Post-Op Instructions
Laparoscopic Sleeve Gastrectomy

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Revised Dec. 08, 2012 ip
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**Vertical Sleeve Gastrectomy**
The vertical sleeve gastrectomy also known as the gastric sleeve surgery, was developed to cause weight loss yet avoid some of the medical problems related to higher weight and/or obesity. This surgery Works as a first procedure weight loss tool, and in most case a second procedure is not needed. This type of surgery is a restrictive surgery, in which it limits the amount of food the stomach can hold.

**Post-Op Health Improvements**
After surgery you may notice an improvement of other obesity related medical conditions such as high blood pressure, sleep apnea, lipid abnormalities, diabetes, etc. **Patients typically lose around 50-60% of excess weight the first year, and can lose more weight over the next 6 to 12months,** after this weight usually stabilizes.

**Laparoscopic Surgery**
Operations for bariatric surgery are normally done in the laparoscopic technique. The laparoscopic technique is done by making several small incisions about 5 or 6 (3x-5mm, 1x-10mm, 1x-12mm) (Keyholes) on the abdominal wall. Dr. Quinones used surgical instruments and a camera, to perform the surgery while looking at a TV monitor to guide the surgery in order to allow him to complete the operation without making a long midline abdominal incision. Laparoscopic gastric surgery usually reduces the length of hospital stay and the amount of scarring, and often results in quicker recovery than an "open" or standard procedure.
Procedure
The Vertical Sleeve Gastrectomy was the procedure that was done laparoscopically. During the surgery harmless carbon dioxide is introduced into the abdomen; this inflates it, and allows a space for Dr. Quinones to work. Dr. Quinones will be removing more than half of your stomach 50-80%, leaving a thin vertical sleeve, or tube, that is about the size of a banana. The anesthesiologist will continuously monitor your heart rate, blood pressure, breathing, and blood oxygen level during the surgery. The portion of the stomach which is removed is responsible for secreting Ghrelin, which is a hormone that is responsible for appetite and hunger.

A bougie is a soft flexible rubber tube that comes in multiple sizes. They are designed to stretch esophageal strictures. We use them to calibrate the size of the gastric sleeve. The size indicates the circumference in millimeters. It is common to use a Size **32 bougie (1-2 ounces)**, which translates to a diameter of about 10 millimeters or 0.4 inches, it is very thin it is also common for surgeons to use a **34-36 French Bougie (2-3 ounces)** and some surgeons use as large as a **64 French Bougie (6-8 ounces)**. It is placed temporarily while performing the operation, and then removed. Dr. Quinones will determine the size of your Bougie; he can use a 32, 34 or 36. It is normal practice to consider slightly larger bougie’s for patients whom are older and patients with lots of co-morbidities to put less pressure on the person’s body as a whole. The bougie tube performs three functions of Ensuring patency of the esophagus and that the integrity of the entire stomach remains attached to the esophagus; Serving as a guide for the amount of the stomach that can be removed; and Testing the suture line integrity while remaining is place.

The stomach is restricted by stapling and dividing it vertically and he stomach that remains is shaped like a very slim banana (i.e. sleeve) and measures from **1-5 ounces (30-150cc)**, the nerves to the stomach remain intact f preserving the functions of the stomach while reducing the volume. Surgical staples keep your new stomach closed, and Dr. Quinones as an added precaution sutures over the staples to avoid leakage issues with your new sleeve. A drain was placed in the incision site to remove fluid. Dr. Quinones does internal stitches and then uses DERMABOND Topical Skin Adhesive it is a sterile, liquid skin adhesive that holds wound edges together, to seal the incision.

Stomach after Surgery
Once you have recovered from the surgery, your body's own scar tissue heals the stomach tissue together, just as your skin stays healed long after sutures or staples are removed. Your stomach does not grow together where the staples are holding it. That is all they do, hold your stomach together to form the pouch. Transecting means they cut it into two separate sections so that there is the ability for it to grow back together as two separate pieces. In super rare instances, the two pieces will find their way back to each other and grow back as one.

Essential Nutrition
It is important for you to make healthy food choices after your surgery to help you with long term weight loss goals and to maintain your nutritional health. A changed eating pattern is important for weight loss, to avoid stomach pains, and to prevent nutritional deficiencies. Following the information outlined will help prevent nutritional deficiencies and other complications.
**Protein Importance**

Protein will be the most important nutrient in your diet, protein is used to repair and replace tissue. Increasing protein intake to 30% you are likely to eat 450 fewer calories a day, and lose about 11 pounds over a 12 week period without employing any other dietary measures. Protein is also responsible for making sure you lose fat and not muscle. Your body uses the amino acids in protein to build lean muscle, which will only make you stronger and more toned, even when you’re not active. Increase your protein over the course of the surgery as you are able to eat more. **Protein should be consumed first at each meal**, then vegetables and fruits, then “whole” grains.

**Protein and Weight Loss Stalls/Plateaus**

Consuming high amounts of protein aid in weight loss plateaus, because it raises your metabolism. With each pound of muscle you add on it burn 40-50 more calories per day. Protein also fills you up faster than a heavy carbohydrate meal. You will need to monitor your protein intake for the remainder of your life **try to consume minimum 60 to 80gm/day in the form of food and/or supplements**. Because your stomach will be very small after surgery, it will be important to eat protein first, and then vegetables, breads or fruits. We highly recommend protein drinks/protein powder drinks for the first 6-8 weeks following surgery. Avoid – Ensure™, Boost™… they have too much sugar! There is no risk for eating a high protein meal or overeating RDA.

*If you have kidney disease consult with your primary care physician first.

**Protein Shakes**

There are many brands of supplements available (ready-to-drink or powders). For some examples, check out: Look for drinks made with **whey protein isolate** (this is absorbed well), vs. Whey protein concentrate, which has lactose, or milk sugar  Strive for a protein with **at least 20 grams of protein per serving**. Mix with skim or 1% milk for an additional 8 grams of protein per serving. Aim for a product with less than 3 grams of sugar per serving. Avoid and/or limit protein collagen-based products (incomplete form of protein that is missing tryptophan, an important building block of protein) Examples: Ready to drink – Atkins®, E.A.S. Myoplex Carb Sense®, Zero Carb Isopure® Powders – Designer®, Unjury®, Nectar®

**Protein Content in Common Foods**

<table>
<thead>
<tr>
<th>Meats, Poultry, and Fish</th>
<th>Portion Size</th>
<th>Grams of Protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef/Turkey Jerky</td>
<td>1 oz dried</td>
<td>10-15</td>
</tr>
<tr>
<td>Beef, Pork, Poultry, Fish</td>
<td>1 oz (2 Tbsp)</td>
<td>7</td>
</tr>
<tr>
<td>Cheese, hard (low-fat)</td>
<td>1 oz</td>
<td>7</td>
</tr>
<tr>
<td>Kraft Bordon fat free singles, eg.</td>
<td>1 oz or 1 slice</td>
<td>5</td>
</tr>
<tr>
<td>Cottage cheese, Ricotta (part skim)</td>
<td>2 Tbsp</td>
<td>3.5</td>
</tr>
<tr>
<td>Imitation Crab Meat</td>
<td>1 oz</td>
<td>3</td>
</tr>
<tr>
<td>Crabmeat</td>
<td>1 oz (2 Tbsp)</td>
<td>6</td>
</tr>
<tr>
<td>Shrimp, Lobster</td>
<td>1 oz</td>
<td>6</td>
</tr>
<tr>
<td>Egg</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Baby Food Meat</td>
<td>1 oz (2 Tbsp)</td>
<td>4</td>
</tr>
<tr>
<td>Potted Meats/Spam Lite</td>
<td>2 oz</td>
<td>8.5</td>
</tr>
</tbody>
</table>
Hot Dog, Low-fat (average) 1 oz 3.5
Tuna Fish 1 oz 7

**Legumes and Nuts**

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
<th>Protein (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almonds</td>
<td>1 oz</td>
<td>6</td>
</tr>
<tr>
<td>Cashews</td>
<td>1 oz</td>
<td>4</td>
</tr>
<tr>
<td>Lentils</td>
<td>½ cup cooked</td>
<td>9</td>
</tr>
<tr>
<td>Lima Beans</td>
<td>½ cup cooked</td>
<td>7</td>
</tr>
<tr>
<td>Peanut butter</td>
<td>2 Tbsp</td>
<td>7</td>
</tr>
<tr>
<td>Red kidney beans</td>
<td>½ cup cooked</td>
<td>8</td>
</tr>
<tr>
<td>Soy beans</td>
<td>½ cup cooked</td>
<td>14</td>
</tr>
<tr>
<td>Tofu</td>
<td>1 slice</td>
<td>5</td>
</tr>
<tr>
<td>Refried beans</td>
<td>½ cup</td>
<td>6</td>
</tr>
<tr>
<td>Sunflower seeds</td>
<td>1 oz</td>
<td>5</td>
</tr>
<tr>
<td>Chili with beans,</td>
<td>drained ½ cup</td>
<td>10</td>
</tr>
</tbody>
</table>

**Milk and Dairy**

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
<th>Protein (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk, skim, 1%, or lactaid</td>
<td>8 oz</td>
<td>8</td>
</tr>
<tr>
<td>Soy milk</td>
<td>8 oz</td>
<td>7</td>
</tr>
<tr>
<td>Yogurt, fat free, no sugar added</td>
<td>6 oz</td>
<td>8</td>
</tr>
<tr>
<td>Greek Style Yogurt, plain, nonfat</td>
<td>5 oz</td>
<td>13</td>
</tr>
<tr>
<td>Sugar free pudding, made with milk</td>
<td>½ cup</td>
<td>4</td>
</tr>
</tbody>
</table>

**Importance of Vitamins and Minerals**

Due to a large portion of your stomach has been removed, and your eating less food, smaller amounts of vitamins and minerals are being absorb. Some people develop anemia from poor nutrition and you should take supplements containing iron and calcium to aid in this matter. The body requires more vitamins during the stress of weight loss. In addition, the stomach secretes a substance called intrinsic factor, which helps in absorption of B-12. There is a chance that you won't be able to absorb this vitamin and may need to take supplemental vitamin B-12. In bypass patients Vitamin B12 deficiency is prevented with a monthly Vitamin B12 injection. You are not required to take Vitamins for the rest of your life, but it is suggested to take vitamins on a regular basis.

**Multivitamin**

One chewable or liquid multivitamin with minerals per day. Take with food.
Examples: Centrum Chewables®, Flintstone Complete®

**Calcium**

1500 mg of calcium citrate per day (take one chewable 3 times daily)
Maximum of 600 mg at one time for absorption Must contain vitamin D (at least 200 IU)
Examples: Twinlab® chewable calcium wafers (2 tab, 3x a day), Citracal® plus D (2 tabs, 3x a day), Solaray Calcium plus D and Mag (2 wafers, 3 times a day)

**SAMPLE Table for Taking Your Supplements**
Morning
Breakfast
Multivitamin (NOT with dairy) Protein Meal
Snack

Afternoon
Lunch
calcium
500-600 mgs
Snack
calcium
500-600 mgs

Evening
Dinner
calcium
500-600 mgs
Snack

For a Successful Weight Loss

It is important to note that lifestyle and behavioral changes are necessary to be successful with your weight loss journey. Following a proper diet such as the one aligned, will help you achieve the maximal amount of weight loss. Eating a high-protein diet combined with exercise enhanced weight and fat loss and improved blood fat levels.

Drinking

AVOID eating and drinking at the same time. Avoid drinking with your meal, then wait at least 30 minutes after a meal to resume drinking. Drink at least 6-8 cups (48-64 ounces) of fluid per day. Liquids should be sipped in between meals. Do not use a Straw it can cause more gas.

Beverages

Intake adequate fluids to prevent dehydration. Aim for 48-64 fl oz (6-8 cups) of fluid per day. Sip on your beverages, no gulping! Avoid carbonated beverages, beverages containing sugar and alcoholic beverages.

Sugar Free

Choose sugar-free, non-carbonated drinks such as: Crystal light®, Fruit 2O®, Diet Snapple®, Propel Fitness Water, Light Minute Maid® drinks, Diet Ice Tea, etc. Limit fat free milk to less than 16 ounces per day, limit 100% real fruit juice to less than 8 ounces per day (try diluting with water).

Tips:
• Wean off carbonated and caffeinated beverages before surgery to help prevent withdrawals.
• Choose beverages with 10 calories or less per serving.
• If plain water sits heavy and you are having problems tolerating it add a sugar-free flavoring (e.g. True Lemon®, lemon or orange slice, etc.)

** Increase your fluid intake if any of the following signs are present: dark urine, headache, dizziness, lethargy, a white coating on the tongue.

Alcholic Beverages

If you drink and decide to drink post-surgery, wait at least 6 months and do so in small moderation because your new smaller stomach will absorb alcohol faster and causing it to have a more potent effect and it can dehydrate the body. After surgery, alcohol enters the blood stream more quickly than before surgery. It is best to avoid drinking alcohol for at least six months after surgery, since it can be irritating to the stomach pouch and cause ulcers. NEVER drive within 24 hours of having an alcoholic beverage.
Food Consumption
Eat slowly and chew your food until it is liquid. Failure to do so can cause pain, nausea, vomiting, and irritate your new pouch for several minutes, possibly hours. Also remember to cut your food into small pieces before trying to consume it. Wait at least 1-2 minutes per bite. Allow at least 30 minutes for meals. Not eating slow especially in the first few months can cause you to over-eat because your new stomach is not able to tell it is full yet. Stop eating when you feel comfortably satisfied. Overeating can cause nausea, vomiting, and the size of your stomach to expand. It can take 6-9 months for your new stomach size to stabilize.

Meals vs. Snacking
Eat three meals a day and limit unnecessary snacking in-between meals. This weight loss surgery is a restrictive procedure, which means that the success of weight loss depends on what you are eating. Unhealthy snacking in-between meals (e.g. pretzels, crackers, cookies, etc.) or eating frequently may prevent successful weight loss or cause weight gain due to excess calorie intake.

Sugars
Aim to keep the “sugars” down to 15 grams or less per serving to help limit “empty calories” in your diet. Avoid concentrated sugar. Keep sugar out of the first 3 ingredients on the food label. The number of sugar grams on the label includes both added and natural sugars; therefore, it is important to read the ingredients to find out what type of sugar the food contains.

Simple Sugars
Avoid these simple sugars, especially if within the first 3 ingredients on food labels: sugar, dextrose, high fructose corn syrup, corn syrup, glucose, sucrose, molasses, and honey. Note: Artificial sweeteners such as nutrasweet/Equal®, saccharine/Sweet & Low®, and sucralose/Splenda® are acceptable to use.

Dieting
Keep in mind that your diet needs to be low-fat, low calorie, sugar-free, and portion controlled for the rest of your life. This is the commitment you must make to achieve maximal weight loss.

Liquid Diet: Week 1
You will be on a liquid diet for the first week after surgery. This diet includes all foods that are liquid at room temperature. Foods allowed during this diet include:

- Low fat ricotta cheese
- Low fat cottage cheese
- Sugar-free gelatin (e.g. Jell-o)
- Sugar-free Popsicles
- Sugar-free Fruit drinks
- Sugar-free Pudding
- Sugar-free Sherbet
- Water
- Decaffeinated coffee
- Decaffeinated tea
1% or skim milk
Protein supplements (three times a day, in-between meals)
Broth  Low-fat/light yogurt (try plain Greek yogurt for more protein)

Sample Full Liquid Meal Plan (1st week post-op)
8:00am 2 Tablespoons fat-free plain Greek-style yogurt (high in protein)
10:00am 8 ounces of skim milk
11:00am 8 ounces whey protein isolate drink (e.g. Isopure Zero Carb) with 8 ounces of
   skim or 1% milk (16 oz total, taking at least 30-60 minutes to drink)
1:00pm 2 Tablespoons low fat cottage cheese (plain)
3:00pm 8 ounces whey protein isolate drink (e.g. Unjury)
6:00pm 8 ounces Crystal Light; 3 ounces sugar-free pudding
8:00pm 8 ounces whey protein isolate drink made with skim or 1% milk
9:00pm 8 ounces of decaffeinated tea

Pureed Diet Week 2
For safe weight loss you need to eat a healthy, well-balanced diet. Everything needs to be blended to the consistency of applesauce for three weeks. This will be a challenge for you. Stick to it and be creative! Buy or borrow a blender or food processor if you do not own one.

Instructions for pureeing foods:
1. Cut food into small pieces about the size of your thumbnail.
2. Place food in the blender.
3. Add enough liquid (fat free chicken broth or fat free gravy) to cover the blades.
4. Blend until smooth like applesauce.
5. Strain out the lumps, seeds, or pieces of food.
6. Use spices (avoid spicy ones) to flavor food.
7. Blend and enjoy!

Measuring
Each cube holds about 1 ounce. This will help you to control portion sizes. Try preparing reduced fat cream soups or pureed meats and vegetables and store them in the trays

High Fat Foods
Limit high fat foods. Low fat is 3 grams or less per serving on a food label.
Examples of high fat foods: potato chips, fried foods, fast food, bacon, sausage, hot dogs, bologna, pepperoni, cream soups, alfredo sauce, donuts, cakes, cookies, and pastries.

Pureed Food Diet Week 2 to 4
Diet Instructions
Limit food to 2 to 4 ounces per meal (approximately 4 to 8 tablespoons).
Do not forget to consume protein first at each meal, then vegetable & fruits, then “whole” grains.
Aim for 6 small meals per day at this point. Drink daily water intake

**FOOD CHOOSE LIMIT**

**Beverages**
Water, Crystal Light®, coffee, tea, non-carbonated beverages, and nutritional drinks
Fruit drinks, iced tea with sugar, soda, alcohol, and all carbonated beverages

**Soups**
Egg drop soup, reduced fat cream soups, broth, and bouillon All others

**Bread, Cereal, Pasta and Rice**
Hot cereal (oatmeal, grits, cream of wheat), mashed potatoes Pasta, bread, rice, and all other starches

**Vegetables**
Any cooked soft and blended or mashed with a fork All others

**Fruits**
Unsweetened applesauce, mashed bananas, any fruit pureed without the seeds, skin or hulls All others

**Meats, Poultry, Fish, Nuts, Beans and Eggs**
Pureed fish, tuna, poultry, veal, pork, or beef; baby food meats; mashed tofu, scrambled egg or egg substitutes Peanut butter; all others

**Milk, Cheese, and Yogurt**
Fat free or 1% milk, low-fat cottage cheese, low-fat or non fat cheese (Alpine Lace®), low fat/unsweetened/low sugar yogurt (Dannon Light and Fit®) Chocolate milk, sweetened condensed milk, 2% or whole milk

**Miscellaneous**
(all should be sugar-free) Gelatin, popsicles (Dole®), pudding, custard, sugar free frozen yogurt, sugar free fat free ice cream All others

After four weeks of following the liquid and pureed diet, you may begin to add food gradually to your diet. You may proceed to a soft foods diet.

**Sample Pureed Menu**

<table>
<thead>
<tr>
<th>Time</th>
<th>Meal</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 a.m.</td>
<td>¼ of a banana Dip: Mix 2 tablespoons of fat free yogurt and 2 tablespoons of low fat cottage cheese</td>
</tr>
<tr>
<td>9:30 a.m.</td>
<td>4-6 tablespoons fat free yogurt</td>
</tr>
<tr>
<td>11:00 a.m.</td>
<td>8 oz fat free milk with 4 ounces of fat-free, plain Greek yogurt added (as a shake)</td>
</tr>
<tr>
<td>12:00 p.m.</td>
<td>8 oz sugar free decaffeinated tea</td>
</tr>
<tr>
<td>1:00 p.m.</td>
<td>2-3 tablespoons pureed pork, 2 tablespoons pureed green beans</td>
</tr>
<tr>
<td></td>
<td>1-2 tablespoons mashed potatoes ,1 tablespoon fat free gravy</td>
</tr>
<tr>
<td>2:30 p.m.</td>
<td>8 oz Crystal Light®</td>
</tr>
<tr>
<td>3:00 p.m.</td>
<td>2 oz low fat ricotta cheese, 2-3 tablespoons applesauce</td>
</tr>
<tr>
<td>4:00 p.m.</td>
<td>8 oz water with lemon</td>
</tr>
<tr>
<td>4:30 p.m.</td>
<td>8 oz fat free milk</td>
</tr>
<tr>
<td>6:00 p.m.</td>
<td>2-3 tablespoons pureed fish, 2 tablespoons pureed broccoli, 2 tablespoons mashed</td>
</tr>
</tbody>
</table>
sweet potato
7:30 p.m. 6 oz broth
8:45 p.m. 4-6 tablespoons sugar free pudding

**Soft Foods Diet: Weeks 4 to 6**

**FOOD CHOOSE LIMIT**

**Beverages**
Same as “Liquid and Pureed Diet” All others. Limit carbonated beverages

**Soups**
Same as “Liquid and Pureed Diet” All Others

**Bread, Cereal, Pasta, and Rice**
Hot or refined cereal, mashed potatoes without the skin, rice, pasta, toast, or crackers All Others

**Vegetables**
Soft cooked vegetables Vegetables with tough hulls or skins like peas and corn

**Fruits**
Unsweetened cooked or canned fruit in their own juice (no syrup), fruits without seeds or skin, banana and citrus fruits without the membranes, unsweetened fruit juice All others

**Meat, Poultry, Fish, Nuts, Beans and Eggs**
Ground lean meat (meatloaf, meatballs, hamburgers), poultry or fish (cooked soft and moist); casseroles made with ground meat, kidney beans, lentils, creamy peanut butter, eggs Avoid nuts. No diced meats/ protein until ground meat tolerated for at least 2 weeks AVOID tough/dry/grilled steak, chicken or turkey, and add low-fat gravy to moisten foods.

**Milk, Cheese, and Yogurt** Fat free or 1% milk, low-fat cottage cheese, low-fat or non fat cheese (Alpine Lace®), low fat/unsweetened/low sugar yogurt (Dannon Light and Fit®) Chocolate milk, or sweetened condensed milk, 2% or whole milk

**Miscellaneous**
(sugar free) Gelatin, popsicles (Dole®), pudding, custard, sugar free frozen yogurt, sugar free fat free ice cream All others

**Instructions:**
1. Limit food to 4 to 6 ounces per meal (approximately 8 to 12 tablespoons). Do not forget to consume protein first at each meal.
2. Eat slowly, and be sure to chew your food until LIQUID.
3. Food choices should be low in fat, low in sugar and low in calories.
4. Use any of the foods recommended on the pureed diet.
5. Avoid snacking on processed foods (e.g. pretzels, crackers, etc.).
Sample Soft Menu (about 4 weeks after your banding surgery)

<table>
<thead>
<tr>
<th>Time</th>
<th>Meal Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 am</td>
<td>8 ounces water with lemon or lime</td>
</tr>
<tr>
<td>8 a.m.</td>
<td>1 scrambled egg with 1 oz of low-fat cheese 1 oz sausage link</td>
</tr>
<tr>
<td>9 am</td>
<td>8 ounces Crystal Light or other beverage without caffeine, carbonation or sugar</td>
</tr>
<tr>
<td>10 a.m.</td>
<td>8 oz skim milk with one serving of a protein powder or 6 oz low-fat Greek yogurt</td>
</tr>
<tr>
<td>12 p.m.</td>
<td>2-3 tablespoons tuna fish (made with low fat mayonnaise) 2 tablespoons unsweetened apple sauce 2 tablespoons cooked green beans</td>
</tr>
<tr>
<td>2 p.m.</td>
<td>2-4 oz sugar free yogurt or low fat cottage cheese with 2 oz pureed fruit or 2-4 oz low fat ricotta cheese with cinnamon</td>
</tr>
<tr>
<td>3 pm</td>
<td>8 oz skim or 1% milk</td>
</tr>
<tr>
<td>6:00 p.m.</td>
<td>4 tablespoons chicken (very tender and moist; try crock pot) 2 tablespoons soft cooked broccoli 1 peach half (canned in natural juices)</td>
</tr>
<tr>
<td>7-9 pm.</td>
<td>8 ounces decaffeinated coffee or decaffeinated tea (artificial sweetener okay)</td>
</tr>
</tbody>
</table>

**After 2-4 weeks of the soft food diet you should gradually introduce more food choices.** Keep food records of your tolerance and intake. Remember that food intolerance is highly individualized. Take your time at meals and chew very well to help increase your tolerance to these foods. Eventually you should be able to tolerate diced meats and a wider variety of breads, cereals, fresh fruits, and fresh vegetables.

**Keep track**
This will help you to monitor your intake and tolerance to foods. Look for patterns of foods tolerated well and food that are not tolerated well food intake, with a log or journal indicating the Date and Time of Meal, the food eaten and approximately how much. Be specific if it was, raw, baked, broiled, etc. Be sure to include condiments. You can also use an online app, such as Sparkpeople, Myfitnesspal, Obesityhelp, etc. They also help track inches, weight, and provide articles for support.

*Don’t forget gum, tic tacs other things in calories you don’t consider food and If you have a nutrionist/dietician make sure you have these records for review*

**Questions and Answers**
These are common questions patients have post surgery about their surgery and other questions on healing.

**Use of Staples, will I be able to go through a metal detector**
It is highly unlikely that the internal staples described above will set off a metal detector. It is recommended, however, that if you ever require a test called magnetic resonance imaging (MRI), you tell the people performing the test that you have internal staples. It is generally safe to undergo MRI scanning although most radiologists recommend waiting at least 2-3 months after surgery to do so. Staples are a more perfected usage during surgery than just suturing alone. The combination of both will give best results for leakage protection.

**Smoking**
Smoking stimulates gastric secretions that can irritate the lining of the stomach. Smoking can slow the healing of the stapled edge of the stomach, and cause bleeding
and ulcers in the stomach and small intestine due to an irritation of the gastric secretions. You should not go back to smoking.

**Pregnancy**
This must be avoided for the first 18 months following surgery. Pregnancy during this time could cause complications and deficiencies for you and your baby and may result in birth defects. For this reason you need to take precautions to prevent pregnancy. Rapid weight loss increases fertility so you must be very careful.

**How does a menstrual cycle affect a woman’s weight loss**
Women should consider their normal menstrual cycle when they weigh themselves. If you typically gained weight during your period before surgery, you will probably continue this pattern after surgery. Remember that water weighs more than fat. This fluctuation of water in your body due to your menstrual cycle may result in a temporary "plateau" in your weight loss, or even a slight weight gain.

**Bowel Movements**
After surgery you may notice your bowel movements are not regular, this is very common amongst gastric sleeve patients. Try to avoid straining with bowel movements and constipation.

**When can I go back to normal activity**
Many patients return to normal levels of activity within 1-3 weeks following laparoscopic surgery. However, if you require “open” surgery, recovery could take up to 6 weeks.

**Hair Loss**
This is usually due to rapid weight loss, and typically presents about 3-6 months after surgery. Patients who experience some hair loss usually notice it occurs three to six months after surgery. This is temporary, and you will not lose all of your hair. As in any major surgery, transient hair loss is experienced by some patients but generally improves with an increase in dietary protein and zinc in your diet. You must take in a minimum of 70 gm of protein per day to help minimize hair loss. Do not take in more than 30mg of zinc per day. Most patients experience hair thinning or loss from protein malnutrition, due to the body’s reaction to faster-than-normal weight loss it can last for 2-3 months. **Biotin supplements** may help, as well as ensuring that your fluid, protein, iron and zinc levels are normal.

**Nausea or Vomiting**
Usually caused by eating too fast, too much, or drinking with your meals. If it is not food related, call your surgeon’s office.

**Bad taste in mouth**
This is common right after the surgery and should go away after a few weeks.

**Decreased appetite and taste changes**
It is very common to not feel hungry right after surgery and to have altered taste sensation. You need to eat ensure that you get proper nutrition and to prevent complications.

**Increased gas**
This is also common after the surgery, especially during the first few weeks. It can be a
sign of a lactose intolerance. If you have gas pains at home, try simethicone drops (Gas X ®). Deverom® can help with the smell.

**Excess skin**
With significant weight loss, there is usually excess skin, but the ‘level will depend on several factors, including how much weight you lose, where you lose it, genetics, age, and whether you’re a man or a woman. Weight training may help minimize the appearance of loose skin, but only plastic surgery will help to get rid of it. Most people find it’s really not a big issue, especially in light of how great they feel at a much lower weight, and how they’re improved their health with the surgery and weight loss.

**Exercise**
Aim for at least 30 minutes every day. Exercise helps maintain long term eight loss. Even 5 minutes at a time, as tolerated, is a start, and increase the time and frequency as tolerated. The first four weeks, walking should be used as the primary exercise. After four weeks, try introducing strength exercises.

**Always speak with your doctor if you have never exercised.**

**Will my stomach stretch**
In the vertical sleeve gastrectomy, the banana shaped stomach is less likely to expand and stretch over time, the stomach can expand to hold one cup of food based on the size of the bougie used, as compared to the pouch of the gastric bypass.

**What should I know Post surgery care?**
1. Avoid using a straw
2. Avoid gulping foods or drink
3. Stay away from sugar and fat
4. Eat slowly, reduce bite size, chew very well
5. High fat foods and lactose intolerance can cause diarrhea
6. Do not eat and drink at the same time anymore
7. Remember to stay hydrated