



## **Basic Nutritional Guidelines**

### **How does surgery assist in weight loss?**

- ***Restriction Mechanism (Lap-Band and Gastric Bypass)***
- The Lap-Band® changes the stomach to the shape of an hour glass with an upper stomach **Reservoir** and a lower main portion. The upper **Reservoir** holds approximately **one ounce (2-3 bites)**. The Gastric Bypass separates a small upper portion of the stomach (also approximately **one ounce**) from the rest of the stomach, after which food passes directly into the small intestine, bypassing the main, lower part of the stomach.
- Filling the upper reservoir results in a feeling of “fullness”. **You Will Need To Eat Much More Slowly** but you should still be able to finish a small meal in about 30 minutes. No adjustment is needed with the gastric bypass and, after the Lap-Band is adjusted properly, both the Bypass and the Lap-Band® require a slower rate of eating.
- You will experience **Early Satiety** after surgery. Satiety means lack of hunger. **It is important to recognize this and learn to stop eating if you are not hungry.** The N.E.W. Program will help this behavior change occur.
- You will need to **Chew Your Food Very** well for the food to pass through the Bypass and the band. Chewing may increase satisfaction with meals and decrease appetite.
  
- ***Malabsorption (Duodenal Switch and Gastric Bypass) and Dumping (Gastric Bypass)***
- **Mild Malabsorption** occurs with the **Gastric Bypass** because most of the stomach and part of the small intestine are bypassed.
- **Substantial Malabsorption** occurs with the **Duodenal Switch** because most of the small intestine is bypassed.
- **Dumping after Gastric Bypass** is usually caused by concentrated sweets. Symptoms are diarrhea, sweating, cramping or bloating, and other symptoms. **Dumping is a very useful and powerful tool** to help people who have failed previous diets due to the tendency to eat sweets.
- With the **Duodenal Switch**, the risk is **Depletion of Numerous Nutrients and Vitamins**, which may occur, especially if appropriate nutritional supplements are not taken or if you do not adhere to close follow-up with your Bariatric surgeon. Blood levels of many nutrients and vitamins are measured at scheduled checkups.
- With the **Gastric Bypass**, **Depletion of Iron and Calcium**, and occasionally other nutrients can occur. We have found this to be uncommon, however, we recommend a multi-vitamin, calcium and iron supplement as a preventative measure for all patients. We also measure blood levels at regular post-op checkups.

# **PHASE DIET INSTRUCTIONS**

## **Preoperative**

The Goal is to decrease the size of the liver for safety in surgery by improving visibility during laparoscopy. The liver lies over the stomach.

### **Two Weeks before Surgery**

- Select a protein supplement
  1. Less than 200 calorie per serving
  2. Greater than 14 grams of protein per serving
  3. May contain vitamin and mineral supplement, but no herbs, ephedra, etc.
  4. Examples of acceptable options are: Trader Joe Designer Whey Protein, Gen Soy, Ultra Pure Protein, HMR, Lindora, etc.
- Drink 3-5 protein shakes per day, depending on the amount of protein per shake. The goal is to provide approximately 800 calories/day, minimum of 60 gm/day protein for women and 100 gm/day protein for men.
- As an alternative to the protein shakes you may purchase protein powder supplement. These are available at Savon and other pharmacies or at grocery stores. Protein powders can be mixed in with other drinks to add the needed protein for maintaining health during this pre-operative period. Remember, the goal is to have a total protein intake of 60 gm/day protein for women and 100 gm/day protein for men.
- Eat low calorie items including broth, Crystal Lite, sugar free Kool Aid, sugar free Jello, sugar free Popsicles, and non-starchy vegetables such as lettuce, bell peppers, carrots and onions. Calorie-free salad dressings are OK.

### **One Day before Surgery**

- Stop drinking protein shakes and eating low calorie items.
- Begin drinking only sugar-free, or low sugar, clear liquids: Crystal light, Popsicles, Jello, broth, Diet 7-Up, Diet Sprite, fruit ice, and small amounts of coffee or tea.
- Do not eat or drink after midnight during the night before surgery.

## **Postoperative**

The goal during the post-operative diet phases is not to lose weight. The goal is to allow a period of time for the Lap-Band or bypass surgery to heal. After surgery there is swelling at the surgical site and this gradually decreases over about 30 days. During this time, food that gets stuck at the surgical site may induce vomiting. Repeated vomiting is uncomfortable and may damage or alter the surgical healing. Therefore, please follow the Phase Diet Instructions for the full 28 days after surgery. The instructions below call for 14 days of liquid only, followed by 14 days of pureed-type foods.

### **Phase 1: LIQUID STAGE**

#### **Weeks 1 & 2 after Surgery (14 days, measured from the day of surgery)**

- Drink liquids slowly. Take a few sips, then wait 1-2 minutes for stomach “reservoir” to empty. You may only be able to sip a total of 5-6 oz. per meal or snack; however, most patients are able to drink at least 16 ounces in one hour.
- Drink at least two or three protein shakes per day to supplement protein intake. At least 60 gm/day of protein.
- Eat low fat soup, skim milk, dilute cream of wheat/ cream of rice cereal, dilute fruit or vegetable juice, Gatorade or Propel Fitness Water.

- Between meals or snacks, drink calorie-free beverages such as water, Crystal-Lite, broth, diet Snapple, Propel, etc.
- You must take in at least 64 oz. of beverages per day.
- Take chewable vitamin mineral supplements beginning one week after surgery.
  - 1000-1500 mg calcium per day (Viactive, Tums, etc.)
  - Take multi-vitamin supplements every day. We recommend the Bariatric Advantage vitamin supplements as these are formulated for patients after gastric bypass surgery. Other options include Flintstone Complete, Centrum Chewable or any liquid or chewable supplement providing 100% of the RDA for iron, thiamine, riboflavin, B12 and other B vitamins.
  - Depending on your consultation with the bariatric internist, you may or may not be asked to take an additional Iron supplement.
  - Gastric Bypass or Duodenal Switch patients may need to take Iron Supplements for life – depending on the advice of the bariatric internist. Iron Gluconate is the best absorbed formula. Iron Sulfate (FeSO<sub>4</sub>) may also be taken.
  - Gastric Bypass or Duodenal Switch patients should also take Calcium Supplements for life. Iron Citrate has the best absorption and may not have as high an incidence of kidney stones as some other forms of calcium. Tums are also a source of calcium. We recommend 1500mg—2000mg of calcium daily.
  - Citrucel or Metamucil are allowed after any bariatric surgery to prevent constipation. These must be taken in dilute form with extra water.

## Phase 2: PUREED FOODS

**Weeks 3 & 4 after Surgery (follow this diet from 15 to 28 days after surgery)**

- Drink 64 oz. of calorie-free beverages between meals and snacks. Wait about 15 minutes before and after meals to drink beverages. For best weight control results you will need to continue this pattern, of not drinking during meals, for the rest of your life. You should begin to develop this habit now.
  - Continue to take your vitamin supplements and calcium as directed above.
  - Use one or two protein shakes per day to supplement your protein intake.
  - Add pureed or very soft foods three times per day. Pureed foods are the consistency of applesauce, scrambled eggs or tuna fish.
1. Eat **high protein items** first at meals three times per day: Tuna fish, scrambled eggs, cottage cheese, low fat broth-based soups (creamed soups often have high concentrations of carbohydrates and may cause stomach upset), low fat yogurt, pureed chicken.
  2. Eat mashed or pureed canned or cooked **vegetables** second at meals, twice per day. Avoid raw vegetables during this phase.
  3. Eat the following **starches** last at meals and snacks: Cooked cereals, rice, pasta, sweet potatoes or mashed potatoes. Avoid BREAD, bran cereal, dry breakfast cereals, or popcorn.
  4. Snack on **fruit** two or three times per day. Mashed or pureed, unsweetened, canned or raw fruit is allowed. Avoid whole fruit during this phase. A good cool drink is a non-sweetened fruit smoothie made up from blended skim milk, ice, protein supplement, bananas, strawberries and/or melon.
  5. Get a minimum of 60 gm of protein per day (100 gm for men). During Phase 2 you may continue to supplement your protein intake using protein shakes, or protein powder added to soups.

**Phase 3 is basically Normal Food and begins 28 days after surgery (One Month after Surgery) and continues for the rest of your life.**

see “Basic Nutritional Guidelines”

If you experience problems with solid foods or suffer from nausea or vomiting, it is recommended that you go back to liquids temporarily then restart solid foods. If vomiting persists even when taking only liquids, call your surgeon immediately. Don't hesitate to seek advice from The N.E.W. Program doctors or dietitian.