Endobariatric Dietary Guidebook

Post-Procedure Diet

Table of Contents

General Considerations Before Having an Endobariatric Procedure 3

- What You Need to Know About Endoscopic Procedures 3
- Who qualifies for endobariatric procedures? 3
- Are you ready to commit to an endobariatric procedure? 4
- Medication Considerations 5
- Preparing for Your Procedure 6

The Day of Your Procedure 7

- What to Expect 7
- Coming Home 7
- Side Effects 7

Living with Your Procedure 8

- Staying on Track 8
- Diet Progression 10
  - Clear Liquids 11
  - Full Liquids 12
  - Pureed and Soft Foods 15
  - Solid Foods 19
  - Food Substitutions 22
- Succeeding with Your Diet 23
- Reaching Your Goals 24
- Meal Tracker 25

General Considerations Before Having an Endobariatric Procedure

What You Need to Know

Having an endobariatric procedure can help you eat less, better manage your weight, and reduce the risks that come from being overweight.
Note: this procedure does not remove fat from the body. It is one of many tools you can use to help you manage your weight. In order for this procedure to help you succeed, you need to eat healthy and exercise.

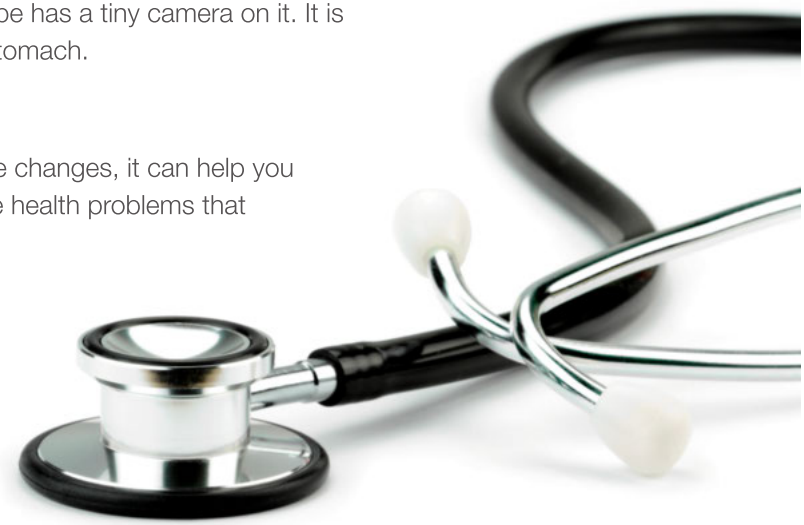
What does "endobariatric" mean?

Endoscopic: refers to the fact that this procedure is done by passing the surgical tools through your mouth and into your stomach. Your physician does not make any incisions.
Bariatric refers to the treatment of obesity.

This procedure is done "endoscopically." To get the tools into the stomach, a small lighted tube, an endoscope, is put into your mouth. The endoscope has a tiny camera on it. It is gently guided down your esophagus and into your stomach.

The Benefits

When a procedure like this is used along with lifestyle changes, it can help you lose weight. Weight loss can help prevent or improve health problems that are linked to extra weight.



Who Qualifies for Endobariatric Procedures?

You should have a Body Mass Index (BMI) over 30. Your BMI is based on your height and weight.
You need to be willing to work hard to reach your weight loss goals.

This may include:

Mental health appointments before surgery. These are directly related to the procedure.
Making changes to your diet, physical activity and other health habits before and after the procedure. These steps will prepare you to keep off the weight you lose.
Taking care of other medical or mental health issues that could affect your surgery or your long-term results. *Examples include treating high blood pressure or depression.*
In addition, you must be willing to continue your efforts at lifestyle changes after the procedure. This includes following the prescribed diet for weeks after the procedure and lifelong efforts at establishing and maintaining healthy eating and activity habits.

Failure to follow the recommended guidelines will directly affect your success at weight loss.

Some people who have a BMI over 30 are not emotionally or medically ready for the endoscopic weight loss procedure. You will have many conversations with your health care team before a decision is made about whether this procedure is right for you.

Are You Ready to Commit to an Endobariatric Procedure?

As with any weight loss treatment, some patients gain weight back. There are many reasons people regain weight. Two of the common reasons are not following the recommended diet and not following the recommended activity guidelines provided by your physician and care team.

Medication Considerations

Discuss with your physician the medications you are currently taking and if there are any changes that need to be made to your prescription or doses. Additionally, your physician will likely prescribe medications that need to be taken before and after your procedures. Take time to purchase your medications before coming in the day of the procedure.

Below are a list of medications your physician will likely prescribe for you before and after your procedure.

Vitamins:

- Calcium supplement (500mg) with Vitamin D (1200-1500mg/day)
    - *Calcium carbonate is not preferable*
- Multivitamin: chewable or liquid form (ex. Centrum chewable)
    - *Don't take the calcium and multi-vitamin together. It impacts absorption.*

Anti-nausea Medication:

- Scopolamine patch
- Emend 1-2 tablets (the first tablet is taken usually 3 hours prior to the procedure with an additional tablet taken 12 hours later)
- Zofran this may be given a prescribed for you to take it for 2-4 weeks as needed

Reflux Medication:

- PPI (proton pump inhibitor) as recommended by physician

Antibiotic:

- Cipro or augmentin may also be recommended by your provider

Grocery Shopping Before Your Procedure

Setting yourself up for success means you need to prepare for your nutritional needs before you have your procedure done. You should complete your grocery shopping before your procedure for the items you will need after your procedure. You will be on a liquid and pureed diet for the first 4-6 weeks. Here are some items you will want to consider adding to your list:

Grocery List Suggestions:

- ☐ Clear, non-carbonated beverages (i.e. Powerade™ Zero, Vitawater (zero calories), Crystal Light)
- ☐ Protein powder (no sugar added) or pre-made protein drink with NO SUGAR added
- ☐ Chicken or beef broth that is low in sodium

The Day of Your Procedure

What to Expect

An endobariatric procedure helps you reduce the amount of food that you are able to consume and therefore you aren't able to eat or drink as much as you used to at one time. You will lose weight by taking in fewer calories than your body uses in a day.

Before the Procedure

Before you go in to the procedure room, you may be asked to change into a hospital gown. Several doctors and nurses may ask you a number of questions. In the procedure room, you are given medication to help you sleep and feel comfortable during the procedure.

Coming Home

After the procedure:

- Do not drive or operate motorized vehicles or equipment for the remainder of the day
- Do not drink alcoholic beverages
- Resume activity as you are comfortable

Side Effects

Pain or discomfort. Everyone experiences varying levels of pain and discomfort from these procedures. It is important for you to manage your pain. Talk with your care team about other ways to control pain if needed.

Issues related to anesthesia. Common side effects of anesthesia include nausea, vomiting, a dry mouth, a scratchy throat, shivering, and sleepiness. These may last for a while after the anesthesia wears off. Serious complications are rare. For more information, ask to talk to your doctor before surgery day.

Issues related to rapid weight loss. As your body reacts to rapid weight loss in the first 6 months, you may have side effects and other changes. These changes should get better over time. They may include:

- Nausea and vomiting
- Body aches
- Feeling tired
- Feeling cold
- Dry skin
- Hair thinning and hair loss
- Mood changes
- Concerns about self-esteem or personal relationships

Living With Your Procedure

This weight-loss procedure is not the end of a long process. It is the start. Your effort to manage your weight and health will go on for the rest of your life. You need to make changes in your eating and physical activity habits. Without these changes, you may gain weight over time.

If you have any issues or concerns as your body changes, talk to the psychologist or psychiatrist you worked with. Or talk to another member of your care team. They're here to help.

Staying on Track

It can be hard to continue healthy habits and keep off weight for a long time. Setbacks are a normal part of making behavior changes. Do not ignore setbacks. Ask for help when you need it. Call your doctor's office and get in contact with your support team. **The important thing is to get back on track as soon as possible.**

These tips can help you stay on track:

Go to all follow-up appointments. These visits are very important to the success of your procedure. Your care team can look for early signs of problems. They can also help you manage side effects and avoid complications.

Follow your nutrition plan. The amount of food you can eat after your procedure is less, so the quality of your diet is very important. Eating properly can help you heal from the procedure. And it can help you avoid problems. For example:

- If you eat or drink large amounts or eat or drink too quickly, you may feel sick to your stomach. You could also vomit or have pain in your lower chest or upper abdomen.
- If you don't eat meals at set times, don't eat enough fiber, or aren't physically active, you may become constipated.
- By following some of these guidelines it can help you lose weight. And it can help you avoid problems such as nausea, vomiting, stomach pain, diarrhea, and constipation. It also can help prevent nutrition problems.

Follow the medicine instructions you are given. You may be told to take or avoid certain medicines. Review all your medicines with your care provider at each appointment. Your provider may suggest changes to the medicines you take.

Avoid dehydration. Ask your dietitian or another member of your care team about ways to get enough fluid.

Avoid snacking. Unless you are told to do something else.

Stay active. Get regular physical activity. This can help you lose weight and keep it off. Physical activity also gives you other health benefits.

Join a support group. Share ideas and get support from others who have had a weight loss procedure.

Get professional help when needed. If you have issues that may lead to unhealthy habits, a counselor or other health care provider can help you deal with them.

Do NOT drink alcohol. You should avoid alcohol for at least the first 6 weeks or longer depending on your physician's recommendation. Alcohol is added calories that does not contain the nutrients you need to achieve your goals.

Diet Progression

Diet Type	Description of Foods	Number of Meals	Length of Time
Clear Liquids	Diluted fruit juice, regular Gatorade™ or regular Powerade™	Drink at least 64 ounces (8 cups) per day; sip liquids throughout the day.	Days 1 and 2 (the day of the procedure – after the procedure is done, and the next day)
Full Liquids	High-protein, low-calorie drinks. Liquids must be low in fat and sugar.	Drink at least 64 ounces (8 cups) per day.	4 weeks (days 3 through 31)
Soft Foods	Foods with very small, tender, moist, easily-chewed pieces. Meat must be ground, fish flaked and other foods must be chopped or mashed. All food and liquid must be low in fat and sugar.	Have 3 to 4 meals* plus 64 ounces of liquids per day.	2 weeks (days 32 through 46)
Regular (Solid Texture) Diet	Foods of any consistency may be tried carefully. Continue to choose foods and liquids low in fat and sugar.	Have 3 meals* plus 64 ounces of liquids per day.	Day 47 and after

*Your doctor may recommend following a different plan. Follow what your dietitian or doctor recommend. These are just guidelines.

Clear Liquids

START: The day after your procedure

DURATION: Days 1-2 post-procedure

DIET INSTRUCTIONS: Drink 2 ounces of **clear, non-carbonated, zero-calorie** liquid every hour! Diluted juice or diluted sports drinks are good options for hydration. Per 8 ounce serving the calories should not exceed 50.

EXAMPLES:

- Water
- Bullion
- Broth
- Decaffeinated tea or coffee
- Sugar-free, non-carbonated, caffeine free beverages

FLUID GOALS: 64 ounces
Continue to take vitamins and other medications as prescribed

KEEP A NUTRITION JOURNAL
This will be an important element of your journey.

Important Information

1. Stop sipping as soon as you feel full.
2. Use 1 ounce medicine cups or small Dixie cups to help you drink slowly.

Full Liquid Diet

The next stage of your journey (which will last approximately 30 days) will be a combination of clear liquids and protein drinks to slowly acclimate your body to consuming less calories and accommodate the size of your stomach. Your body will need time to adjust to the changes and it will be very important to your weight loss that you become comfortable with a low calorie and protein rich diet. It is important that you follow this process as introducing pureed foods to quickly does not allow you to maximize your weight loss and it could potentially have negative impact on the healing process. During this time, take advantage of your bodies healing process and re-establish healthy eating habits to maximize your weight loss.

DURATION: Day 3 - 31 Post-Procedure

DIET INSTRUCTIONS:

- Consume **5oz – 8oz** servings of high protein, low sugar beverages over the course of 30 minutes or more.
  - Water
  - Propel
  - Powerade™ Zero
  - Fat-Free Chicken Broth
  - Calorie-Free Tea
  - Calorie Free Sports Drink
- **DO NOT** exceed 8oz/hour!

PROTEIN GOAL: 60-80grams

These protein drinks should have 15-20g of protein/serving, less than 15g/serving of carbohydrates, and ~100-200 cal/serving.

Examples of Protein Drinks

- EAS Advantage
- HMR 70+
- Glucerna Weight Loss Shake
- Ultra Slim Fast with Soy Protein
- Atkins Advantage Shake
- Ultra Pure Protein Shake

Milk Based Protein

- Optisource
- Whey Protein
- Carb Conscious Carnation Instant Breakfast Blue Box (no sugar added)
- HMR 500, 800 (no ice)

Medications/Vitamins: Continue to take your medications and vitamins as prescribed.

Important Considerations During This Time

When Drinking:

1. Sip all liquids slowly over a one-hour period
   - **DO NOT** exceed 8 ounces per hour
2. Avoid gulping, it introduces air into your system and may cause gas pains
   - **DO NOT** force yourself to finish fluids if you feel full
3. Plan ahead and have the protein drinks ready to drink
4. It is **VERY** important that you stay hydrated
   - Keep an eye on your urine, it should be **no darker** than a light yellow
   - Write down the amount of fluid you drink in your food journal
   - To increase protein intake, you can add “Just Whites” by Deb El
     - This is an egg white powder found in the baking section of the supermarket or in the cake decorating section of craft stores
5. If you are lactose intolerant, try Lactaid drops (available at your pharmacy) or Lactaid milk
   - **Note** – instant breakfast powder and dry skim milk powder contain lactose
6. If you use a high protein soup, strain out any vegetables
   - Recipe: broth (bring to boil) + 2 egg whites, stir well
   - Use a thermos or chill your glass in the freezer to keep your protein shakes cool while you drink them
7. Write down all of your fluid intake on your food journal

Liquid Diet: Sample

Time	Liquids
7 AM	8 ounces water
8 AM	8 ounces protein drink
9 AM	8 ounces water
10 AM	8 ounces protein drink
11 AM	8 ounces water
12 PM	8 ounces protein drink
1PM	8 ounces water
2 PM	8 ounces protein drink
3 PM	8 ounces water
4 PM	8 ounces protein drink
5 PM	8 ounces water
6 PM	8 ounces protein drink
7 PM	8 ounces water
8 PM	8 ounces protein drink
9 PM	8 ounces water

Pureed and Soft Foods

During this stage you will be consuming pureed and semi-solid foods. This allows you to slowly reintroduce foods back into your system.

- It is important for you to eat all of the recommended dietary protein
- Eat only when you are hungry

START: Day 32

DURATION: 2 Weeks

DIET INSTRUCTIONS: Consume 3-4 small meals a day

FLUID GOALS: 64 ounces (8 cups) non-caloric, non-carbonated, non-caffeinated liquid

- Water
- Diluted Fruit Juice with no sugar added
- Fat-Rree Chicken Broth
- Calorie-Free Tea
- Calorie Free Sports Drink

RECOMMENDED SOFT FOODS:

- Dairy: yogurt - no sugar added
- Soup: bullion, broth, low-fat cream soups
- Meat and Meat Substitutes: Fish, eggs, cottage cheese, finely diced cheese or lean meats
- Vegetables: soft cooked vegetables
- Fruits: melons, bananas, no sugar added canned fruits, or citrus without the membrane

CALORIE GOAL: 800-1000 calories per day

VITAMINS:

- TWO chewable multivitamins (children's or adult) OR TWO tablespoons liquid multivitamins
- Calcium Supplement with Vitamin D 1200-1500mg (Maximum 500 mg per dose)
    - **DO NOT** take the multivitamin and calcium at the same time. Taking it simultaneously may interfere with the absorption
    - Generally ½ cup of whole food equals ¼ cup pureed food

Type of Food	Amount	Protein (g)	Fat (g)	Calories
STARCHES				
Mashed Potato	½ cup	2.0	4.4	111
Oatmeal	¾ cup	4.5	1.7	105
Farina	¾ cup	2.5	0.1	87
Cream of Wheat	¾ cup	3.3	0.4	115
FRUITS				
Applesauce (unsweetened)	½ cup	0.2	0.1	53
Peaches (canned in juice)	½ cup	0.8	0.05	55
VEGETABLES (1/2 cup whole = 1/4 cup pureed)				
Green Beans (canned)	¼ cup pureed	0.8	0.1	13
Carrots (baby food)	2.5 oz (2 oz = ¼ cup)	0.0	0.0	30
Beets (canned)	¼ cup pureed	0.8	0.1	26
MILK				
Yogurt, nonfat	8 oz	8	0	90-120
Milk, skim or 1%	8 oz	8	0-3	80-110
MEAT				
Tuna, canned in water	1 oz (1 can = 6 oz)	7	1	40
Imitation crab meat	1 oz	3.5	<1	30
Cheese, low fat or fat free	1 oz	4	0-3	40-50
Cottage cheese, 1% or fat free	1 oz (4 oz = ½ cup)	3.5	<1	20
Egg, scrambled	1 oz	6	80	80
Chicken, pureed (dark meat)	1 oz	7	72	72
Baby Food	2.5 oz	8	90	90
FAT				
Butter	1 teaspoon	0	4.1	36
Olive oil	1 teaspoon	0	4.6	40

Considerations

1. Do not fry your meats.
   - Frying adds calories and can make foods hard to digest
   - Some people may experience dumping with fatty foods
2. Stop eating when you are full.
   - You may regurgitate your food, become nauseous or have pain if you overeat.
3. Continue drinking 8 ounces of fluid per hour.
4. Continue with your chewable vitamin supplements.
5. Write down all the food you eat and the fluid you drink on your food record.
   The food record at this stage is critical to ascertain that you are eating enough protein.
6. Avoid processed foods or foods with added sugars.
7. Do not drink liquids within 30 minutes of eating your food.
8. For lightheadedness or dizziness, try one cup of bouillon as part of your fluid intake.

Pureed and Soft Foods Diet: Sample

Time	Food	Liquid	Protein (g)	Fat (g)	Calories
8 am	1 egg-scrambled (1 meat)		6	6	80
	½ cup applesauce (1 fruit)		0.2	0.1	53
9 am		8 oz coffee, decaffeinated	0	0	0
10 am		8 oz skim milk (1 milk)	8	0	85
11 am		8 oz water			0
12 noon	2 oz tuna fish (1 meat)		14	2	80
	½ tsp light mayonnaise (1/2 fat)		0	2.5	25
	¼ cup pureed carrots (1 vegetable)		0	0	30
	¼ cup pureed green beans (1 vegetable)		0.8	0.1	13
2 pm		8 oz water			
3 pm	8 oz non-fat yogurt (1 milk)		8	0	120
5 pm	3 oz pureed chicken (3 meat)		21	13.5	216
	½ cup mashed potato (1 starch)		2	4.4	111
	½ tsp butter (1/2 fat)		0	2	18
6 pm		8 oz water			
7 pm		8 oz water			
8 pm	¼ cup cream of wheat (1 starch)		3.3	0.4	115
10 pm		8 oz water			
		TOTAL	**63.3**	**31**	**1016**

MEAL PLAN	800-1000 CALORIES/DAY
Starch	2 servings
Fruit	2 servings
Vegetable	2 servings

MEAL PLAN	800-1000 CALORIES/DAY
Milk	2 servings
Meat	6 servings
Fat	1 serving

Solid Food Diet

During this stage you will begin eating solid foods. It will be important to adhere the principles of this diet to maintain your weight loss you have achieved thus far. This is the time you will build foundational nutrition habits that you will follow for the rest of your life.

- It is important for you to eat all of the recommended dietary protein
- Re-establish a regular meal pattern
- If you are having trouble beginning solid foods, return to the soft food diet for a day or two, and then try again

START:
56 days post-operatively

DURATION:
Day 56 and on

DIET INSTRUCTIONS:
900-1200 calories a day

Considerations

1. Avoid all high calorie and soft, mushy foods that can easily pass though your stomach.

2. Avoid any foods that dissolve in your mouth or do not require chewing
i.e. crackers or pretzels; yogurt or ice cream

3. Avoid all highly refined or processed foods
i.e. protein bars, fast food, frozen meals

4. Avoid condiments
i.e. butter, gravy, cream cheese, peanut butter, oil

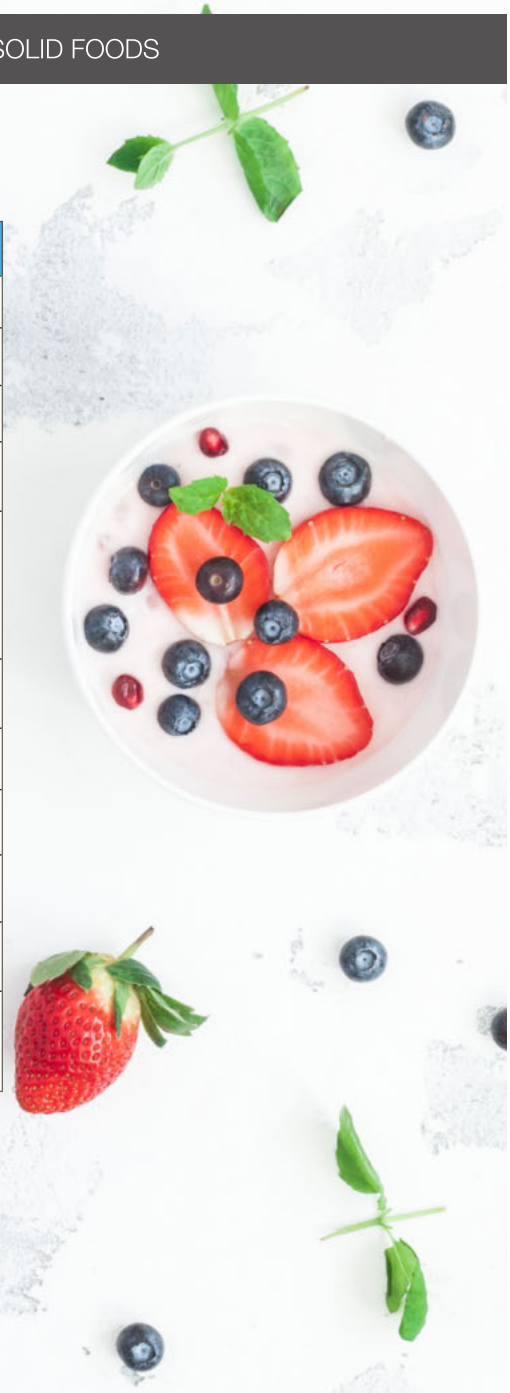
5. Avoid liquid calories, all beverage should have zero calories
i.e. Crystal Light, Diet Snapple, Fruit 2O, diet soda, water

Regular Diet: Sample

Meal	Food	Liquid	Calories	Protein
Breakfast	1 scrambled egg 1 piece whole wheat toast 2 links turkey sausage		78 100 140	6 3 13
		8 oz decaf coffee	5	0
		8 oz water		
Snack	1 serving fruit		60	0
	chewable calcium	8 oz water	0	0
Lunch	2 cups salad greens with non-starchy vegetables 4 oz grilled/steamed chicken 2 teaspoons oil 1 tablespoon vinegar OR 1 tablespoon light dressing herbs, salt, pepper		250-330	21-28
Snack	chewable multivitamin	8 oz water	0	0
	1 hard boiled egg		78	6
Dinner		8 oz water	0	0
	3 oz grilled/steamed/poached fish 1 cup steamed broccoli 1/3 cup sweet potato sodium free herbs/seasoning		120-150 50 80 0	21 2 3 0
Snack	chewable calcium	8 oz water	0	0
	1 serving fruit		60	0
		8 oz water	0	0
		8 oz water	0	0

Food Substitutions

INSTEAD OF	USE
1 egg	¼ cup egg beaters (30 calories, 6 g protein)
2 turkey sausages	2 veggie sausages (120 calories, 13 g protein)
1 piece whole wheat toast	½ whole wheat English muffin
Breakfast example	½ cup fiber one, high fiber cereal, 1 cup skim milk, and 1 scrambled egg
1 serving fruit in AM	½ cup grapes 1 cup cubed melon 1 cup fresh pineapple ½ whole pear
Lunch example	3-4 oz meat, fish, or poultry, a non-starchy vegetable, and a starch (rice, pasta, potato)
2 teaspoons oil and	1 Tablespoon regular salad dressing
1 Tablespoon vinegar	2 Tablespoons light salad dressing
1 hard boiled egg	¼ cup boiled edamame (soybeans)
Dinner example	3-4 oz meat, fish, or poultry, a non-starchy vegetables, and a starch (rice, pasta, potato)
1 cup cooked vegetables	2 cups raw vegetables (exclude starchy vegetables: peas, corn, potatoes, lima beans, plantain, squash, and yams)



EXERCISE:

NIH recommends 150 minutes of exercise per week.

You should be incorporate at least 30 minutes of exercise 5 times per week.

Succeeding With Your New Diet

How you eat and drink after an endobariatric procedure affects your success. To help you reach your goals, your care team offers the following guidelines.

Drink at least 64 ounces (8 cups) of liquid per day*

Sip liquids slowly between meals. Do not drink liquids with meals. Liquids can make you feel full. If you get full from the liquid, you may not be able to eat the food you need. In addition, if you drink liquids with meals it could push your food through your stomach too quickly. That may cause pain in your belly (abdomen). It may also cause you to feel hungry sooner.

- Sip 8 ounces over 30 to 60 minutes
- Stop drinking 30 minutes before your next meal
- If needed, drink only a small amount of liquid with meals
- Wait 30 minutes after finishing your meal to drink liquids

Sip up to 24 ounces (3 cups) of skim or 1% milk as part of your daily liquid intake. Milk is an excellent source of protein and calcium. If you are not able to drink milk, talk to your dietitian about other sources of protein and calcium.

Take small bites and chew food thoroughly

As you follow the diet progression and choose foods with more texture, take small bites of food. Chew the food to a soft consistency before swallowing. Allow 10 to 15 minutes to eat 1 ounce of food. As soon as you start to feel full, stop eating and drinking. Allow at least 30 minutes for each meal.

Dining out

Restaurants often serve portions that are too large for one meal. Ask the staff for smaller portion or to order off the lunch menu. You can always ask to have them package half of the meal for you to take home and ask them to serve you the other half.

*Your doctor may recommend following a different plan. Follow what your dietitian or doctor recommend. These are just guidelines.

Reaching Your Goals

It took a long time to gain weight. It will take time and discipline to help you lose the weight. Your health care team is here for you. They offer these reminders for you today:

- Follow-up care is just as important as all of the “getting ready” steps you take!
- To achieve your goals, follow all instructions your care team members give you.
- The timing for your return to work, other activities and exercise must be approved by your care team.
- Please be patient during your recovery. Every person is different and your recovery will be different than other patients who have had the same procedure. This is true for healing time, food sensitivities, weight-loss goals, and so on.

Meal Tracker: Week 1

MONDAY

Breakfast

Lunch

Dinner

TUESDAY

Breakfast

Lunch

Dinner

WEDNESDAY

Breakfast

Lunch

Dinner

THURSDAY

Breakfast

Lunch

Dinner

FRIDAY

Breakfast

Lunch

Dinner

SATURDAY

Breakfast

Lunch

Dinner

SUNDAY

Breakfast

Lunch

Dinner

NOTES

Meal Tracker: Week 2

MONDAY

Breakfast

Lunch

Dinner

TUESDAY

Breakfast

Lunch

Dinner

WEDNESDAY

Breakfast

Lunch

Dinner

THURSDAY

Breakfast

Lunch

Dinner

FRIDAY

Breakfast

Lunch

Dinner

SATURDAY

Breakfast

Lunch

Dinner

SUNDAY

Breakfast

Lunch

Dinner

NOTES

User Assistance Information

For any assistance, users should contact:

Apollo Endosurgery Inc.
1120 South Capital of Texas Highway
Building 1, Suite 300
Austin, Texas 78746
USA

Or go online at www.apolloendo.com

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