Intragastric Balloon Surgery for Weight Loss

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Read this material completely. If you have questions after you read this information, call the intragastric balloon program coordinator. See the list of your health care team members on the last page of this material.
What You Need to Know First

An intragastric balloon reduces the amount of space in the stomach.

Having this 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 “intragastric balloon” mean?

- Intra refers to “inside.”
- Gastric refers to “the stomach.”

During this procedure, a balloon is inserted into the stomach and filled with saline. Because there is a balloon in your stomach, there is less room in the stomach for food and liquid. Also, the rate by which food and liquids exit your stomach is slower. You might feel full faster — after eating less food than a person typically would eat. Over time, eating less helps a typical person lose weight.

This procedure is done “endoscopically.” To get the tools into the stomach, a small lighted tube, called an endoscope, is put into your mouth. The endoscope has a tiny camera on it, as well as the balloon. The endoscope and balloon are gently guided down your esophagus. There are no incisions made in your skin to reach the stomach.

More information about the procedure is shared later in this material.

The benefits of this procedure

When this procedure 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. Examples include:

- Type 2 diabetes.
- High blood pressure, called hypertension.
- Pauses in breathing during sleep, called obstructive sleep apnea.
- Heart disease.
- Asthma.
- Joint problems.
- High cholesterol.

There are risks related to having this procedure. See “Side Effects, Risks and Complications.”
You may be a candidate for this procedure if you:

- Have a Body Mass Index (BMI) between 30 and 40. Your BMI is based on your height and weight. (See “Learning About Your BMI.”)
- Are willing to put a lot of effort toward reaching your weight loss goal(s). This:
  - Includes attending medical and mental health appointments before surgery. These are directly related to the procedure.
  - Includes making changes to your diet, physical activity and other health habits before the procedure. These steps prepare you to keep off the weight you lose.
  - May include taking care of other medical or mental health issues that could affect your procedure 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 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 are interested in this procedure are not emotionally or medically ready for it. You will have many conversations with your health care team before a decision is made about whether this procedure is right for you.

How long does it take to do this?

Every person is different. The process depends on your overall health, your needs and how well you follow the instructions given to you. The process may be as short as a few days or weeks. Or it could be longer.

This is not a quick fix

It took time to gain the weight. It will take time to lose the weight. Every person has different results. But, in general, most people lose 10 to 14 percent of their initial weight in the first year. For a person who weighs 250 lbs., this is about 25 to 35 lbs.
Learning About Your BMI

To be a candidate for this procedure, you must have a **body mass index** (BMI) between 30 and 40. Your BMI is based on your height and weight.

Refer to the BMI chart below for this example:
Height: 5'5” (65 inches)
Weight: 192 pounds
BMI: 32

If your BMI is not between 30 and 40, this procedure may not be right for you.
Could this procedure work for you?

The intragastric balloon team looks at many things to decide whether this is likely to be a good weight-loss method for you. They look at your:

- Overall health history.
- Current health problems or risk for problems related to your weight.
- Past efforts to lose weight.
- Willingness and ability to make long-term changes to your diet, physical activity and other habits.
- Ability to cope with the effects of weight loss.
- Support from family and friends, who can help you reach your goals.
- Understanding of the risks and complications of the procedure.

If you are not a candidate for this procedure or you choose not to have it, talk to a member of your care team. Your health care team can help you identify other ways to lose weight and improve your health.

Notes
Are You Ready to Commit to This?

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 after the procedure.

To help you be successful, think about this as though you plan to build a house. You would need a lot of tools and a lot of help from people who want to see you succeed. The same is true for rebuilding your health.

This procedure is only one of the many tools you’ll use to improve your health. You need to begin to use some of the tools shown below now — long before you have your procedure.

If you choose not to use an intragastric balloon, you can still use the other tools shown here to help you manage your weight!
This section explains what you need to do to get ready for the procedure.
Steps in the Process

You will follow these steps.

1. **Be evaluated by endocrinology for a weight-reduction procedure.**

2. **Meet with members of the care team.** Your team may include a physician, nurse practitioner (NP), physician assistant (PA), registered dietitian (RD), psychiatrist, or psychologist, and a program coordinator. You will have separate appointments with gastroenterology, endocrinology, psychology, and dietetics.
   - Gastroenterology (GI)/Endoscopy: the physician who performs the procedure is a specialist in gastrointestinal endoscopy.
   - Endocrinology: The doctor, nurse practitioner or physician’s assistant who manages your care before and after the procedure.

If you and the team agree that this procedure may be a good choice for you, you continue with the process.

3. **Meet with other health care providers** as needed based on your health. For example, if you don’t sleep well, you may meet with a sleep specialist.

4. **Complete all of the “assignments”** your care team gives you to do before the procedure. For example, you may be asked to improve eating habits and get regular physical activity. You will be told to complete a behavior-modification program either before or after the procedure. (See “Step 4.”)

5. **Meet with your care team when you finish your assignments.** If your care team decides you may have the procedure, you will continue with this process. Your team will tell you how to get ready. This will include nutrition and physical activity guidelines for you to follow before and after the procedure.

6. **Schedule the procedure.** Meet with your gastroenterology or endoscopy care provider to talk about the procedure, learn how to care for yourself after the procedure and schedule it. Be sure to ask any questions you have.

If any of these steps is skipped, it may affect the decision about your procedure.

7. **Do what you need to do to take care of yourself after the procedure.** (See also “Follow-Up Appointments.”)

It is very important to your success that you go to each of your follow-up visits. Having this procedure is a big commitment to your health. Following up will help you fulfill the promise you made to yourself!
Your weight management care team

Your care team may include:

- **Endocrinology health care providers who are trained in nutrition.** This group may include physicians, nurse practitioners (“NPs”) and physician assistants (“PAs”). Endocrinology is a specialty that works with diseases that affect the body’s glands. These specialists evaluate you before the procedure and help with your follow-up care.

- **Program coordinator.** This person guides you through the process, sets up appointments and answers your questions.

- **Dietitian.** He or she tells you what changes to make in your diet before and after the procedure. This specialist also shares ideas about how to make these changes part of your daily life.

- **Psychologist or psychiatrist.** This specialist helps you identify and manage mental health issues and behaviors that may keep you from losing weight or keeping it off. This person also helps you cope with the emotional and relationship issues that can happen as you lose weight.

- **Gastroenterologist or endoscopic care provider.** This person performs your endoscopic procedure.

- **Other medical specialists.** You may see a health care provider who specializes in sleep disorders. Or you may see a cardiologist if you have heart disease.
Steps 2 & 3: The Evaluations

The evaluation steps help you and your health care team learn as much as possible about your overall health and wellbeing, both physically and mentally. You meet with many health care providers during steps 2 and 3. And you may have a number of tests to learn more about your health.

Your care team members:

- Talk to you about issues that are important for weight control.
- Point out any issues that you need to work on before the procedure.
- Check for health conditions that could increase your risk for complications during or after the procedure. Some health conditions could stop or slow your effort to lose weight or to keep it off.

You are expected to get care for and resolve any health issues that could increase your risks during or after this procedure. See “Step 4.”

Before you have the procedure, it is important to understand what is involved and to think about how the procedure may affect your life. The evaluation period gives you time to do this.

Notes
Step 4: Your Assignments

If you and your health care team decide that this may be a good procedure for you, your team will give you a list of things to do to help you get ready.

☐ **Talk to your health care team** about any health issues you have. Common examples are: blood disorders, including blood clots, high blood pressure and the need to take blood-thinning medication; sleep apnea; and problems related to anesthesia. Also tell your care team about any medications, vitamins and supplements you take. This includes prescription and over-the-counter products.

Talk to your care team about any concerns you have about limiting your intake of alcohol after the procedure.

☐ **Address any other health problems you have.**

☐ **Register with Mayo Clinic’s Patient Online Services.** This gives you and your care team electronic access to each other. You can send health updates to your team in a secure way. And the team can send you medical information as it is available. You can also schedule appointments through Patient Online Services. At the time this material was initially published, the website address for Patient Online Services was: http://mayoclinichealthsystem.org/online-services.

☐ **Consider whether you need to reduce your intake of caffeine.** If you take caffeine tablets or drink 3 cups or more of caffeinated beverages per day, begin to lower your intake in the weeks before the procedure. Caffeinated beverages include coffee, tea, energy drinks, most cola sodas, and sodas like Mountain Dew™ and Jolt™. Talk to your health care team about your use of caffeine.

☐ **Change any behaviors** that make you less likely to lose weight and keep it off. Examples include unhealthy eating patterns, lack of physical activity and poor sleep habits.

☐ **Take part in counseling for any mental health conditions**, such as anxiety or depression. For many people, eating, extra weight and health issues are related to emotional conditions. If you are dealing with a mental health issue, it should be treated before you have this procedure. During the evaluation, you meet with a psychologist. Your team will tell you if they believe you would benefit from counseling.

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You are more likely to keep off weight if you have guidance from professionals and support from your family and friends.
Step 5: The Final Evaluation
Step 6: Scheduling the Procedure

Depending on your needs, it may take few days or few weeks to finish the assignments. When you are finished, your care team reviews your progress.

To decide whether you are ready for the procedure, your team checks to see whether you:
• Have kept your scheduled appointments.
• Understand the risks, benefits and behavior changes needed to be successful.
• Have made changes to your diet and physical activity.
• Followed treatment plans for any health conditions you have.
• Finished any other items needed to help you get ready for the procedure.
• Agreed to all of the follow-up steps needed to be successful. This includes attending health care appointments and following the diet progression as directed.

If the care team members believe this procedure could be a good option for you, you meet with your gastroenterology care provider. Then the program coordinator helps you schedule your procedure (Step 6).
INTRAGASTRIC BALLOON

THE PROCEDURE
Your Digestive System

Knowing how your digestive system works can help you understand what happens when an intragastric balloon is inserted. Figure 1 shows the normal digestive system.

When you eat and drink:

- Food and fluids move from your mouth through a tube, the esophagus, into your stomach.
- The stomach makes “digestive juices” that help break down food. The stomach itself does not absorb nutrients from food.
- When food is partially broken down by the stomach, it passes into your small intestine. The pyloric valve controls the flow of food from the stomach to the intestine.
- The small intestine absorbs nutrients as food moves through it. Your body gets calories from those nutrients.
- Food then enters the large intestine, also called the colon. The large intestine absorbs water from any food that has not been broken down.
- The rest of the food leaves your body as waste, through your rectum.
Getting Ready for the Procedure

There are many steps you need to take to get ready for the procedure. In addition to those listed here, ask your program coordinator if you have other instructions to follow.

It is very important that you do what you are told to do. If you do not, your procedure may be rescheduled or cancelled.

☐ Give your care team a list of all the medicines, vitamins, minerals, and dietary supplements you take. Some of these substances may affect your condition during the procedure and your healing after the procedure.

☐ Tell your health care team if you have a family or personal history of blood disorders. If you have ever had a blood clot, tell your health care provider.

☐ Talk to your care team about your use of caffeine, alcohol, tobacco, and any other drugs. Using any of these products before or after your procedure may affect you during the procedure and while you heal.

☐ Set up and go to your preoperative exam.

☐ Read and follow the directions on your Patient Appointment Guide. They tell you what you need to do in the days right before surgery. This includes direction about what you eat and drink.

If you take blood-thinning medications: you will not be able to take part in the pilot (exception may be aspirin).

If you have diabetes & are on insulin: you will not be able to take part in the pilot.

See also “For more information.”
About the Procedure

This procedure changes the amount of space available for food and drink in your stomach. It means you won’t be able to (should not) 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 into the procedure room, you change into a hospital gown. Several doctors and nurses ask you a number of questions. In the procedure room, you are given anesthesia. Anesthesia is medicine that keeps you asleep and comfortable during this non-surgical procedure.

During the procedure

During the procedure, the gastroenterologist gently guides the endoscope, or “scope,” and balloon through your mouth and esophagus and into your stomach. (See Figure 2.) Once they are in the stomach, the thin, deflated balloon is filled with saline until it’s about the size of a grapefruit. (See Figures 3 and 4.) The procedure typically takes about 20 to 30 minutes. Most people go home the same day.

Figure 2. Scope inserted into stomach through mouth and esophagus
Saline solution is injected to fill the balloon

Uninflated balloon

Figure 3. Placement of intragastric balloon

Tube is removed after balloon is filled
Removing the balloon

The balloon is removed in 6 months using a similar endoscopic procedure. The saline is removed from the balloon, and the balloon is pulled back through an endoscope. (See Figure 4.) The removal procedure usually takes about 20 to 30 minutes. Most people go home the same day.

Figure 4. Draining and removal of intragastric balloon
After the procedure

After you wake in the recovery area:

• You likely will get ice chips and a little water to drink. The day after the procedure, you get to drink more, in the form of clear liquids. Any sweetened juice you drink should be diluted in half with water first.

• You are expected to walk with help as soon as you feel able. **During the first 24 hours after the procedure, do not walk without help from one of your health care providers or a friend or family member.** You will have anesthesia in your body. The risk of falling and injury is very high while you have anesthesia in your system.

• You will start to take medications by mouth. This may be in pill or liquid form.

Before you leave the clinic

This is typically an outpatient procedure. That means that you do not stay overnight in the hospital. Some people may stay overnight for observation, though this is not common.

Before you leave the clinic, talk to your health care provider(s) about what to do at home and what to do if you have problems. See also “Side Effects, Risks and Complications.”

Activity limits related to general anesthesia

You are given anesthesia for this procedure. This medicine keeps you asleep and comfortable during the procedure. After you have had anesthesia and when you take strong pain medication, it is common to have lapses of memory, slowed reaction time and impaired judgment. Therefore, for at least 24 hours after your surgery:

• Rest.

• Do not drive or operate motorized vehicles or equipment.

• Do not return to work or school.

• Do not take on responsibility for children or anyone who depends on your care.

• Do not use exercise equipment or take part in rough play or sports.

• Do not drink alcoholic beverages.
Side Effects, Risks and Complications

Every person is different and every person may react differently to a procedure like this. This may not be a complete list of the side effects, risks and possible complications that could happen. For information about your risks and possible problems (complications), talk to your physician and anesthesiologist before the day of the procedure.

Side effects

• **Nausea and vomiting.** It is common to have moderate to severe nausea and sometimes vomiting after insertion of an intragastric balloon. The care team manages these symptoms with anti-nausea medication. Usually, these symptoms stop within one week of the balloon insertion. If severe nausea and vomiting continue past one week, or you are not able to tolerate your prescribed diet, contact your program coordinator right away.

• **Pain or discomfort.** You may have some pain or discomfort after the procedure. Typically, this stops within about one week. Your care team gives you pain medication to help manage this for the first week. If symptoms last longer than a week, contact your program coordinator right away.

• **Bad breath and regurgitation of undigested food.** Having an intragastric balloon may cause you to have bad breath. It may also cause you to “burp up,” or regurgitate, undigested food. If these symptoms bother you, contact your program coordinator. The symptoms are usually mild and don’t bother people. Most people manage them by brushing and flossing the teeth and using mouth wash.

• **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 anesthesiologist before the day of the procedure.

• **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. 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.

These changes should get better over time.
Risks and complications

Every procedure has risks and possible complications. Your risks are higher if you:

- Are obese. Obesity increases your risk for developing a blood clot or pneumonia during or after the procedure. Your risk of complications goes up the more you weigh.
- Smoke.
- Are not physically active.
- Have had a blood clot in the past.
- Have sleep apnea that is not being treated.

Risks include:

- **Bleeding.** The risk of getting an ulcer and bleeding from it as a result of balloon insertion is low. If you have some bleeding, you may need to go to the hospital and have a blood transfusion to treat the blood loss. It’s also possible that you may need a procedure to treat the source of the bleeding. The balloon may be removed earlier than the usual timeframe for this treatment.
- **Infection (including an abscess).** An abscess is a confined pocket of infected pus and other debris. You could develop an abscess, or get an infection without an abscess, if bacteria leaks from the stomach into the abdominal cavity. An infection is usually treated with antibiotic medication. You may need another procedure or surgery to drain and treat the infection. Having an infection as a result of an intragastric balloon procedure is rare.
- **Reactions to anesthesia.** (See also “Side effects” list.) Serious complications related to anesthesia (such as a drug reaction, breathing problems, blood pressure problems, and death) are rare. To help avoid this, on the day of the procedure, tell your anesthesiologist about any problems you (or a family member) has had with sedation or anesthesia in the past. Also tell the anesthesiologist about all medications you take, including over-the-counter medications and herbal supplements.
- **Perforation of the stomach.** A perforation is an unplanned hole, or puncture, in the stomach. If a puncture is discovered during the procedure, it is usually fixed during the procedure. If a puncture is discovered at a later point and it causes you problems (such as an infection), a separate procedure or surgery may be needed to treat it. *A perforation rarely happens after this procedure.*
- **Blockage of the opening of the stomach.** Even when a person follows the dietary guidelines carefully, it is possible to get a blockage in the stomach or small intestines. This could happen if the balloon unexpectedly deflates and moves into the small intestine. This is a rare complication within the recommended 6 months of intragastric balloon therapy. The risk of balloon deflation and movement increases if you do not return to have the balloon removed in 6 months. Common symptoms of a blockage are nausea that doesn’t go away, vomiting and abdominal pain. If you closely follow the diet guidelines and the symptoms continue, contact your health care provider right away.
- **Death.** The risk of death due to this procedure is very low.
Short-term complications may include:

- **Blood clot, deep vein thrombosis (DVT) and/or pulmonary embolism (PE).** The medical name for a blood clot is a *thrombus.*

  A deep vein thrombosis (DVT) happens when a blood clot forms in one or more of the deep veins in your body (usually in a leg). Blood clots that form in a leg and travel to the lungs are called pulmonary emboli. Blood clots are one of the most common causes of death related to a weight-loss procedure.

  To promote blood flow and avoid blood clots during the procedure, you may be asked to wear a compression device on your lower legs. After the procedure, you should walk often and move your legs and feet when you sit or lie down.

  If a clot happens, medication may be used to thin your blood and/or to help break up the clot. Other treatments or procedures may be used as well, if needed.

- **Pneumonia.** Pneumonia is a lung infection. To help prevent pneumonia, you may be taught breathing exercises to do before and after the procedure. You will be asked to begin walking as soon as possible after your procedure. (Be sure to have someone help you and stay near you. Your risk of falling is high while you have anesthesia in your body.) Sitting in a chair or standing, instead of laying down most of the time, may also help you avoid pneumonia.

  If you get pneumonia, antibiotic medication is typically used to treat the infection. Other treatments, such as draining the infection, may be used if needed.

Long-term complications may include:

- **Gallstones.** Losing weight fast increases your risk of forming gallstones. Your gastroenterologist may have you take medicine to help prevent gallstones.

- **Gastroesophageal acid reflux (GERD).** The gastric balloon may cause or worsen heart-burn or reflux of acid from the stomach into your esophagus. For this reason, your physician may prescribe acid-suppressing medication. If that happens, it is very important that you take this medication as prescribed.

- **Ulcer.** A sore, or ulcer, may develop in your stomach. This can cause bleeding or abdominal pain. Certain medications can help with ulcers, but you may need another procedure to correct this. Some medicines — including those that have aspirin, ibuprofen or naproxen (“NSAIDs”) — may increase the risk of stomach ulcers. Ask your healthcare provider which medicines to avoid after your procedure. Smoking can also increase your risk for getting an ulcer.

- **Nutrition problems.** Your risk for poor nutrition due to the procedure is low. Be sure to follow the nutrition plan you are given. And take the vitamins and supplements that your care team tells you to take. See also “Common Problems After the Procedure.”
• **Dehydration.** Since you will not be able to drink a lot at any one time after your procedure, your body may not get enough fluids. This condition is called *dehydration.* To prevent dehydration, follow the eating and drinking plan as directed. See also “Common Problems After the Procedure.” Contact your program coordinator right away if you are not able to follow the prescribed diet and oral-intake plan.

**Reversing the procedure**

If a complication cannot be corrected or managed, the intragastric balloon can be removed during another procedure.

**Notes**
Follow-Up Appointments

Before you are approved to get an intragastric balloon, you must agree to go to each of these follow-up appointments.

If you do not get your appointment dates in the mail a few days before the expected time, contact the program coordinator.

Your first appointment

This appointment is usually scheduled for 1 to 2 days after the procedure. It is usually with your gastroenterologist.

Months 1 through 6

Contact with nutrition and psychiatry/psychology every other month. Depending on your needs, this may be done either in person or by phone, Patient Online Services or an app.

6-month return visit

This 2 day appointment typically includes:

- Group classes.
- Lab tests, including drawing some blood.
- Individual visits with endocrine or gastroenterology, plus a dietitian and a mental health care provider.
- Group psychology session.
- Removal of your balloon. It is very important to have the balloon removed at 6 months. This will help you avoid some possible complications.

Before you can have the balloon removed

You must be on a clear liquid diet for 48 hours before your appointment to have the balloon removed. Be sure to read the information you receive about how to get ready for this procedure. If you do not have that information about a month before your scheduled 6-month return visit, contact the program coordinator or endocrinology appointment scheduling to ask for it.
Months 6 through 12

You will have regular contact with nutrition and psychiatry/psychology through your Health Coach. Depending on your needs, this may be done in person individually or in a group setting or both. If you are not able to come into the clinic, ask your program coordinator whether it may be done by phone or through Patient Online Services or a smart-phone app.

12-month return visit

This half-day appointment typically includes:

- Group classes.
- Lab tests, including drawing some blood.
- Individual visits with endocrine or gastroenterology.
- Group psychology session.

Additional follow-ups by phone

You may have additional monthly contact with a dietitian and a psychologist. Depending on your schedule and needs, these contacts may be done either in person or by phone or through Patient Online Services or a smart-phone app. Between visits, it is very important that you follow the healthy lifestyle and behavioral modification program described in this material.

Participating in the year-long schedule of follow-up appointments is very important to your success in losing and maintaining weight loss!
LIVING WITH C BALLOON
You May Experience Many Changes

After your weight-loss procedure:

• You will probably lose the most weight during the first three to six months.
• Your mood, self-esteem, health, and quality of life may get a lot better.
• You may sleep better.
• You may be able to reduce or stop taking certain medications that you used to need to treat health conditions.*

This weight-loss procedure is the start of a life-long process. 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. We’re here to help.

Be ready for emotional reactions and other effects

Sometimes people aren’t sure about all of the changes that need to happen to create a successful, lasting outcome.

• Your eating habits change greatly. Your stomach capacity is smaller while the balloon is in. So you have to limit the amount of food and liquid you take in.
• You need to take vitamin and mineral supplements while the balloon is in. You may be advised to continue to take these supplements after the balloon is removed.
• You need to stay physically active for the rest of your life. This will help you avoid gaining back the weight you lost.

All of these changes can create stress.

Your body may look very different soon. This may lead to some new issues and challenges, including:

• Changes in relationships with your spouse, family, friends, and co-workers.
• Changes in sexual relationship with your partner.
• Depression.
• Anxiety.
• Being unhappy with the way your body looks.
• Misuse of alcohol or other substances.

* The effect of this procedure on certain medical conditions, such as diabetes, high blood pressure, hyperlipidemia, and joint problems, is not yet fully known. However these conditions may improve with weight loss.
**Attend a behavior-modification program**

*Everyone who has the intragastric balloon placed should take part in a behavior modification program. This can help you improve your chance for successful weight loss.*

You may attend a behavior modification program for weight loss at this clinic. Or you may look for a similar course in your local area.

This program is designed to help you:

- Choose a healthy, balanced diet.
- Work physical activity into your daily life.
- Deal with issues that keep you from making healthy choices.
- Manage stress.
- Maintain healthy habits over your lifetime.

It’s hard to change habits. This program helps you practice the skills you learn. **Practicing healthy behaviors is a key to making your procedure a success.** The structure and support of this program are very important for you to maintain your successes after the intragastric balloon is removed!

**Women: Be ready for possible physical changes**

Weight loss may lead to more regular menstrual periods and improved fertility. However, rapid weight loss also stresses the body. You are strongly advised not to become pregnant while the balloon is in! If you become pregnant while the balloon is in, tell your obstetrician and your endoscopic care team right away. The balloon needs to be removed.

To avoid pregnancy, use barrier methods of birth control. Examples include a diaphragm, cervical cap, condoms, and spermicidal foam. **Pills and other kinds of birth control may not work as well when you are losing weight quickly.** Talk to your gynecologist about how to care for yourself during this timeframe.
Work hard to stay 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 program coordinator for support. **Get back on track as soon as possible.**

These tips can help you stay on track:

- **Participate in all follow-up appointments and keep in regular contact with your care team.** These steps are very important to the success of your procedure. Your care team members 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, don’t drink enough, or aren’t physically active, you may become constipated.
  
  - If you eat foods high in sugar or fat, you may have stomach pain or discomfort.

- **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. (See also “Common Problems After the Procedure.”)

- **Avoid snacking.** Unless you are told to do something else, eat three meals a day. Snacking throughout the day may lead to weight gain.

- **Stay active.** Unless you are told something else, do at least 30 minutes of moderate to vigorous physical activity a day. 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.
Take your vitamins and supplements

You need to take a multi-vitamin (vitamin and mineral supplement) daily during the six months that you have the balloon in place.

Get regular physical activity

You may lose a lot of weight quickly during the first few weeks after the procedure. But having this procedure does not guarantee that you will keep the weight off.

To successfully control your weight, you must follow the diet progression described on the following pages. And you must develop lifelong, healthy eating and lifestyle habits.

Physical activity promotes weight loss because it increases the number of calories burned. It also improves your overall fitness. It helps minimize muscle loss while you lose weight. And it will help you maintain your weight loss. Talk to your health care provider about how you should plan to increase your physical activity.

Many Mayo Clinic publications about physical activity and fitness are available. Ask your health care provider or dietitian about these patient education materials.

Do not drink alcohol

For least a few weeks after the procedure, do not drink alcohol. Your goals for those early weeks are to drink the required amount of healthy liquids and get enough protein. Alcohol can’t help you reach those goals.
Diet Progression Overview

For a few days after your procedure you are only allowed to drink liquids. After the liquid diet, you can move on (progress) to eating food that has a regular consistency and firmer texture. The speed with which you progress depends on how your body adjusts to the texture and consistency of the food. At each stage of the diet progression, it is important that you chew your food well. Take at least 30 minutes to eat or drink. Note: The diet stages shown here are explained in detail on the following pages.

<table>
<thead>
<tr>
<th>Diet type</th>
<th>Description of foods</th>
<th>Number of meals</th>
<th>Length of time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Liquids</td>
<td>Diluted fruit juice, regular Gatorade™ or regular Powerade™</td>
<td>At least 64 ounces (8 cups) per day; sip liquids throughout the day.</td>
<td>Follow this on days 1 and 2. Day 1 is the day of the procedure (after the procedure is done); day 2 is the next day.</td>
</tr>
<tr>
<td>Full Liquids</td>
<td>High-protein, low-fat, low-sugar drinks. Daily intake from liquids should not be more than 1000 calories per day.</td>
<td>Drink at least 64 ounces (8 cups) per day.</td>
<td>On day 3, begin a full liquid diet. Stay on it for one week (days 3 through 9).</td>
</tr>
<tr>
<td>Pureed Foods</td>
<td>Foods of smooth, pureed consistency, low in fat and sugar.</td>
<td>3 to 5 small meals* &amp; at least 64 oz. of liquids per day.</td>
<td>On day 10, begin a pureed diet. Follow this through day 16.</td>
</tr>
<tr>
<td>Soft Foods</td>
<td>Foods with soft, easily chewed consistency. Food should be in small pieces, low in fat and low in sugar.</td>
<td>3 to 4 small meals* &amp; at least 64 oz. of liquids per day.</td>
<td>On day 17, begin a soft-food diet. Follow this through day 23.</td>
</tr>
<tr>
<td>Regular Diet</td>
<td>Foods of any consistency may be tried carefully. Chew well. Continue to choose foods and liquids low in fat and sugar. Discuss your daily calorie needs with your dietitian.</td>
<td>3 meals* and 64 oz. of liquids per day.</td>
<td>Follow this on day 24 and after.</td>
</tr>
</tbody>
</table>

* Every person is different. Your gastroenterologist or dietitian may give you more instructions about the number of meals per day you should have and how you should progress your diet. You should only move on to the next diet type when you can comfortably handle (tolerate) foods in the current stage. If you are not tolerating food in the prescribed stage, contact your care team.
Diet Progression: Clear Liquids (Days 1 & 2)

The first step in your diet progression is a clear liquid diet. A clear liquid diet helps you avoid dehydration and gives you a small amount of calories.

**Length of time:** 2 days (the day of the procedure and the day after that)

**Amount of liquids:** At least 64 ounces (8 cups) per day

**Recommended liquids**
- 8 ounces (1 cup) diluted fruit juice (½-cup of juice plus ½-cup of water).
- 8 ounces (1 cup) of regular Gatorade™ or regular Powerade™.

**If you plan to drink more**

If you plan to drink more than the 64 ounces of diluted fruit juice, regular Gatorade or regular Powerade in a day, you may add the following liquids:
- Water.
- Bouillon.
- Broth.
- Decaffeinated coffee.
- Decaffeinated tea.
- Sugar-free* gelatin or Popsicles™.
- Sugar-free, non-carbonated, caffeine-free beverages.

**Tips for success**
- Sip 8 ounces (1 cup) over 30 to 60 minutes.
- Limit your intake to no more than 8 ounces (1 cup) per hour.

* See Appendix A for more information about “sugar-free” products.
Diet Progression: Full Liquids (Days 3-9)

The second step in your diet progression is a full-liquid diet. This helps prevent dehydration and gives you needed nutrients, including protein.

Length of time: 1 weeks (days 3 through 9)

Amount of liquids: At least 64 ounces (8 cups) per day

Recommended liquids

- 4 cups (32 ounces) of diluted fruit juice, regular Gatorade, regular Powerade, or skim milk.
- PLUS
- 4 cups (32 ounces) of high-protein, low-carbohydrate drinks. This should total 60 to 80 grams (g) of protein per day. These drinks should have:
  - 15 to 20 grams of protein per 8- to 12-ounce serving.
  - Less than 15 grams carbohydrate per 8- to 12-ounce serving.
  - 100 to 200 calories per 8 to 12 ounces.

Examples of high-protein, low-carbohydrate drinks include:
- Slim Fast High Protein™.
- Atkins Advantage™.
- Muscle Milk™ Light.

If you plan to drink more

If you plan to drink more than the 64 ounces directed above, choose from the following list:

- Water.
- Bouillon.
- Broth.
- Decaffeinated coffee.
- Decaffeinated tea.
- Sugar-free gelatin or Popsicles™.
- Sugar-free, non-carbonated, caffeine-free beverages.

Tips for success

- Sip 8 ounces (1 cup) over 30 to 60 minutes.
- Limit your intake to no more than 8 ounces (1 cup) per hour.
- Your total daily calorie intake should not be greater than 1000 kcals.
- Separate your intake of any food or fluid by at least 30 minutes.
Diet Progression: Pureed Foods (Days 10-16)

The third step in your diet progression is a pureed foods. The pureed diet includes strained, pureed and liquid foods. Not all the foods have to be pureed. But the food you eat must be the consistency of smooth paste with no distinct pieces. Choose foods and liquids low in fat and sugar.

**Length of time:** 1 week (days 10 through 16)

**Amount allowed:** 3 to 6 small meals per day; 2 to 3 medicine cups of food at each meal. Note: 1 medicine cup = 1 fluid ounce or 2 tablespoons. You must also continue to drink at least 64 ounces per day.

**Recommended foods**

If the listed item is a liquid, you do not need to puree it. If it is the consistency of a smooth paste, with no distinct pieces, you do not need to puree it. All other foods on this list must be pureed.

- **Soup:** Broth; bouillon; strained, cream soup.
- **Liquids:** See “Recommended liquids” on previous page.
- **Meat and meat substitutes:** Cottage cheese; soft, scrambled eggs; pureed lean meat, fish, poultry.
- **Milk:** Skim or 1% milk; no-sugar-added/”lite”/light yogurt.
- **Starch:** Cooked cereal; mashed potatoes (without skin); pureed dry cereal; rice or pasta.
- **Vegetables:** Vegetable juice; pureed soft-cooked vegetables.
- **Fruits:** Pureed fruit; mashed banana.
- **Others:** No-sugar-added/”lite”/light frozen yogurt and ice cream; sugar-free/no-sugar-added pudding and custard (without nuts).

**Tips for success**

Puree foods using a blender or food processor. Add a small amount of liquid to the food then blend to a smooth consistency. Strain pureed food to remove distinct pieces. If you have leftover puree, pour 1-ounce portions into each section of an ice cube tray and freeze it for later use. You may also use some types of baby food without pureeing it. Talk to your dietitian about what types you can eat.
**Sample menu** for a pureed diet (3 meals a day)

The following sample menu includes three small meals and at least 64 ounces of liquid. Each meal includes 2 to 3 medicine cups (4 to 6 tablespoons) of food.

Note: 1 medicine cup = 1 fluid ounce or 2 tablespoons.

7:30 to 8 a.m.  
1 medicine cup of pureed, cooked cereal with a small amount of skim or 1% milk to thin or moisten the cereal;  
1 soft, scrambled egg

8:30 to 11:30 a.m.  
8 ounces of a low-carbohydrate protein drink  
16 ounces water or other low-calorie, non-carbonated, caffeine-free liquid

Noon to 12:30 p.m.  
2 medicine cups of pureed lean meat  
1 medicine cup of pureed vegetables

1 to 5 p.m.  
8 ounces of skim or 1% milk  
8 ounces of vegetable juice  
8 ounces of water or other low-calorie, non-carbonated, caffeine-free liquid

5:30 to 6 p.m.  
2 medicine cups of pureed lean meat  
1 medicine cup of mashed potatoes

6:30 to 10 p.m.  
8 ounces of skim or 1% milk  
8 ounces of water or other low-calorie, non-carbonated, caffeine-free liquid

See “Regular diet” and Appendix B for more information about high-protein foods

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*The times listed above are an example of how your meals and beverages can be consumed. You do not need to follow these times exactly. This sample menu is provided to remind you to allow 30 minutes for meals and to restrict fluids 30 minutes before and after meals.*
Sample menu* for a pureed diet (5 meals a day)

The following sample menu includes five small meals and at least 64 ounces of liquid. Each meal includes 2 to 3 medicine cups (4 to 6 tablespoons) of food.

Note: 1 medicine cup = 1 fluid ounce or 2 tablespoons.

7:00 to 8 a.m. 8 ounces of water or other low-calorie, non-carbonated, caffeine-free liquid

8:30 to 9 a.m. 8 ounces of skim milk or 1% milk

10 to 10:30 a.m. 2 medicine cups of pureed cottage cheese
1 medicine cup of pureed fruit

11 a.m. to noon 8 ounces water or other low-calorie, non-carbonated, caffeine-free liquid

12:30 to 1 p.m. 2 medicine cups of pureed lean meat
1 medicine cup of pureed vegetables

1:30 to 2:30 p.m. 8 ounces of skim or 1% milk

3 to 3:30 p.m. 2 to 3 medicine cups of sugar-free/no-sugar-added pudding or custard

4 to 5 p.m. 8 ounces of vegetable juice

5:30 to 6 p.m. 2 medicine cups of pureed lean meat
1 medicine cup of mashed potatoes

6:30 to 7:30 p.m. 8 ounces of skim or 1% milk with no-sugar-added instant breakfast drink mix

8 to 8:30 p.m. 2 to 3 medicine cups of no-sugar-added pureed fruit

9 to 10 p.m. 8 ounces of water or other low-calorie, non-carbonated, caffeine-free liquid

10 p.m. to 11 p.m. 8 ounces of water or other low-calorie, non-carbonated, caffeine-free liquid

See “Regular diet” and Appendix B for more information about high-protein foods.

* The times listed above are an example of how your meals and beverages can be consumed. You do not need to follow these times exactly.
Diet Progression: Soft Foods (Days 17-23)

The fourth step in your diet progression is a soft-food diet. This soft-food diet includes foods that are very small, tender, moist, and easy-to-chew. You need to chew these foods to the consistency of smooth paste, with no distinct pieces. Choose foods low in fat and added sugar.

**Length of time:** 7 days (days 17 through 23)

**Amounts allowed:** 3 to 4 small meals per day. You must also continue to drink at least 64 ounces per day.

**Recommended foods for the soft diet**
- **Soup:** Broth; bouillon; low-fat cream soup.
- **Dairy:** Yogurt (no-sugar added; light or “lite” versions only).
- **Meat and meat substitutes:** Finely diced lean meat or poultry; fish; eggs; cottage cheese; cheese.
- **Starch:** Cooked or dry cereal; potatoes without skin; rice; pasta; toast; crackers.
- **Vegetables:** Soft-cooked vegetables; vegetable juice. Note: Vegetables with hulls or tough skins, such as peas and corn, are not soft foods.
- **Fruits:** No-sugar-added, cooked or canned fruit without seeds or skins; bananas; soft melon; citrus without membranes.

**Recommended liquids**
Drink at least 64 ounces of the recommended liquids per day. Two to three cups per day should be skim or 1% milk. Water and the following other options are recommended too:
- Bouillon.
- Broth.
- Decaffeinated coffee.
- Decaffeinated tea.
- Sugar-free gelatin or Popsicles™.
- Sugar-free, non-carbonated, caffeine-free beverages.

**Tips for success**
- Chew your foods very well.
- Sip liquids slowly between meals, not with meals.
Sample menu* for a soft diet

The following sample menu includes 3 to 4 small meals and at least 64 ounces of liquid. Each meal includes ½ to ¾ cup of food at each meal.

6:30 to 7:00 a.m. 8 ounces of water or low-calorie, non-carbonated, caffeine-free liquid

Meal:
7:30 to 8:00 a.m. ½ cup cooked cereal with a small amount of skim or 1% milk to thin or moisten the cereal and 1 soft, scrambled egg
8:30 to 9:00 a.m. 8 ounces of skim milk or 1% milk or high-protein, low-sugar drink
9:30 to 10:30 a.m. 8 ounces of water or low-calorie, non-carbonated, caffeine-free liquid

11:00 a.m. to noon 8 ounces of water or low-calorie, non-carbonated, caffeine-free liquid

Meal:
12:30 to 1 p.m. 2 ounces soft lean meat, ¼ cup of soft vegetables and 1 slice of toast
1:30 to 2:30 p.m. 8 ounces of skim milk or 1% milk or high-protein, low-sugar drink
3:00 to 3:30 p.m. 8 ounces of water or low-calorie, non-carbonated, caffeine-free liquid
4:00 to 5:00 p.m. ½ cup unsweetened applesauce or soft fruit (no sugar added)

Meal:
5:30 to 6:00 p.m. 2 ounces soft lean meat, ¼ cup soft vegetable, and ¼ cup of mashed potatoes
6:30 to 7:30 p.m. 8 to 12 ounces of high-protein, low-sugar drink
9:00 to 10:00 p.m. 8 ounces of water or low-calorie, non-carbonated, caffeine-free liquid

See “Regular diet” for a list of high-protein food options.

Tips for success

• Be sure to allow 30 minutes to eat each meal.
• Stop eating when you feel full.
• Do not drink fluids within 30 minutes before or after meals.
• Prepare your food before you eat it. Meat must be ground; fish should be flaked; other foods must be chopped or mashed.

* The times listed above are an example of how your meals and beverages can be consumed. You do not need to follow these times exactly.
Diet Progression: Regular Diet (Day 24+)

The fifth and final step in your diet is eating a regular diet. This means you can eat foods that have different consistencies, including food with firm texture.

It is also important to maintain a nutritionally balanced, low-fat, low-sugar diet. A nutritionally balanced diet includes a variety of foods at each meal, including fruit, vegetables, lean proteins, and whole grains. This is the diet you will follow as long as you have the intragastric balloon. Your dietitian can help you develop this plan.

Length of time: Day 24 and every day after that

Amounts allowed: Three meals per day, 1 to 1 1/2 cups of food per meal. You must also continue to drink at least 64 ounces per day.

The number of meals you eat per day and the amounts you eat will depend on how your body handles the regular diet. Talk to your dietitian about this.

Recommended protein-rich foods and liquids

- Beans, peas, lentils.
- Cheese, low fat.
- Cottage cheese, low fat.
- Dry milk powder*.
- Eggs.
- No-sugar-added/“lite”/light yogurt.
- No-sugar-added, high-protein beverages.
- No-sugar-added soy milk.
- Poultry without the skin, fish and other lean meats.
- Skim or 1% milk.

Tips for success

- You must always chew foods to a soft consistency before you swallow. This is especially true for meats and high-fiber foods.
- Include protein-rich foods at every meal; eat them before you eat the rest of your meal. Protein is important for maintaining and repairing your body. Aim for 60 to 80 grams of protein per day.
- Choose foods and liquids low in fat and sugar.
- Keep a food diary to track your food and fluid intake.
- Make mealtimes a focus. Allow at least 30 minutes to eat each meal.
- Talk to your dietitian about how many calories you should consume per day.
- See Appendix B for information about the protein content in some foods.

* Dry milk powder can be added to milk products to increase protein. Two tablespoons of powdered milk can be added to 8 fluid ounces of milk. Dry milk powder can also be added to casseroles, mashed potatoes, meat loaf, cereal, soup, and pudding.
Avoid foods and liquids high in fat and sugar
Examples include:

- **Beverages:** Whole or 2% milk; sweetened milk drinks; sweetened beverages such as fruit drinks, soft drinks and drink mixes; alcoholic beverages.
- **Meat and meat substitutes:** Fried meat, poultry or fish; high-fat luncheon meats; sausages; hot dogs; bacon; cheese made from whole milk.
- **Starches:** Sweet rolls; donuts; chips; croissants; biscuits; high-fat crackers; sweetened, ready-to-eat cereals; muffins.
- **Fruits:** Sweetened fruits that have added sugar or are packed in syrup.
- **Vegetables:** Vegetables with cream, butter, margarine, oil or cheese.
- **Fats and oils**: Oil; lard; shortening; butter; margarine; gravy; salad dressings; mayonnaise; dips; cream cheese; olives; nuts; avocados; peanut butter.
- **Desserts and sweets:** Pies; pastries; cakes; bars; cookies; candies; sweetened yogurts; ice creams; sherbets; puddings; custards; honey; syrups; jellies and jams; chocolate.

**If you plan to use a high-protein supplement**

If you plan to use a high-protein supplement, read the label carefully. Usually, high-protein supplements provide about 15 to 20 grams of protein per serving, and they have very little sugar, if any. Ask your dietitian if you need extra protein. Also ask for more information about how to choose high-protein supplements.

** You may have fats and oils in limited amounts. Talk to your dietitian about this.  **
How to Be Successful With Your New Diet

How you eat and drink after a balloon is placed directly 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 taken with meals can make you feel full and uncomfortable. If you get full from the liquid, you may not be able to eat the food you need.

Slowly sip liquids after a meal as directed. In addition to meeting your hydration needs, liquids will help rinse the balloon and could prevent unpleasant burps caused by foods sticking to the balloon.

- 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, even pureed, consistency before swallowing. 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. And they usually do not allow adults to order child-sized portions.

Ask your dietitian for a restaurant dining card. This card, signed by your health care provider, tells restaurant staff that you need to order small portions. Show the card to your server and ask that you be allowed to order a smaller portion. The restaurants may or may not honor the card.

* See “Diet Progression” for important information about which drinks to consume on the liquid diet.
Take your vitamins and supplements

Talk to a member of your care team about the specific vitamin and mineral supplements you need. (See below.)

For the first 23 days after your procedure:

• Consume enough calcium to meet your needs until you move into the regular diet. For most people, this is 23 days. You will get some of the calcium you need from liquids. However, you may not get all of it that way. Talk to your dietitian or health care provider about taking a calcium supplement.

• Do not take any vitamin and mineral supplements in whole-tablet form. Take them in liquid, chewable or powder form.

Every day while you have the balloon in:

• Take a multivitamin/ multimineral supplement. You may not need to take a supplement after the balloon is out.

Notes
Common Problems After the Procedure

Pain or discomfort

The following foods may cause pain or discomfort for some people:

- Breads
- Coconut
- Dried fruits
- Fibrous vegetables (dried beans, peas, celery, corn, cabbage, broccoli, greens, string beans)
- Fried foods
- Highly seasoned and spicy foods
- Meat with gristle; meat that is tough
- Mushrooms
- Nuts, granola, popcorn
- Orange and grapefruit membranes
- Pickles
- Raw vegetables
- Seeds, hulls and skins

Nausea and vomiting

The following may cause nausea and vomiting for some people:

- Moving too quickly through the diet progression.
- Drinking with meals or drinking too close to meal times.
- Eating too fast or too much.
- Not chewing thoroughly.

Heartburn symptoms

The following may cause heartburn for some people:

- Lying down shortly after eating.
- Drinking strong coffee or tea.

Bad breath

Food debris that may stick to the balloon can cause bad breath. To help avoid this, be sure to drink liquids as directed throughout the day.

Gas or bloating

The following may cause gas or bloating for some people:

- Swallowing air. This often happens when you drink using a straw and chew gum.
- Drinking carbonated beverages, like soda.

To reduce your risk for gas or bloating, eat slowly and chew your food very well before swallowing it.
To help avoid pain and other problems related to food

- Follow the diet progression carefully.
- Chew your food completely before swallowing.
- Try new foods one at a time.
- If a food causes discomfort, don’t eat it. As time passes, you may be able to eat this food.

To help avoid nausea, vomiting and diarrhea

- Choose foods and liquids low in fat and sugar.
- Eat small, balanced meals often.
- Drink liquids between meals.
- Eat and drink slowly.

If you continue to have pain, discomfort, nausea, or vomiting, contact a member of your health care team right away.

Dehydration

You have a greater risk of becoming dehydrated after this procedure. Signs of dehydration include:

- Dark-colored, deep-yellow urine (called “concentrated urine”).
- Constipation.
- Dizziness.
- Dry mouth.
- Fever.
- Nausea.
- Thirst.

To avoid dehydration, **every day** drink at least 64 ounces (8 cups) of liquid between meals. Sip slowly. See “Diet Progression” for more information. If these symptoms continue, contact a member of your health care team.
**Constipation**

Constipation may happen if you:
- Don’t get enough fiber or fluid in your diet.
- Don’t eat and drink on a consistent schedule day to day.
- Don’t get a lot of physical activity.
- Take certain medications.

To help avoid constipation:
- Eat well-balanced meals.
- Eat on a regular schedule.
- Slowly add fiber as directed by your health care provider.
- Drink enough liquids daily (at least 64 ounces).
- Increase your physical activity.

Prune juice may be helpful as a mild laxative. Talk to your health care provider about that. Ask for other suggestions if needed. Your health care provider may suggest commercial laxatives, fiber supplements or stool softeners.

If you continue to have constipation after following these guidelines, contact a member of your health care team.

**Weight gain or inability to continue to lose weight**

If you gain weight or you stop losing weight, contact your dietitian or a member of your care team.
Learning About Your EWL

There are many ways to measure success after a weight-loss procedure. One way is called the percent of excess weight loss (EWL). This percentage is how much of your extra weight you lost.

Many people lose about 25 percent of their excess body weight after this procedure.

How to learn your EWL percentage

1. Start with the Body Mass Index you had before the procedure. (See “Learning About Your BMI.”)
2. Subtract the BMI you have after your procedure. The answer you get is “A.”
3. Take the BMI you had before the procedure and subtract 25. This answer is “B.”
4. Divide A by B.

An example:
Height: 5’5” (65 inches)

Pre-procedure weight: 192 lbs
Pre-procedure BMI: 32
Post-procedure weight: 177 lbs
Post-procedure BMI: 29.5
Excess weight loss: 35.7%

To figure out your excess weight loss:
32 – 29.5 = 2.5 (A)
32 – 25 = 7 (B)

A divided by B is 2.5 divided by 7. In this example, the excess weight loss is 35.7 percent.
Reaching Your Goals

It often takes a long time to gain weight. It will take time and a lot of discipline to help you lose weight and maintain the weight loss. 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. Your recovery will be different than other people you meet who have an intragastric balloon. This is true for healing time, food sensitivities, weight-loss goals, and soon.

Notes
Appendix A:
Sugar-Free and No-Sugar-Added Labeling

Throughout this material, certain food items are labeled “sugar-free” and others are labeled “no-sugar-added.” These terms do not mean the same thing.

• “Sugar-free” means the food or beverage has less than 0.5 grams of sugar per serving. See the food label for serving size. A sugar-free food or beverage has no ingredient that is sugar or that is understood by most people to have sugar in it naturally. For example, green beans are a sugar-free food.

• “No-sugar-added,” “without added sugar” and “unsweetened” mean that no one added sugar, or an ingredient that has sugar in it, to that food or beverage when they were getting it ready to go to the store. (This stage is called “processing the food or beverage.”) The item may have natural sugar in it.

For example, an orange has natural sugar, but no sugar is added to it before it is taken to the grocery store or fruit stand. Milk has 12 grams of sugar, but that is a natural sugar, called lactose.
Appendix B: Protein Content of Certain Foods and Beverages

Your protein goal: __________ grams per day

<table>
<thead>
<tr>
<th>Protein source</th>
<th>Serving size</th>
<th>Protein (in grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby food, meat</td>
<td>1 fl. oz.</td>
<td>3</td>
</tr>
<tr>
<td>Beans, peas, lentils (cooked)</td>
<td>¼ cup</td>
<td>4</td>
</tr>
<tr>
<td>Cheese (shredded)</td>
<td>2 T.</td>
<td>4</td>
</tr>
<tr>
<td>Cottage cheese</td>
<td>2 T.</td>
<td>4</td>
</tr>
<tr>
<td>Egg (large)</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Egg substitute</td>
<td>¼ cup</td>
<td>6</td>
</tr>
<tr>
<td>Instant breakfast (no sugar added)</td>
<td>1 packet</td>
<td>4</td>
</tr>
<tr>
<td>Lean meat (ground or chopped)</td>
<td>1 oz.</td>
<td>7</td>
</tr>
<tr>
<td>Meat (pureed with small amount of liquid to moisten)</td>
<td>1 fl. oz.</td>
<td>4</td>
</tr>
<tr>
<td>Non-fat dry milk powder</td>
<td>2 T.</td>
<td>3</td>
</tr>
<tr>
<td>Skim or 1% milk</td>
<td>8 fl. oz.</td>
<td>8</td>
</tr>
<tr>
<td>Soy milk (no sugar added)</td>
<td>8 fl. oz.</td>
<td>5-8</td>
</tr>
<tr>
<td>Vegetable or soy protein “crumbles”</td>
<td>½ cup</td>
<td>11</td>
</tr>
<tr>
<td>Yogurt (no sugar added, “lite” or light)</td>
<td>6 fl. oz.</td>
<td>5-6</td>
</tr>
<tr>
<td>Yogurt, Greek (no sugar added, “lite” or light)</td>
<td>5-6 oz.</td>
<td>12</td>
</tr>
</tbody>
</table>

T. = Tablespoon / oz. = ounce / fl. oz. = fluid ounce

The amount of grams listed for each food is approximate. Read the food label for specific protein content.
Your Health Care Team

Your Mayo Clinic number:

Program coordinator & phone number:

Endocrinology health care provider & phone number:

Dietitian & phone number:

Psychology health care provider & phone number:

Gastroenterology or endoscopy health care provider & phone number:

Name & phone number of the secretary who supports your Gastroenterology or Endoscopy health care provider:

Your medical insurance company’s name & phone number:

<table>
<thead>
<tr>
<th>Important phone numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Coordinator fax number .................................................. 507-284-0728</td>
</tr>
<tr>
<td>Mayo Clinic (main switchboard in Rochester) .................................. 507-284-2511</td>
</tr>
<tr>
<td>Mayo Clinic Patient Account and Business Services .......................... 507-284-3980</td>
</tr>
<tr>
<td>Mayo Clinic Referring Physician Service ......................................... 800-533-1564</td>
</tr>
<tr>
<td>Psychology Appointment Scheduling .............................................. 507-266-5100</td>
</tr>
<tr>
<td>Endocrinology Appointment Scheduling ......................................... 507-266-5249</td>
</tr>
<tr>
<td>Dietetics Appointment Scheduling ................................................. 507-284-3315</td>
</tr>
</tbody>
</table>

This material is for your education and information only. This content does not replace medical advice, diagnosis or treatment. New medical research may change this information. If you have questions about a medical condition, always talk with your health care provider.