Weight Loss Surgery Information Guide

Accurate and up to date information for anyone considering the option of weight loss surgery to treat their obesity and other weight related medical conditions.

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DISCLAIMER

The information provided in this manual is intended for use by Dr. Jossart's patients only and is to be used in combination with office visits and educational webinars/zoom sessions. It is not intended for use by members of the lay public, nor is it a substitute for individualized medical care, and advice or consultation with a physician.

INTRODUCTION

This guide is for you, the patient. It is carefully edited by Dr. Jossart and his core staff (Amy, Julie and Patty) and includes advice from patients. The information is based on Dr. Jossart' s 25 years of experience with more than 3500 weight loss operations, feedback from patients from more than 30,000 preoperative and postoperative visits and the current medical literature.

The effects of obesity on your health and lifestyle slowly accumulate over time. In your youth, the effects may be limited to decreasing mobility, shortness of breath and joint pains. As you age, medical conditions become more apparent. Diabetes, high blood pressure, sleep apnea, arthritis, and many other medical problems lead to the need for multiple prescription medications and procedures. Other conditions such as blood clots, fatty liver and cancer are common with obesity and occur suddenly and may lead to an early death.

You have most likely lost weight many times in your life and felt better when you did. Unfortunately, you have probably gained weight back several times. You are now considering having surgery to achieve resolution of your weight related medical conditions and achieve a more durable weight loss. Your relatives, friends and doctors may or may not be supportive. Ultimately, you must do the best thing for your health so use the information in this guide, what you learn during the office visits, Webinars and Zoom sessions to make the best decision for yourself.

Weight loss surgery can dramatically improve your lifestyle and health. There are thousands of medical publications proving that weight loss surgery can cure or improve diabetes, high blood pressure, high cholesterol, sleep apnea, arthritis and several other medical conditions. It can reduce the risk of developing cancer and prevent the progression of fatty liver to cirrhosis. Lifestyle improvements cited by patients include the ability to run on a beach, complete a marathon, kayak, hike up a hill, use a seatbelt, cross your legs and the sense you are 20 years younger!

Warning! Weight loss surgery has essentially been proven to be the most effective treatment for obesity. However, 3% of patients beyond 5 years return to their starting weight and more than 20% never achieve or maintain their desired goal weight. The more than 70% who do achieve their desired result do so by following the diet and exercise recommendations. Our experience suggests the actual results you achieve will depend on the following: Daily monitoring of calorie intake, weekly weight monitoring and vigorous exercise. Those who rely completely on the operation to reduce their calorie intake will not lose enough weight. Those who find ways to "beat the pouch" with "soft carbs" will consume too many calories and not lose enough weight.

ABOUT DR. JOSSART

Dr. Jossart has served as Director of Minimally Invasive Surgery at California Pacific Medical Center since 1999. Dr. Jossart received his M.D. from the University of Minnesota-Minneapolis in 1991. He completed his general surgery residency at UCSF Medical Center in San Francisco including 2 years of Endocrine Surgery research. He completed a fellowship in Laparoscopic Surgery at Mount Sinai School of Medicine in 1999. He is a diplomate of the American Board of Surgery and a Fellow with the American College of Surgeons (ACS) and the American Society of Metabolic and Bariatric Surgeons (ASMBS). Since 2005, he has maintained a Center of Excellence (COE) or Center of Medical Experience (CME) status with the ASMBS, Blue Cross, Aetna, United Health Care, Cigna and CMS (Medicare). He is an In Network provider and **Center of Excellence Surgeon** with nearly all of the insurance companies. He does approximately 300 operations per year. Over half are for obesity and the rest are general abdominal operations.

WEIGHT AND BMI

Body Mass Index (BMI) is a calculation that determines your level of obesity. BMI is calculated by dividing your weight in pounds by your height in inches squared and multiplying by a conversion factor of 703 ([Weight/Height2] X 703). You can search BMI calculator on the net or go to http://www.greggjossartmd.com/qualifying/bmi-calculator/ and use the BMI calculator listed under qualifying. The results can even be emailed back to you!

Ideal Body Weight is a term most closely associated with the Metropolitan Life Insurance Tables that described "ideal" weight ranges related to height. This approach did not consider age or body frame. A better approach to determining your ideal body weight is to consider a weight range based on a BMI range.

Goal Weight is the final weight you will try to maintain after surgery. Generally, a BMI of 19-25 is considered normal or healthy. A BMI of 26-30 is considered overweight, but for larger framed individuals with greater muscle mass, this BMI may be considered healthy. Obese individuals who are trying to lose weight through surgery should pick a goal weight that correlates with a BMI range of 22-28 or in some cases, even higher (big men). This accounts for the weight of some excess skin. It is important to understand that your goal weight should be achieved only by losing (metabolizing) fat while preserving muscle mass. Dr. Jossart will help you decide on the weight you should try to achieve every 3 months after surgery and a final goal weight as well.

Morbid obesity is defined as having a BMI greater than 40 kg/m2 or 35-39.9 kg/m2 with weight-related medical conditions such as type 2 diabetes, high blood pressure, sleep apnea, high cholesterol and arthritis. Once your BMI exceeds 35 kg/m2 your risk of developing these medical problems or dying from obesity-related complications increases significantly. In addition, there are 13 types of cancer that are more common in patients with a BMI greater than 35 kg/m2. Generally, insurance companies will approve weight loss surgery for BMI's above 35 kg/m2 (with a medical condition).

SUMMARY OF THE MONTHS AND YEARS AFTER SURGERY

The reason you choose to have surgery is to lose weight, become more active and cure your medical problems. The following is a description of the first year after surgery.

Day 1-14: You were in the hospital for 1 or 2 nights. You go home and remain on a liquid diet of water-based beverages and protein drinks for the first two weeks. You are not on bedrest. You are on light duty activities and lots of walking. You may return to work within days or a few weeks depending on how physical your work is. Diabetes and High Blood Pressure often improve so much in the first day or two after surgery that you may not need to resume your medications at home.

Day 14-28: You advance to a soft diet. You increase activity more. You will lose between 15-30 pounds total in the first month. By the end of the first month, most patients will have reduced their doses or no longer be taking medications for weight related problems.

1-3 months: You consume regular foods but very small portions. The goal is to only consume 600 calories per day including 60 grams of protein per day. The rest of your daily energy or calories will come from metabolizing fat. If you have 100 pounds to lose, you have 350,000 calories of fat to metabolize! By the end of the 3rd month, you will have lost about half the weight you need to lose. Usually about 40-60 pounds.

3 months to one year: The rate of weight loss slows down but because you have lost so much weight you should be able to exercise a lot at this point. Generally, patients can lose another 40-50 pounds from month 3 to month 9. Heavier patients will still have weight to lose after one year and may require more frequent office visits and guidance to lose weight after one year.

One year and beyond: You must maintain a calorie intake and exercise pattern that allows you to maintain your new goal weight. Generally, patients can eat an average of 1300 calories per day and need to exercise 3-5 days per week or focus on getting 10,000 steps per day. By 3-5 years after surgery, if you do not have a stable diet and exercise pattern, you will tend to gain some weight back.

Weight Maintenance/Regain: There is no operation that can guarantee that you maintain your goal weight for the rest of your life. That is mostly up to how compliant you are in the years to follow. It is easiest to maintain your goal weight in the first few years after surgery and becomes more difficult by the third year. A 10-20% weight regain is common even among patients who are reasonably compliant with diet and exercise guidelines. Patients should try to achieve a relatively thin goal weight to allow for some weight regain over the first 5-10 years after surgery. It is critical that you always maintain a total daily calorie intake of less than 1300-1500 calories depending on exercise level. In only a small number of cases will individuals be able to exceed that intake and still maintain weight.

HOW DOES WEIGHT LOSS SURGERY WORK?

All the operations rely mainly on reducing how much you can eat by making your stomach smaller. This is known as “restriction”. It is this smaller stomach that enables you to reduce your calorie intake to 600 calories per day for several months after surgery. This calorie reduction forces you to metabolize fat cells for daily energy. If you have 100 pounds to lose, that is about 350,000 calories to burn off. If the surgery helps you to eat 2,000 less calories per day, you start losing 1-2 pounds every few days. Over 6 months, you may have lost 70 pounds and only have 30 pounds to lose. Metabolism does slow down some and calorie intake does increase some so it does become more difficult to lose the last 30 pounds or so. This type of diet can be done without surgery but it very difficult for most people to adhere to because they still have a normal or large stomach and can easily abandon the diet on any weekend or any period of time after starting. The surgical restriction of the stomach is more durable but be aware that even over a few years, the stomach can enlarge, and bad habits can return.

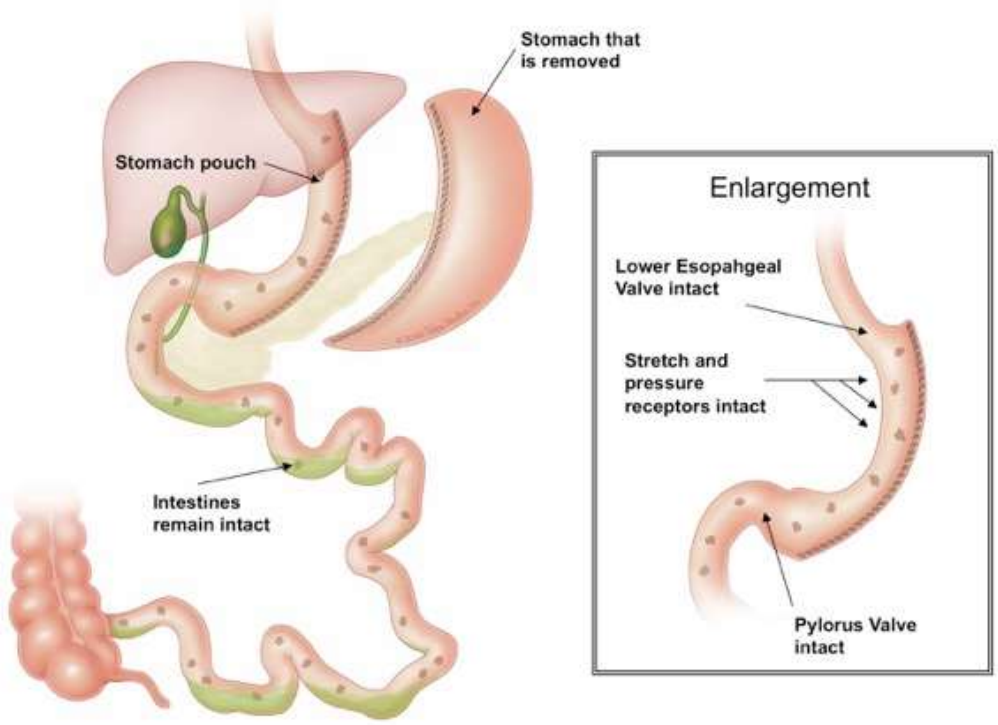
CHOOSING A PROCEDURE

There are 4 procedures that are available and usually authorized by the insurance companies. Patients should not choose based on length of surgery or recovery times as they tend to be similar. They are all done laparoscopically (usually 5 small incisions) which minimizes pain and makes recovery faster. They all take 1-3 hours to complete and 1-2 nights in the hospital. Larger patients with more medical problems often take longer and need a longer hospital stay. Patients go home on light duty activity, lots of walking and usually return to work in 1-2 weeks depending on how physical their job is. Those who have jobs that require lots of lifting should probably take a month off.

Nearly all patients in Dr. Jossart’s practice choose a sleeve gastrectomy. Dr. Jossart has recommended this as a first-choice operation to nearly all patients since 2002. It has the best safety profile and can always be converted to another operation later. In 2022, it was the most common procedure in the United States at 57.4% of procedures. It is superior to a Band procedure and is the reason Band placements have dropped to less than 0.4% of procedures in 2022. It has similar 5-year outcomes as a gastric bypass (22.2% of procedures) with regards to weight loss and diabetes resolution but does not have the catastrophic complications of ulcers and intestinal blockages. It is not as effective as a Duodenal Switch (2.1% of procedures in 2022) but it is much safer. Dr. Jossart does recommend the Duodenal Switch for severe diabetes and very high body weights, but this requires detailed discussions and awareness of the long-term risks. The best thing about a sleeve gastrectomy is that it can be converted to the other operations, but this is unusual since most patients are very satisfied with the sleeve gastrectomy. The final decision on what operation to have is best made with Dr. Jossart in the office while considering all your personal medical issues, age, family input, etc.

SLEEVE GASTRECTOMY (most common, 57% in 2022)

The concept of a tube-shaped stomach was originally developed in about 1985 with the duodenal switch operation. In 2000, the sleeve gastrectomy was done without the duodenal switch. Dr. Jossart started doing the Sleeve Gastrectomy with the Duodenal Switch in 1999 and the Sleeve Gastrectomy alone in 2002. In 2010, insurance companies started authorizing the procedure because 5-year results confirmed it was superior to gastric banding and almost equal to a gastric bypass. It has increased by 451% since 2011.



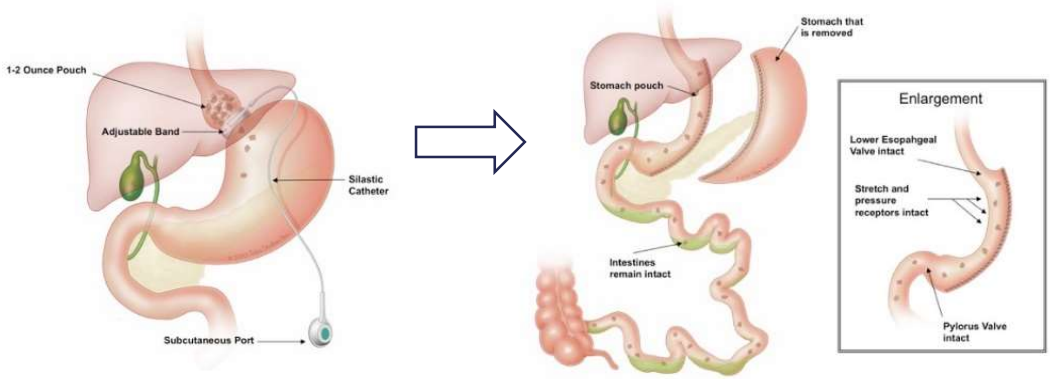
How the sleeve gastrectomy works: This procedure removes a large volume of the stomach (greater curvature) that allows us to eat large portions. The tube-shaped right side of the stomach that remains is called the "sleeve" as it is like the sleeve of a shirt. Most cells that produce the hunger hormone (Ghrelin) are contained in the section that is removed and there is some evidence that this also reduces hunger. The sleeve stomach that remains has intact stretch and pressure receptors as well as the valves of the stomach (Lower esophageal sphincter & Pylorus). Patients tend to notice early fullness, lasting fullness and much less hunger in between meals. Pouch size is usually 1-2 ounces in the first year. Most patients report fullness with 1-2 eggs. After one year, many patients report an increase in pouch size to 4 ounces (the size of a deck of cards).

Benefits: This has become the most common operation because it has weight loss and diabetes cure rates similar to a gastric bypass but none of the risks that bypassing the intestines has. It has the best safety profile over time. For patients who do not lose enough weight or take diabetes into remission, it is possible to proceed with an intestinal bypass a year or two later. However, weight loss with a revision like this is often less than 10 pounds.

Considerations/Risks: The removal of the stomach is permanent. This is generally not a significant concern since the stomach usually expands some and years later patients will often ask if even more stomach can be removed again (the answer is almost always No). Reflux may occur but Dr. Jossart does a hiatal hernia repair in almost 40% of patients (those who have one detected) and only 8% of patients remain on antacids at one year after surgery. Staple line leaks can occur in the first two weeks after surgery. After the first few weeks, the staple line is healed, and leaks do not occur. Leaks are rare with Dr. Jossart's method and there has only been one patient in the last 1,900 that required a re-operation for a leak. Inadequate weight loss or weight regain may occur due to grazing on high calorie snacks (soft carbs) and liquids. This is true for all operations. It is only diet and exercise that keeps you thin in the years after surgery (for all operations)!

BAND REMOVAL AND CONVERSION TO SLEEVE GASTRECTOMY

Laparoscopic adjustable gastric banding was first performed in 1994 and to date more than 600,000 procedures have been performed worldwide. It was authorized by most insurance companies by 2005 and many patients in the United States chose the band as a safer alternative to the gastric bypass. By 2010, the insurance companies started authorizing the sleeve gastrectomy and patients who were considering the band usually chose the sleeve gastrectomy. In 2022, the Gastric Band accounted for only 0.4% of procedures. There are now many patients with Bands in place that have weight loss failure or device related problems and they require Band removal.



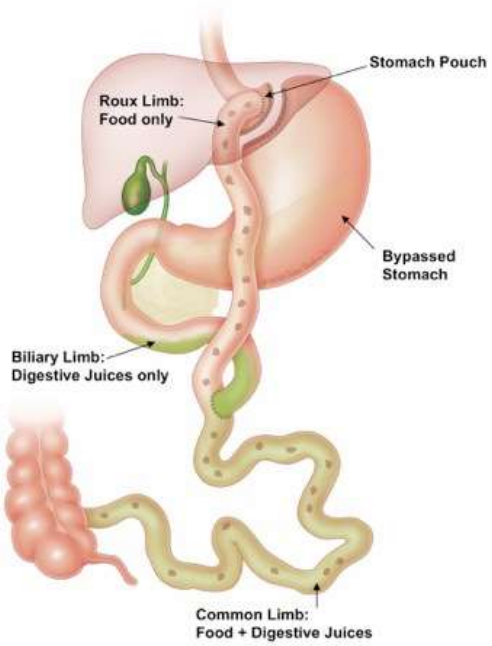
How the Band to Sleeve works: Patients who have band failure or a complication can have the band removed and can be converted to a sleeve gastrectomy. Rarely, this can be done in one operation but is generally not authorized by insurance companies, complications are more common and weight loss is usually not as good. It is always better to remove the band, verify the stomach and esophagus have returned to normal function and anatomy with an Upper GI X-ray, then proceed with a sleeve gastrectomy. This is usually more than 2 months after the band removal.

Benefits: Generally, band removal followed a few months later by sleeve gastrectomy yields the same result as a patient undergoing a sleeve gastrectomy with no prior history of band placement. This is because the tissues of the stomach and esophagus tend to go back to normal within a few months after band removal.

Considerations/Risks: Removing a band and converting to a sleeve gastrectomy at the same time has a higher risk of a large pouch, weight loss failure, reflux (heartburn) and a staple line leak. It can be done in select patients but generally Dr. Jossart always advises against this. This can be explained in more detail during the office visit (drawings will be necessary).

ROUX EN Y GASTRIC BYPASS (RNY) (22% of procedures in 2022)

The gastric bypass has been performed for ulcer, tumors and weight loss for almost a century. Worldwide, it was the most common weight loss operation until the last few years. More patients now choose the sleeve gastrectomy because the weight loss results are similar and they avoid the serious risks of intestinal bypass surgery.



How the gastric bypass works: A small, 1-ounce pouch-about the size of an egg-is created at the top of the stomach. The rest of the stomach is stapled off, preventing food from entering it but allowing digestive juices to empty from it into the small intestine. The small stomach pouch is then connected to a limb of intestine (the Roux limb) with a very tight connection. Patients are very restricted due to the small pouch and the small outlet to the Roux limb. The process of splitting the intestine into two limbs also separates food from digestive juices and limits the number of calories absorbed.

Benefits: Some surgeons still recommend this operation for patients with reflux (heartburn) or diabetes. This is a controversial recommendation since patients with reflux and diabetes are often relieved of both with a sleeve gastrectomy. This topic is often discussed further during office visits and at support groups.

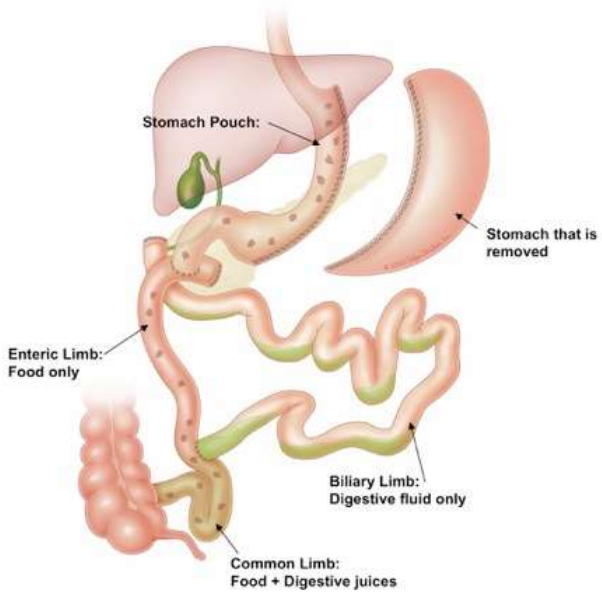
Considerations/Risks: The gastric bypass can be done as safe as a sleeve gastrectomy and patient generally do very well. Problems do tend to develop over time. Ulcers (bleeding or perforation) and intestinal blockages can require emergency surgery. The incidence of these is unknown but may be as high as 10-20% over 10 years. They are more common

with smoking, alcohol and the use of anti-inflammatory medications (ibuprofen). Many patients over age 50 often require a blood thinner and might be at a very high risk for bleeding from a gastric bypass ulcer. Vitamin deficiencies and other intestinal bypass problems may also occur.

DUODENAL SWITCH (2.2% of procedures in 2022)

The duodenal switch has been performed since 1985 but has never been a common operation because it is a technically difficult to perform and has a higher level of risk (both short term and long term).

How the duodenal switch works: Similar to the sleeve gastrectomy, most of the stomach and appetite-related cells are removed. The portion of the stomach that is removed is that which enables us to eat enormous portions. It also contains most of the cells that produce Ghrelin, the hunger hormone. The remaining portion of the stomach is transformed into a 2-4-ounce pouch. The pouch is slightly bigger than a sleeve gastrectomy pouch so that a patient can eat more protein to offset the losses from the intestinal bypass. The pouch is then connected to the enteric limb, diverting food and preventing it from mixing with digestive juices. Food bypasses 40-60% of the small intestine-greater than in a gastric bypass-resulting in increased malabsorption and potentially greater weight loss.



Benefits: The duodenal switch has the best weight loss over time and the best cure of diabetes. Because of the higher risk from the intestinal bypass, Dr. Jossart tends to only recommend it to people with severe diabetes (poor control on insulin) and the heaviest patients (over 400 pounds). Staging the duodenal switch by doing the sleeve gastrectomy first and then the intestinal bypass 6 months to 2 years later can make the procedure much safer. In addition, only patients who actually need the bypass portion would be able to choose to proceed with it.

Considerations/Risks: The procedure is highly technical and requires more intense follow up because of the extreme amount of intestinal bypass and is therefore not offered by most surgeons. This operation does not have ulcer problems like a gastric bypass. It does have a risk of intestinal blockages and the risk of vitamin deficiencies is higher than the other operations.

EDUCATION AND SUPPORT

Due to COVID-19, our educational and support group meetings are now digital. Below are the links and login instructions for the available digital options.

Tutorial (10 minutes)	To see several video tutorials (two on weight loss surgery), visit youtube.com/user/drjossart
Dr. Jossart's Support Group Lecture March 2023 (60 minutes)	The pictures and slides go very well with the content in the Goal Weight Guide. Enjoy! • youtube.com/user/drjossart
View Webinar on YouTube (45 minutes)	Watch a webinar to learn about weight loss surgery and the postoperative diet plan given by Dr. Gregg Jossart and Amy Baertson, RD that took place on April 14, 2021. • Click on Webinar Video • Or type in the URL: tinyurl.com/4hxbnhdp
Zoom Meeting with our Registered Dietitian	Join our virtual meetings to learn from our dietitian and others who have had the surgery recently. These Zoom meetings are held on the first Tuesday of each month at 6 PM. Link: Zoom.us/j/4096005357 Meeting ID: 409 600 5357 Password: RD-support

INSURANCE

Insurance companies generally have the same criteria for authorization which is a BMI of 40kg/m2 or 35-40 kg/me with a comorbidity (Diabetes, sleep apnea, high blood pressure). They vary greatly on how many months of preparation is mandatory. We can help advise you on these policies and criteria but feel free to call your insurance company as well.
As of January 2023, we are Center of Excellence providers for most insurance companies including: Aetna, Cigna, United, Blue Cross, Blue Shield, CMS (Medicare), Sutter Select and Sutter Plus, Brown and Toland, NEMS.

HOSPITAL

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Enter at the Geary Street Driveway Entrance for drop off then proceed to 4th floor to check in for your surgery. There are numerous hotels in the area and the best deals are online. The closest hotel is the Marriott Courtyard on Van Ness and Geary. It is across the street from the hospital. The Van Ness Holiday Inn is 3 blocks away.

BASIC RULES FOR TRAVEL AND DISCHARGE

The hospital generally won't discharge you to yourself, a taxi driver or a minor. They may allow a ride service to pick you up. Be sure to have a relative, friend or neighbor pick you up. If you have a long trip home, stop every 1-2 hours, and get out of the car and walk for 10 minutes or so. This prevents blood clots. If you have a long way home (more than 3 hours) you will be more likely to stay two nights in the hospital and don't leave the hospital during the Bay Area rush hour (3-7 pm).