, or redness around the perimeter of the incision or foul smelling CALL the office immediately.

Your incision may open slightly and leak or ooze fluid. Do not panic. If the oozing is new or your incision opens call the office. Note the color of the fluid, color of the skin color around the incision site, if you have had a temperature, amount of drainage, smell if any, and consistency of the drainage. If the incision opens note in inch increments how much it has opened. Do not submerge your incision for 3 weeks unless cleared by your surgeon. Take your temperature every AM and PM for the first month after surgery.

4. **Activity:** Continue walking at least four times a day. Start with short walks and increase your distance. Please read the exercise section in the workbook. No lifting greater than 15 pounds for 6 weeks after surgery. You should not drive for 2-3 weeks due to the chance of accident and the steering wheel causing damage to your incision. Many patients go back to halftime work the fourth week to ease back into a work schedule.

5. **Diet:** Please refer to your Nutrition and Vitamin section. Start taking two childrens chewable vitamins until you are taking enough protein and fluids and then you may start taking regular Multivitamins and 1500mg Calcium. Always remember that Protein and Water are the most important nutrients for the first few months.

CONCERNS: *We do not expect you to have any serious concerns but if you do experience fever 101 or above, wound drainage, chest pain, shortness of breath, vomiting, leg pain or swelling, or any other unusual symptoms call the office IMMEDIATELY! 1 (661) 725-4847*

Exercise: Walking is the best postoperative exercise and since you have been doing laps around the nurse's station in the hospital you are all geared up! Time your walks and walk around your home initially and then go outside adding both time and distance to each walk. Keep up the good work that you started before surgery! You will feel fatigued at times; listen to your body. Learn to push yourself gently. Remember to stretch before and after walking, swimming (you can not submerge your incision until cleared by your surgeon) or any type of exercise. Stretching helps to warm up your muscles and gives your tendons strength and flexibility.

Take your water bottle with you on your walks and continuously sip. While exercising you need to pay attention to your hydration. You will need to take in increased amounts of fluid if you are perspiring. Adequate fluid intake is essential to prevent and fight dehydration that could lead to possible kidney damage. Of course, water is your fluid of choice and must be continually sipped all day. Gatorade is an excellent source of fluids because it contains potassium, remember that it also contains a large amount of sugar and may slow your weight loss.

Patients who have committed themselves to an exercise program list many benefits such as: helping ease incision pain, help ease the discomfort you may feel after eating too much, improved sleeping, less back pain, and increased feeling of well being.

You can keep up with the upper body work out that you began before surgery! However, you need to listen to your body; *if it hurts do not do it!* Continue with your arm curls and lifts that you started before surgery. You may find it harder and need to decrease the weight or go to a smaller soup can or less water in the bottle. But remember to increase your repetitions in sets of 10's and add weight as you progress. Remember not to lift more than 15 pounds before six weeks.

Push-ups may be started by leaning on a wall at first and then progressing to the floor adding more repetitions as you go.

You should not do any abdominal crunches (low sit-ups) or sit-ups until 10-12 weeks and after first checking with your surgeon. When you are cleared to start abdominal crunches listen to your body. Start slowly and increase your repetitions in the typical floor position, on your back, knees bent, hands clasped behind your head supporting your head. Keep your elbows out flat; if you are able to see your elbows then you are not in an efficient body position.

The average Gastric Reduction Duodenal Switch patient will lose an average of 100 pounds. Exercise will affect the weight loss tremendously. If one has 200-300 pounds to lose, the surgery may not be as successful unless exercise becomes an integral part of the program.

If you want to feel good, help your skin bounce back and maintain and build muscle mass you must exercise. *Exercise also helps to keep your bones tissue dense and strong, maintains weight loss, increases strength and balance, boosts energy, and improves quality of life.* Research has shown that the patient who decreases sugar intake and exercises 3 or more times a week for at least 30 minutes has a 22% increase in their weight loss.

There is no accurate way to estimate how one's skin will react to surgery or weight loss. There are many factors, such as age, genetics, and elasticity of the skin, that influence the change in one's skin. Exercise may help the skin's ability to tighten up after the weight has been lost. You want to give your body the best chance possible while rapidly losing weight. **Do not cheat your body of this important aspect of exercise and weight loss. You will need to make a life long commitment to exercising!**

Protein and water are essential during the weight loss period. Remember to eat your protein items first and try to take a minimum of 80 grams of protein daily. This will prevent muscle loss, provide energy, and help with tissue repair and healing.

Emotional and Psychological changes:

This surgery will have both physical and psychological effects on your life. Please do not take these changes lightly. All patients need to consider these changes before their surgery. Some of the feelings that you will begin to experience will be depression, frustration, anxiety, anger, disappointment, helplessness, euphoria, excitement, and joy. This will be a normal reaction to the changes that you will be experiencing in your body image. If these changes are over whelming or you or our office feels you need further assistance with dealing with the psychological changes after weight loss surgery we will refer you to a mental health care professional. This is another important purpose for the psychological evaluation. It gives us someone to refer you to, if the need should arise, to a professional that has had contact with you in the past.

Remember this surgery will NOT fix your everyday problems with spouses, significant others, children, or family members. This surgery will begin to allow you to gain control over one aspect of your life. Be ready to hear positive and negative comments from people close to you. Some of your immediate family members will also be affected by your surgery. You may also have family or friends that may have difficulties with your weight loss. It is important to try and resolve these issues but the most important thing is you and your well being. Your relationships may change due to the weight loss. Some people may be threatened by your weight loss or become insecure. You might experience family conflict as you go through the process and your body begins to change. You will go through ups and downs in the months after surgery. You may even have libido changes, either increased or decreased.

There may even be times when you ask yourself "WHAT DID I DO!"

You may miss eating favorite foods or eating large meals. It will be difficult to adjust to not having the emotional comfort that food has provided you in the past. We, as a society, don't realize the effect food has or the role it plays in our everyday lives. One of the keys to the success of this surgery is for you to learn to replace those comforts with healthy activities. It will be harder to take smaller portions of food and for your mind to realize that the smaller portions are satisfying. Try to use a smaller sized plate to give yourself the illusion that your plate is fuller than if you had a larger plate.

It is sometimes difficult for patients to see themselves as smaller sized people even one year after surgery. They still may go to the large size section of the store to buy clothing.

It is important to discuss these issues with your support persons and come up with good coping mechanisms to deal with issues as they come up. Only you know yourself and it

is important to share with your support persons how you are feeling and what you think may help get you through the rough times. The important lesson to gain from this is to be prepared for these times. Just knowing that these changes may happen is not always enough. You need to have a goal or plan ahead of time to prepare for these changes.

It helps to keep a journal or diary, make connections with other patients, talk or cry with family or friends and most important to set goals for yourself. Set goals for where you want to be six months or a year after surgery. When these rough periods arrive focus on your goal and try not to get stuck in the emotional lows.

There may be times when you may need to seek assistance from a professional regarding these psychological issues. Your surgeon needs to be aware of how you are doing emotionally and psychologically. Please keep the lines of communication open to facilitate the best possible outcome for you. This is also one reason that we have you see a psychologist prior to surgery. If you need to see a psychologist after surgery it is best to see someone who has seen you at least one other time during a lower stress period.

Exercise is also a great tool to stay positive. It keeps the chemical levels in the brain balanced and helps to keep you motivated and increase weight loss. Good rest is also very important.

Long Term Commitments: Remember this surgery is only a **tool**; a tool to help you win the battle against Morbid Obesity. How effectively you use this tool will affect your weight loss. Please follow the recommended guidelines within this workbook.

Your window of weight loss is anywhere from 12 to 18 months. This is the most effective time to take advantage of exercise, eating healthy, and behavior modification. You can control weight loss and may see weight loss up to 24 months if you are diligent with your adding dietary/nutritional changes and exercise. Only with improved nutrition and increased activity can you expect to come close to your goal weight and maintain that goal weight. You will need to change the amount and types of foods that you eat. This surgery can assist you in making these changes but you need to actively pursue and maintain these changes.

The average Duodenal Switch patient loses anywhere from 70% to 85% of their excess weight. If you do not achieve this weight loss you must consider your sugar and carbohydrate intake, the frequency of meals (snacks and grazing will not help to lose the weight), and activity level. Please take this tool and gain back your health and well being. Your journey has begun! Now follow the guidelines and ENJOY this beautiful life that lies ahead of You!

- **Follow up:** Lifetime follow up is critical! Following up with your surgeon and scheduled lab work will help identify any nutritional deficiencies and problems you might develop and should be easily corrected. It is important to remember that you have altered your anatomy and you need to be followed by a surgeon who is familiar with the procedure and the entrescies of the procedure. Blood work may be ordered at 3 months, 6 months, 9 months and annually after that. The office staff will inform you when you are due for blood work. Blood work and multivitamin and calcium are your best defenses against nutritional deficiencies.
- **Daily Multivitamins & Calcium:** The limited absorptive part of the surgery makes it necessary for you to take and be committed to taking multivitamins and

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1500mg calcium for life. The multivitamin should be a general multivitamin with minerals and added calcium (you may need to add a calcium tablet to get 1500mg of calcium a day). The Calcium should be taken in divided doses over the day, not the entire 1500mg in one dose. Read your vitamin labels! If you are a menstruating female you maybe at risk for iron deficiency anemia and may need to take iron supplements also. We will also be monitoring your vitamin D and A levels to see if it is necessary for you to take water soluble Vitamin A & D. The limited absorptive properties of the surgery can put you at risk for loss of bone density but with exercise and taking calcium supplements this can be avoided. Bone density scans are something one should consider having done as a baseline and every few years after surgery especially if you are 50 years and older.

- **Exercise:** The more weight that you lose the easier this element will be. Exercise has many benefits such as tightening loose skin, relieves stress, and depression. Setting a consistent (at least 3-4 times a week) aerobic and weight bearing exercise program is the most beneficial. If you do not make exercise an integral part of your lifestyles you may re-gain weight.
- **Diet and Nutritional Changes:** Surgery is only a tool and the key to the success of the tool is the long term diet and nutritional changes that surgery can afford you. GRDS is not a cure for bad eating choices and will not be effective if you are eating unhealthily, eating larges amounts, over stuffing yourself, eating between meals, snacking or grazing during the day. Having surgery **DOES NOT** give you license to eat as much as you want whenever you want. If you choose to eat in this fashion you **WILL GAIN WEIGHT**.
- **Monthly Group Meetings:** We consider group meetings MANDATORY. We know realistically we cannot make you attend these meetings, but they are for you: for education, support, and nutritional and Medical advice. Family member are always encouraged to attend. Studies have shown that patients who regularly attend group meetings seem to have more successful weight loss and mental adjustments down the road.

PREGNANCY (DOC-10)

Pregnancy: We ask that you prevent pregnancy for at least 18-24 months after your surgery or until cleared by your surgeon. This is the time for rapid weight loss and is **not** conducive to maintaining the health of a fetus. We ask that you use two forms of birth control, such as barrier and chemical forms or barrier and pill forms of birth control once the doctor has released you to start taking the birth control pill. Maternal malnutrition may impair normal fetal development after surgery. All patients who are losing weight, at a rapid rate, are in some way suffering some form of malnutrition.

Pregnancy should be postponed until your weight has become stable for some time. After the initial 18-24 months, your meal portions should become normalized and your nutritional status become adequate to sustain health for a growing fetus. Women who become pregnant after WLS should receive specific attention from the surgical care team along with their obstetrician. **We will need to know the name and address of your OB/GYN so that we may send them an information packet to inform them as to the procedure you have undergone and what to monitor.** Many patients have become pregnant after DS without any difficulty, but they do need to be watched more closely and they also need to make sure they are taking all necessary vitamins, minerals and proteins.

- Folic acid, one of the B vitamins, has been found to prevent neural tube defects (NTD). Increased intake of folic acid reduces the risk of NTDs such as anencephaly and spina bifida (open spine) by as much of 50 to 70 % if women take enough of it before conception and in the early months of pregnancy. Take your multivitamins containing 400 mg of folic acid (the standard in most multivitamins) every day.
- Vitamin A is also important to prevent blindness in the fetus. Vitamin A levels should be drawn prior to becoming pregnant and during the pregnancy.
- Protein is important in all structural formation of the fetus and the mother needs to increase protein intake by at least 30 grams daily. Nearly all tissue formation involves the necessity of protein.

Many morbidly obese patients also have fertility problems, but after WLS they will frequently be able to become pregnant once the weight loss begins. **Do not get pregnant until your weight has stabilized after 18 to 24 months. Please notify the office immediately upon learning of your pregnancy. Use at least TWO forms of birth control during the first 18-24 months!**

HAIR LOSS AND SKIN CHANGES (DOC-11)

Unfortunately hair loss is a very real side effect of surgery and it can be a disheartening problem. Hair loss happens because the hair follicles grow in cycles over several months. The shock of surgery, lower caloric & protein intake, and anesthesia cause the hair follicle to stop growing. Because this may happen any where in the growth cycle you often don't see the hair loss right after surgery but a few months after surgery. The hair loss WILL STOP. The tips below can help slow hair loss and encourage new hair growth, however because of the hair follicle's growth cycle it may take several months before you start seeing new hair growth.

The same reason for the hair loss can also cause changes in your skin texture and appearance. It is not uncommon for patients to develop acne or dry skin after surgery. The protein, vitamins and calcium are also important to health skin. You can also try using a very emollient cream for dry skin and keeping acne skin clean and oil free. These problems will go away.

- Protein intake is extremely important for healing, hair growth and to prevent muscle wasting. After surgery you need 80 gm or more of protein every day. Again while you are going through the weight loss period your body does not care if it loses fat mass or muscle mass. The best way to enhance hair growth, fat mass loss and prevent muscle loss is to get 80 gm or more of protein daily and to exercise daily.
- Multivitamins with minerals every day are also an important supplement because if you are deficient in vitamins and minerals then your body takes the essential vitamins for the general running of your body and doesn't give the unessential things like hair and nails what they need to grow.
- Nioxin shampoo has been traditionally used by cancer and chemo patients but some GRDS patients have had good luck with it also.
- Biotin tablets or powder are great for healthy hair, skin, and nails. 600-1000 mcg daily and can be found at most health food, vitamin or beauty supply store. Also assist the body in turning fat mass into usable energy.
- Folicure tablets and shampoo can also help. They can be found at Sally's Beauty Supply.
- Zinc 50mg tablets every other day for no more than a month. Zinc blood levels can get too high after this period of time. Zinc can interfere with iron absorption at higher levels. Zinc helps with protein synthesis and collagen formation (both ingredients for hair growth). Inactivity can lower the body's levels of zinc another reason why exercise is important.

Folate is helpful if you develop a fine acne type rash on your skin. You can add an additional tablet daily for 30 days and the rash should resolve. Please call the office if it persists or does not get better after a week of taking the additional supplementation.

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BARIATRIC SURGERY CONTRACT (DOC-12)

Ara Keshishian, M.D.

Karim Zahriya, M.D.

GASTRIC REDUCTION-DUODENAL SWITCH

HAVING ELECTED TO UNDERGO BARIATRIC SURGERY FOR MY OBESITY, I UNDERSTAND & AGREE TO THE FOLLOWING:

1. I have been informed of my personal medical problems, the dangers of morbid obesity, and the operations available to me.
2. The dangers and complications of surgery have been completely explained to my satisfaction, including the possibility of death. Re-operations may also be necessary, either during the same hospitalization, or later after being discharged.
3. I am voluntarily electing to have this surgery without coercion or deception on the part of the surgeons or other medical staff.
4. I realize the importance of post-operative appointments and blood work and I will keep those scheduled appointments and have labs drawn.
5. Specific **vitamin and mineral supplements** shall be required after surgery and I will purchase and be committed to taking these supplements the rest of my life.
6. I realize the importance of attending the **monthly group meetings** and understand they are crucial to my success especially the first year.
7. It has been emphasized to me that **behavior modification** is critical in attaining acceptable long term weight loss and that this process is learned primarily through Support Group meetings.
8. I am now aware that Behavior Modification is an important educational process, which will be made easier as a result of my surgery. I do understand that it involves exercise, changes in the types & amount of food I eat, liquids I drink, the number of meals I eat per day. **I am aware that if I don't make these changes it is possible I can re-gain weight.**
9. I realize my liver may be sensitive after this surgery and I should stay away from alcohol and any drugs that may cause liver damage.
10. I understand the importance of **long-term follow-up**. I agree to be seen in the office and have necessary blood drawn or communicate with our office and have blood drawn on an annual basis.
11. **I will read and follow the guidelines within the Patient Workbook that I have been given.**
12. **I understand why I should not become pregnant during the weight loss period and until cleared by my surgeon.** (if applicable)

I _____ have read the foregoing contract. I do understand and agree to abide by these terms.

PATIENT _____

Date _____ WITNESS _____

TEACHING GUIDELINES (DOC-13)

- Normal Anatomy
- Gastric Reduction Duodenal Switch Anatomy and Physiology
- Different Weight Loss Procedures Anatomy and Physiology
- Complications, Morbidity, and Mortality of Surgery
- Nutrition, Vitamin, and Mineral requirements and complications
- Exercise
- Psychological Changes
- Preoperative Instructions
- Hospital Course of Care
- Discharge Instructions
- Support Group Meeting Attendance
- Importance of reading and studying the Patient Workbook
- Pregnancy after weight loss surgery
- Viewed educational video
- Given patient Workbook

I _____, acknowledge that in my preoperative teaching session(s): I have received detailed explanations as outlined above. I was given adequate opportunity for questions and answers to my satisfaction. I am aware that the Bariatric Clinical Coordinator is available by phone or e-mail to answer questions I may have at any time. I am also aware that I need to attend 2 Bariatric support group meetings before my surgery. I have received the patient workbook and I will read and follow the guidelines with in the workbook.

Patient Signature: _____ Date: _____

Witness Signature: _____ Date: _____

PATIENT HOMEWORK (DOC-14)
Due prior to your surgery date

1. Name three items of food that you will NOT be able to have the first month after surgery.

2. What size is your stomach after surgery?

In ounces: _____

In cup measurements: _____

3. Describe how you should care for your incision after surgery at home.

4. What should you do if you have a temperature higher than 101.0?

5. What are the 2 signs and symptoms of dehydration?

6. How many grams of protein will you need to eat daily after surgery?

7. How much of a chicken breast might you be able to eat after surgery?

8. How should you keep yourself from becoming dehydrated after surgery?

9. Name four items of food that you WILL be able to have the first month after surgery.

10. How many ounces of water or fluids do you need to sip continuously every day after surgery

11. How long before you are able to drive after surgery?

12. What may happen if you gulp or drink too much too quickly or eat too much after surgery

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13. Your stool may be what consistency after surgery for the first weeks?

14. If you experience signs or symptoms of dehydration what should you do immediately?

15. What are the benefits of exercise, as described in your workbook, after surgery?

16. When will you be able to do sit-ups or crunches after surgery?

17. How long after weight loss surgery should you wait to become pregnant? Why?

18. How long after surgery might you be at risk for pulmonary embolism (blood clot to the lung)?

19. What is the best prevention of pulmonary embolism?

20. How much Calcium should you take daily after surgery?

21. What is a problem you may develop if you do NOT take your Calcium?

22. If you are an out of town patient, approximately how long will you and your support person need to stay within close proximity of your surgeon's office?

23. I can re-gain weight if I do not maintain a healthy well balanced diet and a regular exercise routine. True or False

ADDITIONAL INFORMATION (DOC -15)

1. The Wellness Encyclopedia for Food and Nutrition
Random House
Dr. Sheldon Margen M.D.
University of California at Berkley
2. Obesity Surgery Magazine
Official Journal of American Society of Bariatric Surgery
3. Cooking Light
PO Box 2463
Birmingham, AL 35282-9556
4. Ten Days to Self Esteem
D. Burns 1993
5. Talking to Yourself: Learning the language of self-affirmation 1991
6. What Do You See When You Look In The Mirror? Helping yourself to a positive body image. Thomas F. Cash PhD 1995

WEBSITES FOR FURTHER INFORMATION

www.obesityhelp.com

www.mywls.com

www.mdlabs.com (for protein shakes & recipes)

www.duodenalswitch.com

www.parthenon.com (for Devrom)

www.fitday.com (food nutritional value & exercise)

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PSYCHOLOGIST & DIETICIAN ROSTER (DOC-16)

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JOURNALING EXERCISE (DOC-17)

We strongly recommend that you start a journal to accompany you through your journey. Along with pictures, measurements and milestones, the journal will help you put into words the changes that you are going through. You will treasure this work and will be glad to flip back the pages to see your transformation. To get you started, we have given you a few exercises for you to complete. This is your journal; nobody is going to ask you to share it with anyone, unless you want to do so. Be truthful and honest with yourself and have fun writing down on paper the struggles, the surprises, and the accomplishments. You will also find a table to record your measurements, weights, etc. These journal entries will be a great tool to look back on as you progress through your changing new life. You might also redo the following exercises at your yearly anniversaries to see how you have changed!

If you would like to expand on a thought please use another piece of paper.

What I like most about myself is:

I feel my best when I ...

I look best when I ...

I smile the most when I ...

What I believe people like best about me is ...

What I do to enhance all of the good qualities in me is ...

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What I have done to improve my self-esteem and self-image since surgery is:

When I look in the mirror I am a different person and what I like about this person is:

What I don't like about that person is:

What I plan to do in the future to improve my self-esteem and self-image is:

How do I feel about myself?

What kind of friend am I to myself?

How do I feel about my body now?

The most difficult situation I have had to deal with since surgery is ...

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When dealing with my significant other I have had to help them adjust by ...

When I look in the mirror and still see myself as being "fat", what I do to help me overcome that feeling is to ...

My significant other tries to help me adjust by

TOP TIPS FOR YOUR FIRST WEEKS AT HOME (DOC-18)

Stomach size is only 4-6 ounces: 1/2-2/3 of a measuring cup at MAXIMUM STRETCH. You **do not** want to stretch your stomach.

CONSTANT SIPPING of water or other acceptable fluids.

48-64 ounces daily! DO NOT GULP OR DRINK LARGE AMOUNTS OF FLUIDS AT ONE TIME. This may make you vomit. Your stomach size is too small for gulping or large amounts.

80 grams or more of protein a day: Limited to the below list of acceptable diet for the first 1 month after being advanced from your hospital diet by your surgeon. **The first few days after being released from the hospital you may be on a more restrictive diet.**

Low fat, low sugar, NO CARBONATED DRINKS, nothing fried or crispy, limit spicy foods, Lactose free. Read workbook for further information.

- 1 Egg=8 Gm. Protein.
- Lactose-free protein powder=24 Gm. Protein/Tb. (Mix in blender with ice, soy milk, water, or add to other foods. Replaces a meal.
- Protein Bars (Low carbohydrates)
- Mashed potatoes
- Morningstar soy products: chickenless nuggets, buffalo wings, breakfast sausage
- Tempeh (soy vegetable product)
- Healthy-Choice Soups—no pasta or large chunks of meat add tofu for extra protein
- Tuna, moist fish such as salmon, orange roughy, mackerel, etc.
- Bake chicken breast or dark meat in broth or fat free, milk free sauce
- Peanut butter on crackers
- Turkey Bacon
- Tofu and Tofu Rella cheese products (no lactose). Remember to use Tofu As you would rice. Tofu is a great source of protein.
- Low-fat crackers—may help with nausea.
- Yogurt—Light, no fruit, and lactose free.
- Adding plain yogurt (instead of sour cream) to rice and mashed potatoes.
- Oatmeal, cream of wheat, grits; Wheat Germ sprinkled on any food can add extra protein
- Soy milk, rice milk, or Lactaid Milk

A meal may only be ½ or less of a small chicken breast and two teaspoons of rice or potato, or a small 4 ounce cup or less of yogurt. **Give yourself 30 minutes or more to eat**

Walk! Walk! Walk! Increase the length and time that you walk each time you walk.

Do your breathing exercises 10 times every 1-2 hours while awake.

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Bowel Movements will be loose for the first few weeks. If you have watery diarrhea you may try Pepto Bismol, if it persists longer than 2 days call the office. Increase your fluid intake. (Pepto Bismol may turn your stools very dark.) Also check to make sure you are eating appropriately! Increase water intake if you are having watery diarrhea.

Incision care unless otherwise prescribed: shower, wash with soap, rinse and dry thoroughly. If oozing or catching on clothing you may cover with a very light dressing, otherwise leave open to air except for wearing your abdominal binder. Take your temperature every AM and PM for the first month after surgery.

Incision may ooze or leak fluid or open slightly. Do not panic. If the oozing is new or your incision opens call the office. Note the color of the fluid, color of the skin around the incision site, amount of drainage, smell if any, if you have had a temperature and consistency of drainage. If incision opens note in inch increments how much it has open. Take your temperature every AM and PM for the first month after surgery.

Drainage Bulbs: DO NOT CUT tubing on drain bulbs. Bulbs need to be compressed after draining and the top closed while the bulb is compressed for adequate suction. Drainage may be pink/red to yellow clear fluid with a few clots.

Abdominal Binder: Wear the abdominal binder for at least 6 weeks while you are up and about. This helps to keep your incision secure while it is healing and helps to decrease your chances of forming a hernia.

If you have any fever (101.0 or higher), with chills, nausea, vomiting, persistent diarrhea, increase in pain, foul smelling or purulent puss like drainage from incision, shortness of breath, calf pain and/or tenderness or chest pain call the office IMMEDIATELY! (661) 725-4847

If you have any questions PLEASE call the office. (661) 725-4847

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GROUP MEETINGS (DOC-19)

You can find updates regarding group meeting on our website www.gr-ds.com under the group meeting icon.

Delano: 6:00 PM Delano Regional Medical Center Zacharias Conference Center 1401 Garces Hwy (Second Tuesday of every month)

Paso Robles: 6:30 PM Paso Robles Airport conference center facility 4000 Wing Way. (Third Thursday of every month)

Ukiah: 6:00 PM Ukiah Assembly of God Church 398 N. Barnes
contact Ruth Lorain letstalk@iwon.com for further information (First Friday of every month).

Bishop: 6:30 PM at the Partridge Building Northern Inyo Hospital. (The third Monday of every month)

Red Bluff: 6:00 PM. across the parking lot from the Coyne Educational Center in the Modular building, 2550 Sister Columba Dr. Red Bluff, CA. (First Thursday of every month.)

Eureka: 6:00 PM in the St. Joseph Hospital Campus Modular A and B at entrance, 2700 Dolbeer Ave Eureka, CA 95501.

Las Vegas: 6:00 PM at Sunrise Hospital 3186 S. Maryland Pwky. Meeting is usually in the Auditorium or the Rendezvous Room (Third Monday of every month).

San Jose: 9:00 AM Regional Medical Center of San Jose in the Peppertree C Room 2255 N. Jackson San Jose, CA 95116 (first Saturday of every month).

Sacramento: 6:00 PM Mercy General Hospital Campus 4001 J. Street Conference Room #2 (Friday before San Jose Meeting)

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WEIGHT AND MEASUREMENT TABLE (DOC -20)

	Pre-Op	Date	Date	Date	Date	Date	Date	Date	Date
Left Wrist									
Right Wrist									
Left Upper Arm									
Right Upper Arm									
Chest									
Waist									
Hips									
Left Thigh									
Right Thigh									
Left Calf									
Right Calf									
Dress Size									
Pant Size									
Shirt Size									
Bra Size									
Ring Size									
Shoe Size									
Neck Size									
Belt Size									
Jacket Size									

NUTRIENT INFORMATION (Doc-21)

FAT SOLUBLE VITAMINS

Vitamin A and Beta Carotene

- **Benefits These Body Functions:** Growth, vision, healthy tissue-skin-hair, resistance to infection.
- **RDA and Best Food Sources:** 5000iu - milk, butter, eggs, liver, leafy green and yellow vegetables.
- **Synergetic Nutrients (Works With):** Niacin, C, D, E, pantothenic acid, zinc.
- **Deficiency Symptoms:** Night blindness, itching, dry skin, loss of sense of taste.
- **Negative Interactions:** Alcohol, coffee, cortisone, mineral oil, nitrates.

Vitamin D

- **Benefits These Body Functions:** Bones, teeth, optimum calcium-phosphorus metabolism.
- **RDA and Best Food Sources:** 400iu - milk, cod liver oil, tuna, salmon oil, eggs.
- **Synergetic Nutrients (Works With):** Vitamin A, C, calcium, phosphorus.
- **Deficiency Symptoms:** Soft bones and teeth, spontaneous fractures, bone curvature.
- **Negative Interactions:** Mineral oil.

Vitamin E

- **Benefits These Body Functions:** Antioxidant. Protects cell membrane and tissues. Maintains circulatory system.
- **RDA and Best Food Sources:** 30iu - vegetable oil, grains, wheat germ, lettuce.
- **Synergetic Nutrients (Works With):** Vitamin C, B12, manganese, selenium.
- **Deficiency Symptoms:** Poor muscular and circulatory performance.
- **Negative Interactions:** Air pollution, mineral oil, birth control pills.

Vitamin F (Unsaturated Fatty Acids)

- **Benefits These Body Functions:** Influences skin, blood coagulation, cholesterol, glandular activity.
- **RDA and Best Food Sources:** Vegetable oils, sunflower seeds. RDA not established.
- **Synergetic Nutrients (Works With):** Phosphorus, A, C, D, E
- **Deficiency Symptoms:** Acne, allergies, dry skin, brittle hair, eczema, brittle nails.
- **Negative Interactions:** Radiation, X ray therapy.

Vitamin K (Menadione)

- **Benefits These Body Functions:** Blood clotting (coagulation).
- **RDA and Best Food Sources:** Green leafy vegetables, molasses, yogurt, alfalfa. RDA not established.
- **Synergetic Nutrients (Works With):** Unknown.
- **Deficiency Symptoms:** Diarrhea, increased tendency to hemorrhage.
- **Negative Interactions:** Aspirin, antibiotics, mineral oil, rancid fat, X ray therapy.

WATER SOLUBLE VITAMINS

Vitamin B1 (Thiamin) B Complex Factor

- **Benefits These Body Functions:** Heart and cardiovascular system, growth, nervous system, energy production, digestion.
- **RDA and Best Food Sources:** 1.5 mg - cereals, fish, lean meat, liver, poultry, milk, pork.
- **Synergistic Nutrients (Works With):** B-complex, B12, C.
- **Deficiency Symptoms:** Fatigue, poor appetite, pins and needles in legs, depression.
- **Negative Interactions:** Alcohol, coffee, excessive sugar, tobacco. Physical and mental stress depletes this nutrient.

Vitamin B2 (Riboflavin) B Complex Factor

- **Benefits These Body Functions:** Healthy skin. Tissue repair. Antibody and red blood cell formation.
- **RDA and Best Food Sources:** 1.7 mg - cereals, yeast, milk, eggs, leafy green vegetables, lean meat.
- **Synergistic Nutrients (Works With):** Vitamin A, niacin, B-complex, B1.
- **Deficiency Symptoms:** Cracks at mouth corners, sore tongue, light sensitivity to eyes.
- **Negative Interactions:** Alcohol, coffee, sugar, tobacco. Physical and mental stress depletes this nutrient.

Vitamin B3 (Niacin or Niacinamide) B Complex Factor

- **Benefits These Body Functions:** Healthy skin, nervous system, cell metabolism. Converts food to energy.
- **RDA and Best Food Sources:** 18 mg - cereals, yeast, lean meat, liver, eggs.
- **Synergistic Nutrients (Works With):** B-complex, B1, B2, B6, tryptophan.
- **Deficiency Symptoms:** Weakness, skin rash, memory loss, irritability, insomnia.
- **Negative Interactions:** Alcohol, coffee, sugar, antibiotics. Physical and mental stress depletes this nutrient.

Vitamin B5 (Pantothenic Acid) B Complex Factor

- **Benefits These Body Functions:** Helps convert proteins, carbohydrates, fats into energy. Immune system.
- **RDA and Best Food Sources:** 7.0 mg - most plants and animal food.
- **Synergistic Nutrients (Works With):** Folic acid, biotin, B-complex.
- **Deficiency Symptoms:** Weakness, depression, decreased resistance to infection.
- **Negative Interactions:** Alcohol, coffee. Physical and mental stress depletes this nutrient.

Vitamin B6 (Pyridoxine) B Complex Factor

- **Benefits These Body Functions:** Healthy red blood cells, gums, teeth, blood vessels, nervous system.
- **RDA and Best Food Sources:** 2.0 mg - cereals, wheat germ, yeast, meat, bananas, vegetables.

- **Synergetic Nutrients (Works With):** Vitamin C, biotin, pantothenic acid, niacin, magnesium.
- **Deficiency Symptoms:** Fatigue, anemia, nerve dysfunction, irritability.
- **Negative Interactions:** Alcohol, coffee, tobacco, birth control pills. Physical and mental stress depletes this nutrient.

Vitamin B12 (Cyanocobalamin) B Complex Factor

- **Benefits These Body Functions:** Development of red blood cells, growth, nervous system maintenance.
- **RDA and Best Food Sources:** 3.0 mcg - fish, lean meat, liver, milk.
- **Synergetic Nutrients (Works With):** Folic acid, A, B1, B6, niacin, biotin, pantothenic acid.
- **Deficiency Symptoms:** Anemia, weakness, fatigue, red-sore tongue, nerve degeneration.
- **Negative Interactions:** Alcohol, coffee, tobacco, calcium deficiency.

Folic Acid (Folacin, Folate) B Complex Factor

- **Benefits These Body Functions:** Production red blood cells, tissue cells. Normal growth. Healthy intestinal tract.
- **RDA and Best Food Sources:** 400 mcg - yeast, leafy green vegetables, meats.
- **Synergetic Nutrients (Works With):** Vitamin C, B6, B12, niacin.
- **Deficiency Symptoms:** Anemia, intestinal problems, pale tongue.
- **Negative Interactions:** Alcohol, oral contraceptives, tobacco, sulfa drugs. Physical and mental stress depletes this nutrient.

Choline - B Complex Factor

- **Benefits These Body Functions:** Nerve transmission. Regulates liver and gallbladder. Cell membrane structure.
- **RDA and Best Food Sources:** Yeast, eggs, fish, lecithin, wheat germ, organ meats, soy.
- **Synergetic Nutrients (Works With):** Vitamin A, B-complex, inositol, folic acid.
- **Deficiency Symptoms:** Growth problems, impaired liver and kidney function.
- **Negative Interactions:** Alcohol, coffee, sugar.

Inositol - B Complex Factor

- **Benefits These Body Functions:** Fat and cholesterol metabolism. Nerve function.
- **RDA and Best Food Sources:** Molasses, yeast, lecithin, fruits, meat, milk, nuts.
- **Synergetic Nutrients (Works With):** Choline, B-complex, B12.
- **Deficiency Symptoms:** Hair loss, constipation, eye abnormalities, high cholesterol.
- **Negative Interactions:** Alcohol, coffee.

Para-Aminobenzoic Acid (PABA) B Complex Factor

- **Benefits These Body Functions:** Blood cell formation, pigmentation of skin and may help restore color to gray hair.
- **RDA and Best Food Sources:** Molasses, eggs, liver, milk, rice, yeast, wheat germ, bran.
- **Synergetic Nutrients (Works With):** B-complex, folic acid, C.
- **Deficiency Symptoms:** Constipation, depression, fatigue headaches, irritability.
- **Negative Interactions:** Alcohol, coffee, sulfa drugs.

Vitamin C (Ascorbic Acid)

- **Benefits These Body Functions:** Wound healing, immune system. Maintenance of healthy gums, skin, blood.
- **RDA and Best Food Sources:** 60 mg - citrus fruits, berries, cabbage, vegetables, tomatoes.
- **Synergistic Nutrients (Works With):** Vitamin A, B6, pantothenic acid, zinc.
- **Deficiency Symptoms:** Bruise easily, wound healing, tooth/gum defects, aching joints.
- **Negative Interactions:** Antibiotics, aspirin, stress, cortisone. Physical and mental stress depletes this nutrient.

Vitamin H (Biotin) B complex Factor

- **Benefits These Body Functions:** Skin, circulatory system. Metabolism of carbohydrates, proteins, fats.
- **RDA and Best Food Sources:** 200 mcg - egg yolk, green leafy vegetables, milk, liver, kidneys.
- **Synergistic Nutrients (Works With):** Vitamin A, B2, B6, niacin.
- **Deficiency Symptoms:** Non-specific skin rash.
- **Negative Interactions:** Alcohol, coffee, raw egg white, antibiotics.

MINERALS

Calcium

- **Benefits These Body Functions:** Bone and tooth development and maintenance. Muscle contraction, nerve transmission.
- **RDA and Best Food Sources:** 800-1000 mg - milk, cheese, green vegetables.
- **Synergistic Nutrients (Works With):** Vitamin A, C, D, phosphorus.
- **Deficiency Symptoms:** Heart palpitations, muscle cramps, tooth/bone weakening.
- **Negative Interactions:** Excess saturated fat in diet.

Chromium

- **Benefits These Body Functions:** Carbohydrate metabolism, energy production and optimum utilization of glucose.
- **RDA and Best Food Sources:** 50-200 mcg - yeast, whole grains, vegetable oils.
- **Synergistic Nutrients (Works With):** Unknown.
- **Deficiency Symptoms:** Poor glucose tolerance. Low blood sugar levels.
- **Negative Interactions:** Excess iron.

Copper

- **Benefits These Body Functions:** Enzyme function. Hemoglobin production.
- **RDA and Best Food Sources:** 2-3 mg - nuts, seeds, organ meats, raisins.
- **Synergistic Nutrients (Works With):** Iron, zinc, cobalt.
- **Deficiency Symptoms:** Anemia, fatigue, weakness, bone fragility.
- **Negative Interactions:** Exhaust fumes, cadmium.

Iodine

- **Benefits These Body Functions:** Production of thyroid hormone. Regulates metabolism.
- **RDA and Best Food Sources:** 150 mcg - seafood, kelp, iodized salt.
- **Synergistic Nutrients (Works With):** Unknown.

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- **Deficiency Symptoms:** Enlarged thyroid gland in neck.
- **Negative Interactions:**

Iron

- **Benefits These Body Functions:** Transport of oxygen to tissues. Enzyme functions.
- **RDA and Best Food Sources:** 10-18 mg - whole grain cereals, nuts, green vegetables.
- **Synergetic Nutrients (Works With):** B6, C, B12, folic acid. Fiber increases absorption.
- **Deficiency Symptoms:** Fatigue, weakness from anemia, brittle fingernails.
- **Negative Interactions:** Excess saturated fat in diet, excess protein.

Magnesium

- **Benefits These Body Functions:** Enzyme activity. Health of heart arteries. Protein production. Nerve function.
- **RDA and Best Food Sources:** 300-400 mg - whole grains, seafood, green vegetables.
- **Synergetic Nutrients (Works With):** B6, C, calcium, phosphorus.
- **Deficiency Symptoms:** Growth failure, leg cramps, nervousness, confusion, easily angered.
- **Negative Interactions:** Excess iron.

Manganese

- **Benefits These Body Functions:** Enzyme activity in reproduction, growth, fat metabolism.
- **RDA and Best Food Sources:** 2.5-5.0 mg - whole grains, eggs, nuts, green vegetables.
- **Synergetic Nutrients (Works With):** Unknown.
- **Deficiency Symptoms:** Poor growth, reproductive and coordination abnormalities.
- **Negative Interactions:** Alcohol, coffee, cortisone, diuretics, excess sugar.

Phosphorus

- **Benefits These Body Functions:** Bone/tooth formation, muscle contraction, kidney function, nerve and muscle activity.
- **RDA and Best Food Sources:** 800-1200 mg - eggs, fish, meat, poultry, grains, cheese.
- **Synergetic Nutrients (Works With):** Calcium, iron, magnesium, manganese, vitamins A and D.
- **Deficiency Symptoms:** Continuous thirst, dry skin, general weakness, weak reflexes.
- **Negative Interactions:** Alcohol, coffee, cortisone, diuretics, excess sugar.

OTHER BASIC NUTRITIONAL FACTORS

Protein (Amino Acids)

- **Function:** Provides amino acids needed to build, repair, and maintain body tissues; fights infection; as an enzyme assists with chemical reactions; as a hormone regulates body functions; may be used for energy or converted to body fat. Each amino acid has specific functions.

- **Sources:** Meats, fish, poultry, milk, cheese, and eggs are some of the best sources since they contain all the essential amino acids; i.e. those the body cannot make. Vegetable protein (dried beans and peas, wheat, oats, brown rice) must be combined with complementary protein to provide missing essential amino acids. Small amounts of milk or cheese are very efficient in increasing the quality of vegetable proteins.
- **RDA:** 44 gm

Carbohydrates

- **Function:** Provide energy sources for the brain, nervous system and muscles. Those not used immediately by the body for energy are stored as fat. If the body does not get enough carbohydrates to supply its energy needs, the body burns dietary or body fat and protein for energy, thus robbing the body of protein that it needs for repair and maintenance.
- **Sources:** Two types of carbohydrates: simple and complex. **Complex** are found in starches, i.e. potatoes, rice, cereals, legumes, and some vegetables. **Simple** are found in the sugars, i.e. table sugars, products made with table sugars, and the natural simple sugars of fruit. Both contain the same number of calories per ounce, but foods containing complex carbohydrates carry a greater variety of minerals and vitamins. They also are excellent sources of dietary fiber that assist the body's digestive tract to function in a healthy manner.
- **RDA:** No specific amount recommended.

Fats

- **Function:** Nutrients that are often misunderstood, but fulfill unique body functions. Provide concentrated energy source; source of linoleic acid essential to the body, but doesn't make; aid in the absorption of fat-soluble vitamins; carry the flavor of foods; help maintain body temperature.
- **Sources:** Nuts, peanut butter, whole-milk products, meats, fish, poultry, eggs and some fruits such as olives and avocados. Richest sources of linoleic acid are vegetable oils, including corn, safflower, soybean, and sunflower or margarines and salad dressings made of these oils.
- **RDA:** No specific amount recommended.

Note: This guide is not intended to be used for diagnostic or prescriptive purposes. For any treatment or diagnosis of illness, please see your physician.