



Memorial Sloan Kettering  
Cancer Center

PATIENT & CAREGIVER EDUCATION

# About Your Whipple Procedure

This guide will help you get ready for your Whipple procedure at MSK. It will also help you know what to expect as you recover.

Use this guide as a source of information in the days leading up to your surgery. Bring it with you on the day of your surgery. You and your care team will use it as you learn more about your recovery.

## Your care team

Doctor: \_\_\_\_\_

Nurse: \_\_\_\_\_

Phone number: \_\_\_\_\_

Fax number: \_\_\_\_\_

## Your caregiver

Your caregiver will learn about your surgery with you. They'll also help you care for yourself while you're healing after surgery. Write their name below.

Caregiver: \_\_\_\_\_



Visit [www.msk.org/pe/whipple-procedure](http://www.msk.org/pe/whipple-procedure) to view this guide online.

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# About your Whipple procedure

The Whipple procedure is done to remove a tumor in the head of your pancreas, your ampulla, or the first part of your duodenum. These organs are located in the back of your abdomen (belly) behind your stomach and just above your small intestine (see Figure 1).

## About your pancreas and surrounding organs

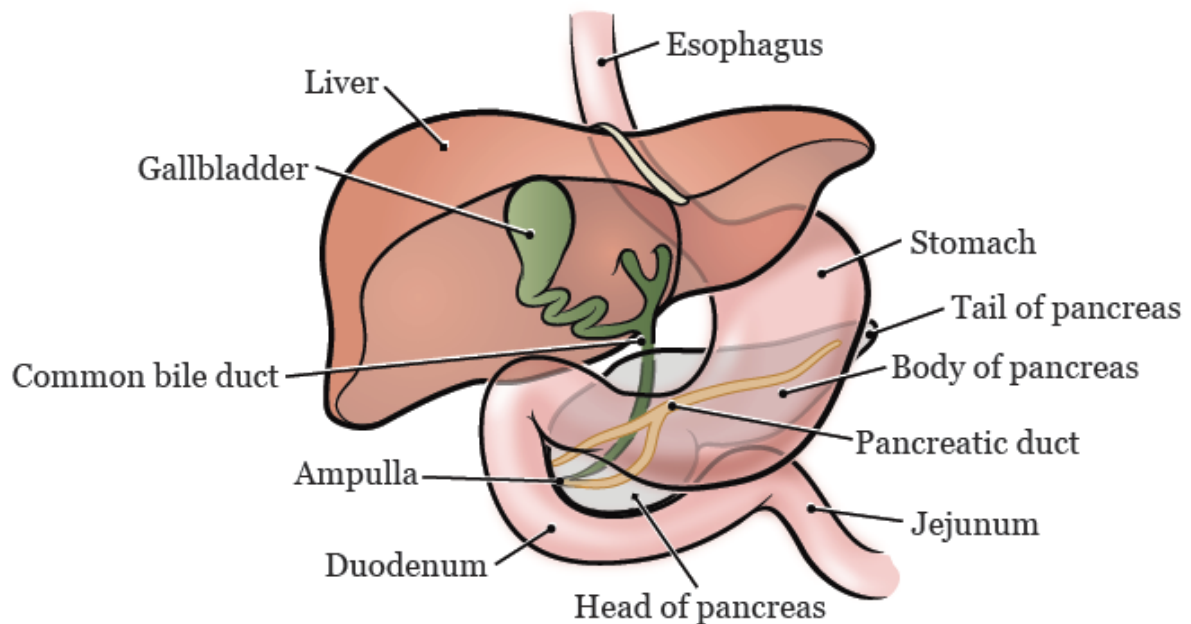


Figure 1. Your pancreas and surrounding organs

- Your **pancreas** makes enzymes that help digest the food you eat, including fats. It also makes insulin and glucagon, which are hormones that help regulate your blood sugar levels. Your pancreas has 3 parts: the tail, the body, and the head. The head of your pancreas is attached to your duodenum.

- Your **gallbladder** stores bile. Bile is a liquid that's made in your liver that helps digest fats. When you eat food, your gallbladder sends stored bile to your duodenum to help with digestion.
- Your **common bile duct** is a small tube that carries bile from your liver to your gallbladder to be stored, then from your gallbladder to your duodenum when you eat.
- Your **ampulla** (also called the ampulla of Vater) is a small sac where your common bile duct and your pancreatic duct meet. It's located outside your duodenum, near the head of your pancreas.
- Your **duodenum** is the first part of your small intestine. It's directly attached to your stomach.
- Your **jejunum** is the second part of your small intestine.

Even though part of your pancreas will be removed during your surgery, there's usually enough of it left after your surgery to make hormones (insulin and glucagon) and digestive enzymes.

- If your pancreas doesn't make enough digestive enzymes after your surgery, you may have diarrhea. If this happens, you may need to take enzyme pills when you eat.
- If your pancreas doesn't make enough insulin after your surgery, you may have high blood sugar. This is rare. If you do have high blood sugar after your surgery, your healthcare team will help you.

## About the Whipple procedure

The Whipple procedure is done using one large incision (surgical cut) in your abdomen. Sometimes, before making the large incision, your surgeon will make several small incisions and put a small video camera into your abdomen. They will use the camera to look at your organs to see if the

cancer has spread outside of your pancreas. This is called a diagnostic laparoscopy.

If the cancer has spread, your surgeon may decide not to continue with your surgery. If the cancer hasn't spread, your surgeon will make a large incision and continue with the Whipple procedure to try to remove the tumor.

During your surgery, your surgeon will remove the head of your pancreas, your duodenum, the end of your common bile duct closest to your duodenum, and your gallbladder. Sometimes, part of your stomach must also be removed.

After these organs are removed, your surgeon will connect the rest of your common bile duct and your remaining pancreas to your jejunum (see Figure 2). This is so the pancreatic enzymes and bile will flow into your small intestine, like they did before your surgery.

Your surgery will take about 4 hours.

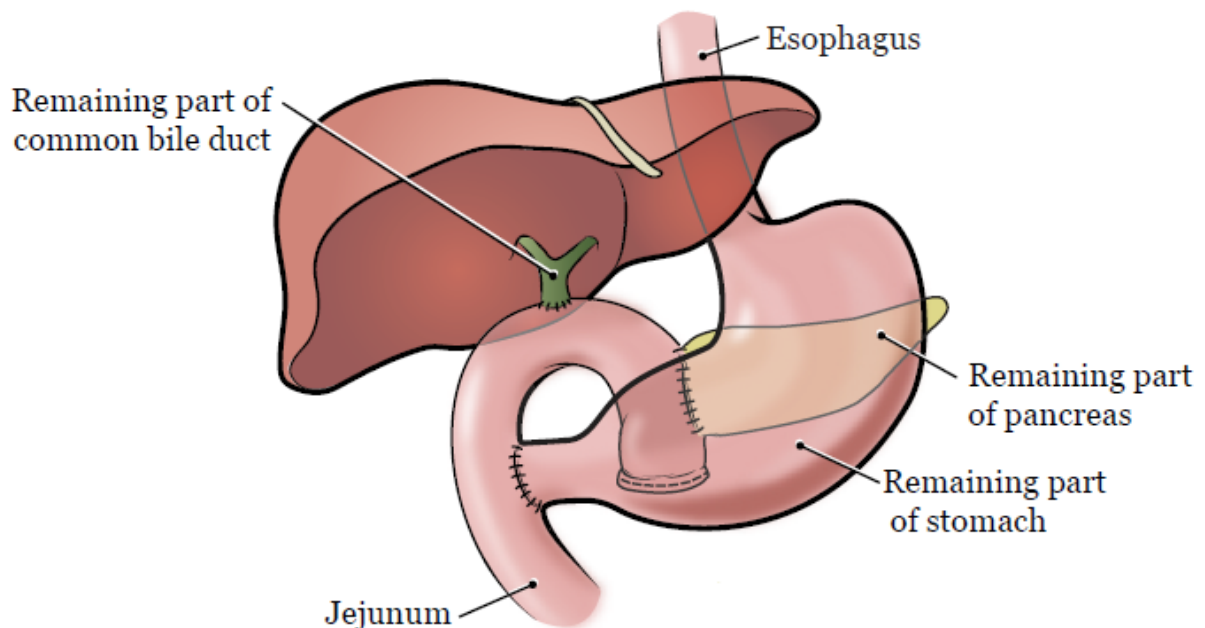


Figure 2. Your pancreas and surrounding organs after surgery

Notes \_\_\_\_\_

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# Before your Whipple procedure

This section will help you get ready for your surgery. Read it when your surgery is scheduled. Refer to it as your surgery gets closer. It has important information about what to do to get ready.



As you read this section, write down questions to ask your healthcare provider. You can use the space below.

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# Getting ready for your surgery

You and your care team will work together to get ready for your surgery. Help us keep you safe by telling us if any of these things apply to you, even if you're not sure.

- I take an anticoagulant (blood thinner), such as:
  - Aspirin
  - Heparin
  - Warfarin (Jantoven®, Coumadin®)
  - Clopidogrel (Plavix®)
  - Enoxaparin (Lovenox®)
  - Dabigatran (Pradaxa®)
  - Apixaban (Eliquis®)
  - Rivaroxaban (Xarelto®)
- I take an SGLT2 inhibitor, such as:
  - Canagliflozin (Invokana®)
  - Dapagliflozin (Farxiga®)
  - Empagliflozin (Jardiance®)
  - Ertugliflozin (Steglatro®)
- I take prescription medicine(s), including patches and creams. A prescription medicine is one you can only get with a prescription from your healthcare provider.
- I take over-the-counter medicine(s), including patches and creams. An over-the-counter medicine is one you can buy without a prescription.
- I take dietary supplements, such as herbs, vitamins, minerals, or natural or home remedies.

These are examples of medicines. There are others.

Be sure your healthcare provider knows all the medicines you're taking.



- I have a pacemaker, automatic implantable cardioverter-defibrillator (AICD), or other heart device.
- I have sleep apnea.
- I have had a problem with anesthesia (A-nes-THEE-zhuh) in the past. Anesthesia is medicine to make you sleep during a surgery or procedure.
- I'm allergic to certain medicines or materials, including latex.
- I'm not willing to receive a blood transfusion.
- I drink alcohol.
- I smoke or use an electronic smoking device, such as a vape pen or e-cigarette.
- I use recreational drugs, such as marijuana.

## About drinking alcohol

It's important to talk with your healthcare providers about how much alcohol you drink. This will help us plan your care.

If you drink alcohol regularly, you may be at risk for problems during and after your surgery. These include bleeding, infections, heart problems, and a longer hospital stay.

If you drink alcohol regularly and stop suddenly, it can cause seizures, delirium, and death. If we know you're at risk for these problems, we can prescribe medicine to help prevent them.

Here are things you can do before your surgery to keep from having problems.

- Be honest with your healthcare providers about how much alcohol you drink.

- Try to stop drinking alcohol once your surgery is planned. Tell your healthcare provider right away if you:
  - Get a headache.
  - Feel nauseous (like you're going to throw up).
  - Feel more anxious (nervous or worried) than usual.
  - Cannot sleep.

These are early signs of alcohol withdrawal and can be treated.

- Tell your healthcare provider if you cannot stop drinking.
- Ask your healthcare provider questions about drinking and surgery. All your medical information will be kept private, as always.

## **About smoking**

If you smoke, you can have breathing problems when you have surgery. Stopping for even a few days before surgery can help.

Your healthcare provider will refer you to our Tobacco Treatment Program if you smoke. You can also reach the program by calling 212-610-0507 or visit [www.msk.org/tobacco](http://www.msk.org/tobacco) to learn more.

## **About sleep apnea**

Sleep apnea is a common breathing problem. If you have sleep apnea, you stop breathing for short lengths of time while you're asleep. The most common type is obstructive sleep apnea (OSA). With OSA, your airway becomes fully blocked during sleep.

OSA can cause serious problems during and after surgery. Tell us if you have or think you might have sleep apnea. If you use a breathing device, such as a CPAP machine, bring it on the day of your surgery.

## Using MyMSK

MyMSK ([my.mskcc.org](http://my.mskcc.org)) is your MSK patient portal. You can use it to send and read messages from your care team, view your test results, see your appointment dates and times, and more. You can also invite your caregiver to make their own account so they can see information about your care.

If you do not have a MyMSK account, you can sign up at [my.mskcc.org](http://my.mskcc.org). You can get an enrollment ID by calling 646-227-2593 or your doctor's office.

Watch *How to Enroll in MyMSK: Memorial Sloan Kettering's Patient Portal* at [www.msk.org/pe/enroll\\_mymsk](http://www.msk.org/pe/enroll_mymsk) to learn more. You can also contact the MyMSK Help Desk by emailing [mymsk@mskcc.org](mailto:mymsk@mskcc.org) or calling 800-248-0593.

## About Enhanced Recovery After Surgery (ERAS)

ERAS is a program to help you get better faster after your surgery. It's important to do certain things before and after your surgery as part of the ERAS program.

Before your surgery, make sure you're ready by:

- **Reading this guide.** It will help you know what to expect before, during, and after your surgery. If you have questions, write them down. You can ask your healthcare provider at your next visit or call their office.
- **Exercising and following a healthy diet.** This will help get your body ready for your surgery.

After your surgery, help yourself recover more quickly by:

- **Reading your recovery pathway.** This is an educational resource your healthcare provider will give you. It has goals for your recovery. It will help you know what to do and expect each day.

- **Starting to move around as soon as you can.** The sooner you get out of bed and walk, the quicker you can get back to your usual activities.

## **Within 30 days of your surgery**

### **Presurgical testing (PST)**

You'll have a PST appointment before your surgery. You'll get a reminder from your surgeon's office with the appointment date, time, and location.

You can eat and take your usual medicine(s) the day of your PST appointment.

It's helpful to bring these things to your appointment:

- A list of all the medicines you're taking, including prescription and over-the-counter medicines, patches, and creams.
- Results of any medical tests done outside of MSK in the past year, if you have them. Examples include results from a cardiac stress test, echocardiogram, or carotid doppler study.
- The names and telephone numbers of your healthcare providers.

You'll meet with an advance practice provider (APP) during your PST appointment. They work closely with MSK's anesthesiology (A-nes-THEE-zee-AH-loh-jee) staff. These are healthcare providers with special training in using anesthesia during a surgery or procedure.

Your APP will review your medical and surgical history with you. You may have tests to plan your care, such as:

- An electrocardiogram (EKG) to check your heart rhythm.
- A chest X-ray.
- Blood tests.

Your APP may recommend you see other healthcare providers. They'll also talk with you about which medicine(s) to take the morning of your surgery.

## Identify your caregiver

Your caregiver has an important role in your care. Before your surgery, you and your caregiver will learn about your surgery from your healthcare providers. After your surgery, your caregiver will take you home when you're discharged. They'll also help you care for yourself at home.



### For caregivers

Caring for a person going through cancer treatment comes with many responsibilities. We offer resources and support to help you manage them.

Visit [www.msk.org/caregivers](http://www.msk.org/caregivers) or read *A Guide for Caregivers* to learn more. You can ask for a printed copy or find it at [www.msk.org/pe/guide\\_caregivers](http://www.msk.org/pe/guide_caregivers)

## Fill out a Health Care Proxy form

If you have not already filled out a Health Care Proxy form, we recommend you do now. If you already filled one out or have any other advance directives, bring them to your next appointment.

A health care proxy is a legal document. It says who will speak for you if you cannot communicate for yourself. This person is called your health care agent.

- To learn about health care proxies and other advance directives, read *Advance Care Planning*. You can ask for a printed copy or find it at [www.msk.org/pe/advance\\_care\\_planning](http://www.msk.org/pe/advance_care_planning)

- To learn about being a health care agent, read *How to Be a Health Care Agent*. You can find it at [www.msk.org/pe/health\\_care\\_agent](http://www.msk.org/pe/health_care_agent) or ask for a printed copy.

Talk with a member of your care team if you have questions about filling out a Health Care Proxy form.

## **Do breathing and coughing exercises**

Practice taking deep breaths and coughing before your surgery. Your healthcare provider will give you an incentive spirometer to help expand your lungs. To learn more, read *How to Use Your Incentive Spirometer*. You can find it in the “Educational resources” section of this guide.

## **Do physical activity**

Doing physical activity will help your body get into its best condition for your surgery. It will also make your recovery faster and easier.

Try to do physical activity every day. Any activity that makes your heart beat faster, such as walking, swimming, or biking, is a good choice. If it’s cold outside, use stairs in your home or go to a mall or shopping center.

## **Follow a healthy diet**

Follow a well-balanced, healthy diet before your surgery. If you need help with your diet, talk with your healthcare provider about meeting with a clinical dietitian nutritionist.

## 7 days before your surgery

### Follow your healthcare provider's instructions for taking aspirin

Aspirin can cause bleeding. If you take aspirin or a medicine that has aspirin, you may need to change your dose or stop taking it 7 days before your surgery. Follow your healthcare provider's instructions. **Do not stop taking aspirin unless they tell you to.**

To learn more, read *How To Check if a Medicine or Supplement Has Aspirin, Other NSAIDs, Vitamin E, or Fish Oil*. You can find it in the “Educational resources” section of this guide.

### Stop taking vitamin E, multivitamins, herbal remedies, and other dietary supplements

Vitamin E, multivitamins, herbal remedies, and other dietary supplements can cause bleeding. Stop taking them 7 days before your surgery. If your healthcare provider gives you other instructions, follow those instead.

To learn more, read *Herbal Remedies and Cancer Treatment*. You can find it in the “Educational resources” section of this guide.

## 2 days before your surgery

### Stop taking nonsteroidal anti-inflammatory drugs (NSAIDs)

NSAIDs, such as ibuprofen (Advil® and Motrin®) and naproxen (Aleve®), can cause bleeding. Stop taking them 2 days before your surgery. If your healthcare provider gives you other instructions, follow those instead.

To learn more, read *How To Check if a Medicine or Supplement Has Aspirin, Other NSAIDs, Vitamin E, or Fish Oil*. You can find it in the “Educational resources” section of this guide.

## 1 day before your surgery

### Note the time of your surgery

A staff member will call you after 2 p.m. the day before your surgery. If your surgery is scheduled for a Monday, they'll call you the Friday before. If you do not get a call by 7 p.m., call 212-639-5014.

The staff member will tell you what time to get to the hospital for your surgery. They'll also remind you where to go. This will be:

The Presurgical Center (PSC) at Memorial Hospital  
1275 York Ave. (between East 67th and East 68th streets)  
New York, NY 10065  
Take the B elevator to the 6th floor.



## **Shower with a 4% CHG solution antiseptic skin cleanser, such as Hibiclens®**

4% CHG solution is a skin cleanser that kills germs for 24 hours after you use it. Showering with it before your surgery will help lower your risk of infection after surgery. Your nurse will give you a bottle to use before your surgery.

Shower with a 4% CHG solution antiseptic skin cleanser before you go to bed the night before your surgery.

1. Wash your hair with your usual shampoo and conditioner. Rinse your head well.
2. Wash your face and genital (groin) area with your usual soap. Rinse your body well with warm water.
3. Open the 4% CHG solution bottle. Pour some into your hand or a clean washcloth.
4. Move away from the shower stream. Rub the 4% CHG solution gently over your body from your neck to your feet. Do not put it on your face or genital area.
5. Move back into the shower stream to rinse off the 4% CHG solution. Use warm water.
6. Dry yourself off with a clean towel.

Do not put on any lotion, cream, deodorant, makeup, powder, perfume, or cologne after your shower.

## Instructions for eating and drinking: 8 hours before your arrival time



- Stop eating 8 hours before your arrival time, if you have not already.
  - Your healthcare provider may tell you to stop eating earlier. If they do, follow their instructions.
- 8 hours before your arrival time, do not eat or drink anything except these clear liquids:
  - Water.
  - Soda.
  - Clear juices, such as lemonade, apple, and cranberry juices. Do not drink orange juice or juices with pulp.
  - Black coffee or tea (without any type of milk or creamer).
  - Sports drinks, such as Gatorade®.
  - ClearFast CF(Preop)® or Ensure® Pre-Surgery clear carbohydrate drink.
  - Gelatin, such as Jell-O®.

You can keep having these until 2 hours before your arrival time.

# The day of your surgery

Remember, starting 8 hours before your arrival time, do not eat or drink anything except the things listed earlier.

## Instructions for drinking: 2 hours before your arrival time



If your healthcare provider gave you a ClearFast CF(Preop) or Ensure Pre-Surgery clear carbohydrate drink, finish it 2 hours before your arrival time.



**Stop drinking 2 hours before your arrival time. This includes water.**

## Take your medicines as instructed

A member of your care team will tell you which medicines to take the morning of your surgery. Take only those medicines with a sip of water. Depending on what you usually take, this may be all, some, or none of your usual morning medicines.

## Shower with a 4% CHG solution antiseptic skin cleanser, such as Hibiclens

Shower with a 4% CHG solution antiseptic skin cleanser before you leave for the hospital. Use it the same way you did the night before.

Do not put on any lotion, cream, deodorant, makeup, powder, perfume, or cologne after your shower.

## Things to remember

- Wear something comfortable and loose-fitting.
- If you wear contact lenses, wear your glasses instead. Wearing contact lenses during surgery can damage your eyes.
- Do not wear any metal objects. Take off all jewelry, including body piercings. The tools used during your surgery can cause burns if they touch metal.
- Leave valuable items at home.
- If you're menstruating (have your monthly period), use a sanitary pad, not a tampon. We'll give you disposable underwear and a pad if you need them.

## What to bring

- Sneakers that lace up. You may have some swelling in your feet after surgery. Lace-up sneakers can fit over this swelling.
- Your breathing device for sleep apnea (such as your CPAP machine), if you have one.
- Your Health Care Proxy form and other advance directives, if you filled them out.
- Your cell phone and charger.
- Only the money you may want for small purchases, such as a newspaper.
- A case for your personal items, if you have any. Eyeglasses, hearing aids, dentures, prosthetic devices, wigs, and religious articles are examples of personal items.
- This guide. You'll use it to learn how to care for yourself after surgery.

## Where to park

MSK's parking garage is on East 66th Street between York and 1st avenues. If you have questions about prices, call 212-639-2338.

To get to the garage, turn onto East 66th Street from York Avenue. The garage is about a quarter of a block in from York Avenue. It's on the right (north) side of the street. There's a tunnel you can walk through that connects the garage to the hospital.

There are other parking garages on:

- East 69th Street between 1st and 2nd avenues.
- East 67th Street between York and 1st avenues.
- East 65th Street between 1st and 2nd avenues.

## Once you're in the hospital

When you get to the hospital, take the B elevator to the 6th floor. Check in at the desk in the PSC waiting room.

Many staff members will ask you to say and spell your name and birth date. This is for your safety. People with the same or a similar name may be having surgery on the same day.

We'll give you a hospital gown, robe, and nonskid socks to wear when it's time to change for surgery.



### For caregivers, family, and friends

Read *Information for Family and Friends for the Day of Surgery* to help you know what to expect on the day of your loved one's surgery. You can ask for a printed copy or find it at [www.msk.org/pe/info\\_family\\_friends](http://www.msk.org/pe/info_family_friends)

## **Meet with a nurse**

You'll meet with a nurse before surgery. Tell them the dose of any medicines you took after midnight (12 a.m.) and the time you took them. Make sure to include prescription and over-the-counter medicines, patches, and creams.

Your nurse may give you medication to help with pain after surgery. If they do, they will give you information about the medication before you take it.

Your nurse may also place an intravenous (IV) line in one of your veins, usually in your arm or hand. If your nurse does not place the IV, your anesthesiologist (A-nes-THEE-zee-AH-loh-jist) will do it in the operating room.

## **Meet with an anesthesiologist**

You'll also meet with an anesthesiologist before surgery. They will:

- Review your medical history with you.
- Ask if you've had any problems with anesthesia in the past, such as nausea or pain.
- Talk with you about your comfort and safety during your surgery.
- Talk with you about the kind of anesthesia you'll get.
- Answer your questions about your anesthesia.

Your doctor or anesthesiologist may also talk with you about placing an epidural catheter (thin, flexible tube) in your spine (back). An epidural catheter is another way to give you pain medicine after your surgery.

## **Get ready for surgery**

When it's time for your surgery, you'll take off your eyeglasses, hearing aids, dentures, prosthetic devices, wig, and religious articles.

You'll either walk into the operating room or a staff member will bring you there on a stretcher. A member of the operating room team will help you

onto the operating bed. They'll put compression boots on your lower legs. These gently inflate and deflate to help blood flow in your legs.

Once you're comfortable, your anesthesiologist will give you anesthesia through your IV line and you'll fall asleep. You'll also get fluids through your IV line during and after your surgery.

## **During your surgery**

After you're fully asleep, your care team will place a breathing tube through your mouth into your airway. It will help you breathe. They'll also place a urinary (Foley) catheter in your bladder. It will drain your urine (pee) during your surgery.

Your surgeon will close your incisions with staples or stitches once they finish your surgery. They may also place Steri-Strips™ (thin pieces of surgical tape) over your incisions. They'll cover your incisions with a bandage.

Your care team will usually take out your breathing tube while you're still in the operating room.





# After your Whipple procedure

This section will help you know what to expect after your surgery. You'll learn how to safely recover from your surgery both in the hospital and at home.



As you read this section, write down questions to ask your healthcare provider. You can use the space below.

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# In the Post-Anesthesia Care Unit (PACU)

You'll be in the PACU when you wake up after your surgery. A nurse will be keeping track of your temperature, pulse, blood pressure, and oxygen levels. You may get oxygen through a tube resting below your nose or a mask over your nose and mouth. You'll also have compression boots on your lower legs.

## Pain medicine

You'll get epidural or IV pain medicine while you're in the PACU.

- If you're getting epidural pain medicine, it will be put into your epidural space through your epidural catheter. Your epidural space is the space in your spine just outside your spinal cord.
- If you're getting IV pain medicine, it will be put into your bloodstream through your IV line.

You'll be able to control your pain medicine using a button called a patient-controlled analgesia (PCA) device. Read *Patient-Controlled Analgesia (PCA)* to learn more. You can find it at [www.msk.org/pe/pca](http://www.msk.org/pe/pca) or ask for a printed copy.

## Tubes and drains

You will have 1 or more of the tubes and drains below. Your doctor or nurse will talk with you about what to expect.

- You will have a Foley catheter in your urethra going into your bladder. This tube drains urine from your bladder so your care team can keep track of how much urine you're making. Your Foley catheter is usually removed 2 days after your surgery.
- You may have a nasogastric (NG) tube in your nose going into your stomach. This tube drains the fluid that naturally collects in your

stomach. It will help keep you from vomiting (throwing up). If you have a NG tube, it's usually removed the first day after surgery.

- You may have a drainage tube in your abdomen to drain fluid from the area. If you have this drainage tube, it's usually removed a few days after surgery, but you may still have it when you're discharged from the hospital. Read the "Caring for Your Tubes and Drains" section for more information

## Moving to your hospital room

You may stay in the PACU overnight. A staff member will bring you to your hospital room after your stay in the PACU.

## In your hospital room

The length of time you're in the hospital after your surgery depends on your recovery. Most people stay in the hospital for 6 days.

In your hospital room, you'll meet one of the nurses who will care for you during your stay. A nurse will help you out of bed and into your chair soon after you get there.

Your care team will teach you how to care for yourself while you're healing from your surgery. You can help yourself recover more quickly by:

- **Reading your recovery pathway.** We will give you a pathway with goals for your recovery if you do not already have one. It will help you know what to do and expect on each day during your recovery.
- **Starting to move around as soon as you can.** The sooner you get out of bed and walk, the quicker you can get back to your usual activities.

Read *Call! Don't Fall!* to learn what you can do to stay safe and keep from falling while you're in the hospital. You can find it in the "Educational resources" section of this guide.

## **Managing your pain**

You'll have some pain after your surgery. At first, you'll get your pain medicine through your epidural catheter or IV line. You'll be able to control your pain medicine using a PCA device. Once you can eat, you'll get oral pain medicine (pain medicine you swallow).

We will ask you about your pain often and give you medicine as needed. Tell one of your healthcare providers if your pain is not relieved. It's important to control your pain so you can use your incentive spirometer and move around. Controlling your pain can help you recover faster.

You'll get a prescription for pain medicine before you leave the hospital. Talk with your healthcare provider about possible side effects. Ask them when to start switching to over-the-counter pain medicine.

## **Moving around and walking**

Moving around and walking will help lower your risk for blood clots and pneumonia (lung infection). It will also help you start passing gas and having bowel movements (pooping) again. Your nurse, physical therapist, or occupational therapist will help you move around.

To learn more about how walking can help you recover, read *Frequently Asked Questions About Walking After Your Surgery*. You can find it at [www.msk.org/pe/walking\\_after\\_surgery](http://www.msk.org/pe/walking_after_surgery) or ask for a printed copy.

## Exercising your lungs

It's important to exercise your lungs so they expand fully. This helps prevent pneumonia.

- Use your incentive spirometer 10 times every hour you're awake. Read *How to Use Your Incentive Spirometer* to learn more. You can find it in the "Educational resources" section of this guide.
- Do coughing and deep breathing exercises. A member of your care team will teach you how.

## Eating and drinking

During your surgery, some of your digestive organs were moved or removed. After your surgery, your digestive system needs time to heal and adjust to the changes. You will slowly go back to drinking and eating. The table below is a guideline. Follow your healthcare team's instructions.

Days after surgery	Diet
The day of surgery	Do not eat or drink anything.
1 day after surgery	Start drinking sips of clear liquids.
2 days after surgery	Follow a clear liquid diet.
3 days after surgery	Start eating small amounts of solid foods.
4 days after surgery	Eat solid foods.
5 days after surgery	Eat solid foods.
6 days after surgery	Eat solid foods.

An inpatient clinical dietitian nutritionist will visit you in your hospital room to plan your diet with you before you're discharged.

To learn more about your diet and nutrition after your Whipple procedure, read *Eating After Your Gastric Bypass Surgery or Whipple Procedure*. You can find it in the “Educational resources” section of this guide.

## **Caring for your tubes and drains**

Your nurse will help you care for your tubes and drains while you’re in the hospital.

If you have a drainage tube in your abdomen, your healthcare team will keep track of how much fluid is draining from the tube. Once the amount is low enough, they will remove the tube. This usually happens a few days after surgery, but you may still have the drainage tube when you’re discharged from the hospital. Your healthcare team will tell you what to expect.

If you will still have the drainage tube when you’re discharged, your nurse will teach you how to care for it at home. They will also give you the supplies you will need. Your case manager may also arrange for a home care nurse to visit you at home to help you.

## **Showering**

You will be able to shower on the first day after your surgery. A member of your care team will help you.

## **Leaving the hospital**

By the time you’re ready to leave the hospital, your incision will have started to heal. Before you leave, look at your incision with one of your healthcare providers. Knowing what it looks like will help you notice any changes later.

On the day of your discharge, plan to leave the hospital around 11 a.m. Your healthcare provider will write your discharge order and prescriptions before

you leave. You'll also get written discharge instructions. One of your healthcare providers will review them with you before you leave.

If your ride isn't at the hospital when you're ready to leave, you may be able to wait in the Patient Transition Lounge. A member of your care team will give you more information.

## At home

Read *What You Can Do to Avoid Falling* to learn what you can do to keep from falling at home and during your appointments at MSK. You can find it in the "Educational resources" section of this guide.

Your first appointment after surgery will be 10 to 14 days after you leave the hospital. Your nurse will give you instructions on how to make this appointment, including the phone number to call.

## Filling out your Recovery Tracker

We want to know how you're feeling after you leave the hospital. To help us care for you, we'll send questions to your MyMSK account. We'll send them every day for 10 days after you're discharged. These questions are known as your Recovery Tracker.

Fill out your Recovery Tracker every day before midnight (12 a.m.). It only takes 2 to 3 minutes to complete. Your answers to these questions will help us understand how you're feeling and what you need.

Based on your answers, we may reach out to you for more information. Sometimes, we may ask you to call your surgeon's office. You can always contact your surgeon's office if you have any questions.

To learn more, read *About Your Recovery Tracker*. You can find it at [www.msk.org/pe/recovery\\_tracker](http://www.msk.org/pe/recovery_tracker) or ask for a printed copy.

## Managing your pain

People have pain or discomfort for different lengths of time. You may still have some pain when you go home and will probably be taking pain medicine. Some people have soreness, tightness, or muscle aches around their incision as they recover. This doesn't mean something is wrong.

Follow these guidelines to help manage your pain at home.

- Take your medicine(s) as directed and as needed.
- Call your healthcare provider if the medicine prescribed for you does not help your pain.
- Do not drive or drink alcohol while you're taking prescription pain medicine. Some prescription pain medicines can make you drowsy (very sleepy). Alcohol can make the drowsiness worse.
- You'll have less pain and need less pain medicine as your incision heals. An over-the-counter pain reliever will help with aches and discomfort. Acetaminophen (Tylenol®) and ibuprofen (Advil® or Motrin®) are examples of over-the-counter pain relievers.
  - Follow your healthcare provider's instructions for stopping your prescription pain medicine.
  - Do not take too much of any medicine. Follow the instructions on the label or from your healthcare provider.
  - Read the labels on all the medicines you're taking. This is very important if you're taking acetaminophen. Acetaminophen is an ingredient in many over-the-counter and prescription medicines. Taking too much can harm your liver. Do not take more than one medicine that has acetaminophen without talking with a member of your care team.



- Pain medicine should help you get back to your usual activities. Take enough to do your activities and exercises comfortably. You may have a little more pain as you start to be more active.
- Keep track of when you take your pain medicine. It works best 30 to 45 minutes after you take it. Taking it when you first have pain is better than waiting for the pain to get worse.

Some prescription pain medicines, such as opioids, may cause constipation. Constipation is when you poop less often than usual, have a harder time pooping, or both.

## Preventing and managing constipation

Talk with your healthcare provider about how to prevent and manage constipation. You can also follow these guidelines.

- Go to the bathroom at the same time every day. Your body will get used to going at that time. But if you feel like you need to go, don't put it off.
- Exercise, if you can. Walking is a great type of exercise that can help prevent and manage constipation.
- Drink around 8 (8-ounce) cups of liquids daily, if you can. Follow the instructions in *Eating After Your Gastric Bypass Surgery or Whipple Procedure*. You can find it in the "Educational Resources" section of this guide.

If you haven't had a bowel movement in 2 days, call your healthcare provider.

## Managing diarrhea

If your pancreas doesn't make enough enzymes to digest your food, you may have diarrhea. If this happens, contact your doctor's office. You may

need to take enzyme pills when you eat. Your doctor or nurse will give you more information.

## **Caring for your incision**

It's normal for the skin below your incision to feel numb. This happens because some of your nerves were cut during your surgery. The numbness will go away over time.

The staples in your incision will be removed during your first appointment after surgery. This is usually about 2 weeks after you're discharged. While the staples are in your incision, you may feel some tightness or a tugging feeling along your incision. This is normal. Doing gentle stretching can help.

If you go home with Steri-Strips on your incision, they will loosen and fall off by themselves. If they haven't fallen off within 10 days, you can take them off.

If the area around your incision is red, puffy, or if you have any drainage from your incision, contact your doctor's office.

## **Showering**

Shower every day. Taking a warm shower is relaxing and can help ease muscle aches. You will also clean your incision when you shower.

When you shower, use soap to gently wash your incision. After you shower, pat the area dry with a clean towel. Don't rub over your incision. Leave your incision uncovered, unless there's drainage.

Don't take tub baths until you discuss it with your doctor at your first appointment after your surgery.

## Eating and drinking

After your surgery, you may have a smaller appetite (desire to eat) or no appetite at all. You will probably feel full quickly after eating. These are expected and should get better over time.

If you find your appetite isn't good at first, try having meals that include your favorite foods and high-calorie foods. It's important to get enough calories and protein to promote healing keep from losing weight. You should think of food as being as important as your medications.

Follow the eating and drinking guidelines in *Eating After Your Gastric Bypass Surgery or Whipple Procedure*. You can find it in the "Educational resources" section of this guide. If you have any questions, you can reach a clinical dietitian nutritionist by calling 212-639-7312.

## Weight changes

Many people lose weight after their surgery. You may not get back to your pre-surgery weight for some time. Your goal should be to stay at your new weight. If you have questions or concerns about your weight, talk with a member of your healthcare team.

## Physical activity and exercise

When you leave the hospital, your incision will look like it's healed on the outside, but it won't be healed on the inside.

- Don't lift anything heavier than 5 pounds (2.3 kilograms) for at least 8 weeks after your surgery. Check with your doctor before you do any heavy lifting.
- Ask your doctor or nurse before starting strenuous exercises, such as jogging and tennis.

Doing aerobic exercise, such as walking and stair climbing, will help you gain strength and feel better. You can walk outside or indoors at your local mall or shopping center. Gradually increase the distance you walk. Climb stairs slowly, resting or stopping as needed. You can also keep doing your coughing and deep breathing exercises and using your incentive spirometer.

## **Managing fatigue**

Fatigue is having less energy or feeling more tired than usual. It's normal to feel fatigued after your surgery. This may last for 6 to 8 weeks after surgery, but it will get better slowly over time. Try to increase your activity level every day to help manage your fatigue. Get up, get dressed, and walk. You may need a nap during the day, but try to stay out of bed as much as possible so you will sleep at night.

It's important for you to go back to your usual activities after surgery. Spread them out over the course of the day. You can do light household tasks. Try washing dishes, preparing light meals, and other activities as you are able.

Your body is an excellent guide for telling you when you have done too much. When you increase your activity, monitor your body's reaction. You may find that you have more energy in the morning or the afternoon. Plan your activities for times of the day when you have more energy.

## **Driving**

While your incision is healing, you may not be able to twist your body as well as normal. This can make it hard for you to drive. You also shouldn't drive if you're taking pain medication that may make you drowsy. During your first appointment after surgery, your doctor will tell you if it's safe for you to start driving again.

You can ride in a car as a passenger at any time after you leave the hospital.

## **Going back to work**

Talk with your healthcare provider about your job. They'll tell you when it may be safe for you to start working again based on what you do. If you move around a lot or lift heavy objects, you may need to stay out a little longer. If you sit at a desk, you may be able to go back sooner.

## **Traveling**

If you're traveling a long distance, try to get up once an hour to walk around. This will help prevent blood clots. Remember to drink around 8 (8-ounce) cups of liquids every day, even when you're traveling.

## **Managing your feelings**

You may have new and upsetting feelings after a surgery for a serious illness. Many people say they felt weepy, sad, worried, nervous, irritable, or angry at one time or another. You may find that you cannot control some of these feelings. If this happens, it's a good idea to seek emotional support. Your healthcare provider can refer you to MSK's Counseling Center. You can also reach them by calling 646-888-0200.

The first step in coping is to talk about how you feel. Family and friends can help. We can also reassure, support, and guide you. It's always a good idea to let us know how you, your family, and your friends are feeling emotionally. Many resources are available to you and your family. We're here to help you and your family and friends handle the emotional aspects of your illness. We can help no matter if you're in the hospital or at home.

# When to call your healthcare provider



Call your healthcare provider if:

- You have a fever of 100.5 °F (38 °C) or higher.
- You have chills.
- You have shortness of breath.
- The skin around your incision is warmer than normal.
- The skin around your incision is getting more red.
- The area around your incision is starting to swell.
- Swelling around your incision is getting worse.
- You have pus-like (thick, yellowish, or foul-smelling) drainage from your incision.
- You have any sudden increase in pain or new pain.
- You have nausea and vomiting.
- You have diarrhea.
- You have constipation that isn't relieved within 2 days.
- You have any new or unexplained symptoms.
- You have any questions or concerns.

## Contact information

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call.

If you're not sure how to reach your healthcare provider, call 212-639-2000.

# Support services

This section has a list of support services. They may help you as you get ready for your surgery and recover after your surgery.



As you read this section, write down questions to ask your healthcare provider. You can use the space below.

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# **MSK support services**

## **Admitting Office**

212-639-7606

Call if you have questions about your hospital admission, such as asking for a private room.

## **Anesthesia**

212-639-6840

Call if you have questions about anesthesia.

## **Blood Donor Room**

212-639-7643

Call for information if you're interested in donating blood or platelets.

## **Bobst International Center**

888-675-7722

We welcome patients from around the world and offer many services to help. If you're an international patient, call for help arranging your care.

## **Counseling Center**

[www.msk.org/counseling](http://www.msk.org/counseling)

646-888-0200

Many people find that counseling helps them. Our Counseling Center offers counseling for individuals, couples, families, and groups. We can also prescribe medicine to help if you feel anxious or depressed. Ask a member of your care team for a referral or call the number above to make an appointment.

## **Food Pantry Program**

646-888-8055

We give food to people in need during their cancer treatment. Talk with a member of your care team or call the number above to learn more.



## **Integrative Medicine Service**

[www.msk.org/integrativemedicine](http://www.msk.org/integrativemedicine)

Our Integrative Medicine Service offers many services to complement (go along with) traditional medical care. For example, we offer music therapy, mind/body therapies, dance and movement therapy, yoga, and touch therapy. Call 646-449-1010 to make an appointment for these services.

You can also schedule a consultation with a healthcare provider in the Integrative Medicine Service. They'll work with you to make a plan for creating a healthy lifestyle and managing side effects. Call 646-608-8550 to make an appointment for a consultation.

## **MSK Library**

[library.mskcc.org](http://library.mskcc.org)

212-639-7439

You can visit our library website or call to talk with the library reference staff. They can help you find more information about a type of cancer. You can also visit the library's Patient and Health Care Consumer Education Guide at [libguides.mskcc.org/patienteducation](http://libguides.mskcc.org/patienteducation)

## **Nutrition Services**

[www.msk.org/nutrition](http://www.msk.org/nutrition)

212-639-7312

Our Nutrition Service offers nutritional counseling with one of our clinical dietitian nutritionists. Your clinical dietitian nutritionist will talk with you about your eating habits. They can also give advice on what to eat during and after treatment. Ask a member of your care team for a referral or call the number above to make an appointment.

## **Patient and Community Education**

[www.msk.org/pe](http://www.msk.org/pe)

Visit our patient and community education website to search for educational resources, videos, and online programs.

**Patient Billing**

646-227-3378

Call if you have questions about preauthorization with your insurance company. This is also called preapproval.

**Patient Representative Office**

212-639-7202

Call if you have questions about the Health Care Proxy form or concerns about your care.

**Perioperative Nurse Liaison**

212-639-5935

Call if you have questions about MSK releasing any information while you're having surgery.

**Private Duty Nurses and Companions**

917-862-6373

You can request private nurses or companions to care for you in the hospital and at home. Call to learn more.

**Rehabilitation Services**

[www.msk.org/rehabilitation](http://www.msk.org/rehabilitation)

Cancers and cancer treatments can make your body feel weak, stiff, or tight. Some can cause lymphedema (swelling). Our physiatrists (rehabilitation medicine doctors), occupational therapists (OTs), and physical therapists (PTs) can help you get back to your usual activities.

- **Rehabilitation medicine doctors** diagnose and treat problems that affect how you move and do activities. They can design and help coordinate your rehabilitation therapy program, either at MSK or somewhere closer to home. Call Rehabilitation Medicine (Physiatry) at 646-888-1929 to learn more.
- An **OT** can help if you're having trouble doing usual daily activities. For example, they can recommend tools to help make daily tasks easier. A

PT can teach you exercises to help build strength and flexibility. Call Rehabilitation Therapy at 646-888-1900 to learn more.

### **Resources for Life After Cancer (RLAC) Program**

646-888-8106

At MSK, care does not end after your treatment. The RLAC Program is for patients and their families who have finished treatment.

This program has many services. We offer seminars, workshops, support groups, and counseling on life after treatment. We can also help with insurance and employment issues.

### **Sexual Health Programs**

Cancer and cancer treatments can affect your sexual health, fertility, or both. MSK's sexual health programs can help you before, during, or after your treatment.

- **Our Female Sexual Medicine and Women's Health Program** can help with sexual health problems such as premature menopause or fertility issues. Ask a member of your MSK care team for a referral or call 646-888-5076 to learn more.
- **Our Male Sexual and Reproductive Medicine Program** can help with sexual health problems such as erectile dysfunction (ED). Ask a member of your care team for a referral or call 646-888-6024 to learn more.

### **Social Work**

[www.msk.org/socialwork](http://www.msk.org/socialwork)

212-639-7020

Social workers help patients, families, and friends deal with common issues for people who have cancer. They provide individual counseling and support groups throughout your treatment. They can help you communicate with children and other family members.

Our social workers can also help refer you to community agencies and programs. If you're having trouble paying your bills, they also have information about financial resources. Call the number above to learn more.

### **Spiritual Care**

212-639-5982

Our chaplains (spiritual counselors) are available to listen, help support family members, and pray. They can contact community clergy or faith groups, or simply be a comforting companion and a spiritual presence. Anyone can ask for spiritual support. You do not have to have a religious affiliation (connection to a religion).

MSK's interfaith chapel is located near Memorial Hospital's main lobby. It's open 24 hours a day. If you have an emergency, call 212-639-2000. Ask for the chaplain on call.

### **Tobacco Treatment Program**

[www.msk.org/tobacco](http://www.msk.org/tobacco)

212-610-0507

If you want to quit smoking, MSK has specialists who can help. Call to learn more.

### **Virtual Programs**

[www.msk.org/vp](http://www.msk.org/vp)

We offer online education and support for patients and caregivers. These are live sessions where you can talk or just listen. You can learn about your diagnosis, what to expect during treatment, and how to prepare for your cancer care.

Sessions are private, free, and led by experts. Visit our website to learn more about Virtual Programs or to register.

# External support services

There are many other services available to help you before, during, and after your cancer treatment. Some offer support groups and information. Others can help with transportation, lodging, and treatment costs.

Visit [www.msk.org/pe/external\\_support\\_services](http://www.msk.org/pe/external_support_services) for a list of these support services. You can also call 212-639-7020 to talk with an MSK social worker.

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# Educational resources

This section lists the educational resources mentioned in this guide. It also has copies of the resources that are most important for you to read. They will help you get ready for your surgery and recover after your surgery.



As you read these resources, write down questions to ask your healthcare provider. You can use the space below.

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These are the educational resources that were mentioned in this guide. You can find them online or ask a member of your care team for a printed copy.

- ***A Guide for Caregivers*** ([www.msk.org/pe/guide\\_caregivers](http://www.msk.org/pe/guide_caregivers))
- ***About Your Recovery Tracker*** ([www.msk.org/pe/recovery\\_tracker](http://www.msk.org/pe/recovery_tracker))
- ***Advance Care Planning*** ([www.msk.org/pe/advance\\_care\\_planning](http://www.msk.org/pe/advance_care_planning))
- ***Call! Don't Fall!*** ([www.msk.org/pe/call\\_dont\\_fall](http://www.msk.org/pe/call_dont_fall))
- ***Eating After Your Gastric Bypass Surgery or Whipple Procedure***  
([www.msk.org/pe/eating\\_gastric\\_bypass\\_whipple](http://www.msk.org/pe/eating_gastric_bypass_whipple))
- ***Frequently Asked Questions About Walking After Your Surgery***  
([www.msk.org/pe/walking\\_after\\_surgery](http://www.msk.org/pe/walking_after_surgery))
- ***Herbal Remedies and Cancer Treatment***  
([www.msk.org/pe/herbal\\_remedies](http://www.msk.org/pe/herbal_remedies))
- ***How to Be a Health Care Agent***  
([www.msk.org/pe/health\\_care\\_agent](http://www.msk.org/pe/health_care_agent))
- ***How To Check if a Medicine or Supplement Has Aspirin, Other NSAIDs, Vitamin E, or Fish Oil*** ([www.msk.org/pe/check-med-supplement](http://www.msk.org/pe/check-med-supplement))
- ***How to Enroll in MyMSK: Memorial Sloan Kettering's Patient Portal***  
([www.msk.org/pe/enroll\\_mymask](http://www.msk.org/pe/enroll_mymask))
- ***How to Use Your Incentive Spirometer***  
([www.msk.org/pe/incentive\\_spirometer](http://www.msk.org/pe/incentive_spirometer))
- ***Patient-Controlled Analgesia (PCA)*** ([www.msk.org/pe/pca](http://www.msk.org/pe/pca))
- ***What You Can Do to Avoid Falling*** ([www.msk.org/pe/avoid\\_falling](http://www.msk.org/pe/avoid_falling))





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PATIENT & CAREGIVER EDUCATION

# Call! Don't Fall!

This information describes what you can do to keep from falling and stay safe while you're in the hospital. Being in the hospital can make you weak. Follow these guidelines to avoid falling.

- Call for help every time you need to get out of bed or up from a chair.
- Don't go to the bathroom alone.
- Don't bend over. If you drop something, call for help.
- Don't lean on furniture that has wheels, such as your bedside table, over-bed table, or IV pole.
- Wear safe, supportive shoes. Examples include shoes with laces and slippers with nonskid soles. Don't wear shoes or slippers with an open back.
- Call for help right away if you see any spills on the floor.
- Use the grab bars in the bathroom and railings in the hallways.
- If you have glasses or hearing aid(s), wear them when you're awake.
- Let us know what you will need near you. Help us make sure we have:
  - Placed your call button where you can reach it
  - Placed items you may need (such as your phone, books, or glasses) where you can reach them
  - Turned on a night light before it gets dark
  - Raised the top bedrail to keep you safe
  - Removed any clutter from around your bedside and chairside



**Call!  
Don't Fall!**

For more resources, visit [www.mskcc.org/pe](http://www.mskcc.org/pe) to search our virtual library.

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Call! Don't Fall! - Last updated on December 19, 2017

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PATIENT & CAREGIVER EDUCATION

# Eating After Your Gastric Bypass Surgery or Whipple Procedure

This information describes the dietary (eating and drinking) guidelines you will need to follow after your gastric bypass (gastrojejunostomy) or Whipple procedure (pancreaticoduodenectomy). It also describes how to monitor your bowel movements for changes after your surgery.

Your clinical dietitian nutritionist will review this information with you before you leave the hospital. If you have any questions or concerns, or are losing weight after you leave the hospital, call 212-639-7071 to set up an appointment with your clinical dietitian nutritionist.

## Dietary Guidelines

After your surgery, the amount of food you can eat at once and the time it takes for food to leave your stomach may change. Because of this, you may need to change the way you eat.

Follow the guidelines below. You can also use the sample menus at the end of this resource to plan your meals.

### Eat smaller meals more often

After surgery, you may feel full more quickly when you eat.

If this happens to you, or if you have nausea or indigestion, try eating smaller meals more often. For example, try eating 6 half-size meals instead of 3 main meals each day. This will allow you to eat the same amount of food overall, but in smaller portions that will be easier to digest.

You may be able to eat larger portions as time passes.

## **Drink enough liquids**

Try to drink around 8 (8-ounce) glasses of liquids each day. This will help you keep from getting dehydrated.

Drink most of your liquids between meals, at least 1 hour before or after you eat. Drink only 4 ounces (½ cup) of liquids with each meal. This will help you have more space in your stomach for food.

## **Chew your food well**

Chew your food well to help your body digest your meals more quickly and easily.

## **Avoid foods that cause gas**

If you're having bloating or fullness, it may help to avoid foods and drinks that can cause gas. Examples include:

- Broccoli
- Cabbage
- Brussels sprouts
- Cauliflower
- Fruits that aren't ripe
- Carbonated drinks, such as sodas or seltzer water

Try avoiding these things for the first month after your surgery. If you're not having symptoms after that time, you can try adding them back to your diet one at a time to see if you can tolerate them.

## **Eat slowly**

Eat slowly to avoid feeling uncomfortable due to overeating. You will know when you're full.

## **Include protein in your diet**

After surgery, your body needs more protein to help you heal. Good protein sources include:

- Lean beef cuts
  - Eye round roast
  - Top round roast
  - Bottom round roasts
  - Steaks
  - Top sirloin steak
- Chicken or turkey with the skin removed
- Fish
- Low-fat dairy products
- Eggs

## **Start with low-fat foods**

Eat low-fat foods right after your surgery. You eat less fat by following the guidelines below.

- Trim any visible fat from meats.
- Bake or broil foods instead of frying them.
- Use only a pat of butter or margarine on toast.
- Avoid heavy gravies and cream sauces.
- Limit “regular” (not labelled low-fat) snack chips, croissants, doughnuts, and rich desserts like pound cake or cakes with frostings
- Stay away from processed meats like hot dogs, sausage, bacon, and bologna, unless they’re labelled “low-fat”.

You can gradually increase the amount of fat in your diet to an amount that you can tolerate. See the section below called “Monitor Your Bowel Movements for Changes” for more information.

# Monitor Your Bowel Movements for Changes

## Problems with fat absorption

Some people have problems absorbing fat after their surgery. This may cause weight loss or make it harder for your body to absorb some vitamins.

You may not be absorbing all the fats you're eating if you're having any of the following symptoms:

- Frequent bowel movements
- Bowel movements that float
- Bowel movements that are very light in color, frothy, greasy, or foul smelling

If you have any of these symptoms, ask your doctor if you need to take pancreatic enzyme medication. An example is pancrelipase (Zenpep®). You can take these medications with your meals to help with digestion.

## Lactose intolerance

Lactose intolerance is not being able to digest lactose. Lactose is a sugar found in dairy products. Some people become lactose intolerant after surgery. If you have gas, bloating, or diarrhea after you eat foods with lactose, you may have lactose intolerance.

Milk, ice cream, and soft cheeses (such as cottage cheese) have a lot of lactose. Hard cheeses like cheddar and Parmesan have lower amounts of lactose. Some people with mild lactose intolerance can tolerate these lower lactose foods.

There are also medications available that can help you digest lactose. One example is lactase (Lactaid®)

Sometimes, lactose intolerance after surgery will go away. You can try having dairy again in a few months to see if it has improved.

## Dumping syndrome

Dumping syndrome is when you have diarrhea (loose bowel movements) after

having large amounts of sweets, such as:

- Sugar, honey, and syrup
- Regular (not diet) soda and fruit juices
- Cakes, cookies, and candies

If you think you have dumping syndrome, limit or avoid sugary foods or drinks and try diluting juices with water.

If you have dumping syndrome, it's especially important to take steps to keep from getting dehydrated.

- Limit your intake of liquids to only 4 ounces during meals.
- Drink more liquids between meals, at least 1 hour before or after a meal.

## Sample Menus

The sample menus at the end of this resource have 6 small meals with 4 ounces of liquid at each meal and 8 ounces of liquid between meals. Soup also counts as a liquid.

The menus include solid foods. If you're on a mechanical soft (diced food) diet when you go home, ask your doctor when you can start eating solid foods again. For more information, read the resource *Eating Guide for Puréed and Mechanical Soft Diets* ([www.mskcc.org/pe/pureed\\_mechanical\\_soft\\_diets](http://www.mskcc.org/pe/pureed_mechanical_soft_diets)).

Many of the foods on the menus aren't sugar-free. Use sugar-free or "light" yogurt in place of regular yogurt, limit fruit juices, and dilute fruit juices with water if you:

- Have diabetes
- Have high blood sugar
- Are having dumping syndrome

Foods with an asterisk (\*) have lactose. If you're lactose-intolerant, try lactose-free milk (such as Lactaid) in place of regular milk. You can also take lactase

tablets or drops to help you digest dairy products.

Meal Time	Sample Menu 1	Sample Menu 2
Breakfast 7:30 AM	<ul style="list-style-type: none"> <li>• ¾ cup of corn flakes</li> <li>• ½ cup of milk*</li> <li>• ½ of a banana</li> </ul>	<ul style="list-style-type: none"> <li>• 1 scrambled egg</li> <li>• 1 slice of toast</li> <li>• 1 teaspoon of margarine</li> <li>• ½ cup of orange juice</li> </ul>
9:00 AM	<ul style="list-style-type: none"> <li>• ½ cup juice mixed with ½ cup water</li> </ul>	<ul style="list-style-type: none"> <li>• 1 cup of tomato juice</li> </ul>
Snack 10:00 AM	<ul style="list-style-type: none"> <li>• ½ cup of cottage cheese*</li> <li>• ½ cup of canned fruit</li> </ul>	<ul style="list-style-type: none"> <li>• 1 tablespoon of peanut butter</li> <li>• 3 graham crackers</li> <li>• ½ cup of milk*</li> </ul>
11:30 AM	<ul style="list-style-type: none"> <li>• 1 cup of whole milk*</li> </ul>	<ul style="list-style-type: none"> <li>• ½ cup juice mixed with ½ cup water</li> </ul>
Lunch 12:30 PM	<ul style="list-style-type: none"> <li>• ½ cup of chicken soup</li> <li>• ½ of a turkey and cheese sandwich with lettuce and tomato</li> <li>• 2 teaspoons of mayonnaise</li> </ul>	<ul style="list-style-type: none"> <li>• ½ of a roast beef sandwich with lettuce and tomato</li> <li>• 2 teaspoons of mayonnaise</li> <li>• ½ cup of milk*</li> </ul>
2:00 PM	<ul style="list-style-type: none"> <li>• 1 cup of tomato juice</li> </ul>	<ul style="list-style-type: none"> <li>• 1 cup of broth</li> </ul>
Snack 3:00 PM	<ul style="list-style-type: none"> <li>• Fruit yogurt*</li> <li>• ½ cup of cranberry juice</li> </ul>	<ul style="list-style-type: none"> <li>• ½ cup of tuna salad</li> <li>• 6 saltine crackers</li> <li>• ½ cup of pineapple juice</li> </ul>
4:30 PM	<ul style="list-style-type: none"> <li>• ½ cup juice mixed with ½ cup water</li> </ul>	<ul style="list-style-type: none"> <li>• ½ cup juice mixed with ½ cup water</li> </ul>
Dinner 5:30 PM	<ul style="list-style-type: none"> <li>• 2 ounces of baked chicken</li> <li>• 1 small baked potato with sour cream*</li> <li>• ½ cup of cooked carrots</li> <li>• ½ cup of lemonade</li> </ul>	<ul style="list-style-type: none"> <li>• 2 ounces of baked fish</li> <li>• ½ cup of rice</li> <li>• ½ cup of green beans</li> <li>• 2 teaspoons of margarine</li> <li>• ½ cup of apple juice</li> </ul>
7:00 PM	<ul style="list-style-type: none"> <li>• 1 cup of water</li> </ul>	<ul style="list-style-type: none"> <li>• 1 cup of water</li> </ul>
Snack 8:00 PM	<ul style="list-style-type: none"> <li>• 1 ounce of cheddar cheese*</li> <li>• 6 saltine crackers</li> <li>• ½ cup of apple juice</li> </ul>	<ul style="list-style-type: none"> <li>• ¼ cup of cottage cheese</li> <li>• 1 slice of bread</li> <li>• ½ cup of cranberry juice</li> </ul>



9:30 PM	<ul style="list-style-type: none"> <li>• ½ cup juice mixed with ½ cup water</li> </ul>	<ul style="list-style-type: none"> <li>• ½ cup juice mixed with ½ cup water</li> </ul>
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If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit [www.mskcc.org/pe](http://www.mskcc.org/pe) to search our virtual library.

Eating After Your Gastric Bypass Surgery or Whipple Procedure - Last updated on November 1, 2017

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PATIENT & CAREGIVER EDUCATION

# Herbal Remedies and Cancer Treatment

This information explains herbal remedies and how they can affect your treatment.

## About Herbal Remedies

Herbal remedies are any herbs, botanical (plant-based) supplements, or dietary supplements you take for their health benefits. These may come as tablets, capsules, powders, teas, liquid extracts, and fresh or dried plants.

Some herbal remedies can help prevent or manage side effects of cancer or your treatment. The herbal remedies that can help you depend on what symptoms you have and what treatment you're getting.

Even though herbal remedies can feel safe, they may not all be safe. Herbal remedies do not go through the same testing as prescription medications to make sure they work and are safe.

Some herbal remedies may be harmful. This is because they can:

- Affect how your other medications work.
- Raise or lower your blood pressure.
- Thin your blood and increase your risk of bleeding.
- Keep radiation therapy from working as well as it should.
- Change how your body reacts to sedation (medication to make you calmer) or general anesthesia (medication to make you sleepy).

Talk with your healthcare provider about any herbal remedies or other

supplements you are taking. They can provide an open and safe space to talk about these products.

For more information about herbs and supplements, visit [www.abouterbs.com](http://www.abouterbs.com) or call MSK's Integrative Medicine Service at 646-608-8550.

## **Stop taking herbal remedies before your treatment**

**Stop taking herbal remedies and other dietary supplements 7 days (1 week) before you:**

- Have surgery.
- Start chemotherapy.
- Start radiation therapy.
- Have certain procedures. Your healthcare provider will let you know if you need to stop taking herbal remedies before your procedure.

Herbal remedies and other dietary supplements can cause bleeding and affect your treatment. Follow your healthcare provider's instructions for when to restart taking herbal remedies.

You can still use some herbs in your food and drinks, such as using spices in cooking and drinking tea. Herbal remedies are stronger than the herbs you cook with.

## **Common Herbal Remedies and Their Effects**

These are some commonly used herbs and their side effects on cancer treatments.

### **Echinacea (EH-kih-NAY-shuh)**

- Can cause rare but serious allergic reactions, such as a rash or trouble breathing.
- Can keep medications that weaken your immune system from working as well as they should.

## **Garlic**

- Can lower your blood pressure and cholesterol levels.
- Can increase your risk of bleeding.

## **Ginkgo (also known as Ginkgo biloba)**

- Can increase your risk of bleeding.

## **Ginseng (JIN-seng)**

- Can keep sedation or general anesthesia from working as well as they should.
- Can increase your blood pressure.
- Can increase your risk of bleeding.
- Can lower your blood glucose (sugar) level.

## **Turmeric (TER-mayr-ik)**

- Can keep chemotherapy from working as well as it should.

## **St. John's Wort**

- Can keep some medications from working as well as they should.
- Can make your skin more sensitive to radiation or laser treatment.

## **Valerian (vuh-LEER-ee-un)**

- Can make sedation or general anesthesia affect you more than they should.

## **Herbal formulas**

- Herbal formulas contain many different herbs and dosages.
- Stop taking these products 7 days (1 week) before treatment. Do not start taking herbal formulas again until your healthcare provider tells you it is safe.

This information does not cover all herbal remedies or possible side effects. Talk with your healthcare provider if you have any questions or concerns.

## Contact Information

- To schedule a consultation with a healthcare provider in Integrative Medicine, call 646-608-8550.
- To make an appointment for Integrative Medicine Service's therapies, classes, and workshops, call 646-449-1010.

For more information, visit [www.mskcc.org/IntegrativeMedicine](http://www.mskcc.org/IntegrativeMedicine) or read *Integrative Medicine Therapies and Your Cancer Treatment* ([www.mskcc.org/pe/integrative\\_therapies](http://www.mskcc.org/pe/integrative_therapies)).

For more resources, visit [www.mskcc.org/pe](http://www.mskcc.org/pe) to search our virtual library.

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Herbal Remedies and Cancer Treatment - Last updated on May 5, 2022

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## PATIENT & CAREGIVER EDUCATION

# How To Check if a Medicine or Supplement Has Aspirin, Other NSAIDs, Vitamin E, or Fish Oil

This information will help you check if your medicines or dietary supplements have aspirin, other NSAIDs, vitamin E, or fish oil as an active ingredient. NSAID stands for nonsteroidal anti-inflammatory drug.

It's important to stop taking these medicines and supplements before many cancer treatments. They affect your platelets (blood cells that clot to prevent bleeding) and can raise your risk of bleeding.

Other dietary supplements, such as vitamins and herbal remedies, can also affect your cancer treatment. Read *Herbal Remedies and Cancer Treatment* ([www.mskcc.org/pe/herbal\\_remedies](http://www.mskcc.org/pe/herbal_remedies)) to learn more.

**Make sure your healthcare provider always knows all the prescription and over-the-counter medicines and supplements you're taking.** This includes patches and creams.

A prescription medicine is one you can only get with a prescription from your healthcare provider. An over-the-counter medicine is one you can buy without a prescription.

# What is an active ingredient?

An active ingredient is the part of a medicine or supplement that makes it work. Some medicines and supplements have just one active ingredient. Others have more. For example:

- Ibuprofen is the active ingredient in Advil® and Motrin®. Ibuprofen is an NSAID.
- Naproxen is the active ingredient in Aleve®. Naproxen is an NSAID.
- Acetaminophen is the active ingredient in Tylenol®.
- Aspirin, acetaminophen, and caffeine are the active ingredients in Excedrin®.

Generic medicines sometimes use their active ingredient as their name. But people often call medicines and supplements by a brand name, even if they're generic. This can make it hard to know their active ingredients.

## How to find a medicine or supplement's active ingredients

You can always find the active ingredients by reading the label.

### Over-the-counter medicines

Over-the-counter medicines list their active ingredients in the “Drug Facts” label (see Figure 1). Active ingredients are always the first thing on the Drug Facts label.

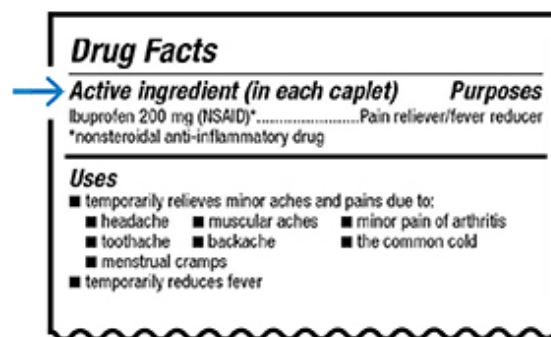


Figure 1. Active ingredients on an over-the-counter medicine label



## Prescription medicines

Prescription medicines list their active ingredients on the label. Their active ingredients and their generic name are the same thing.

Labels often look different depending on which pharmacy you use. Here's an example of where to find a medicine's active ingredients (generic name) on a label from MSK's pharmacy (see Figure 2).

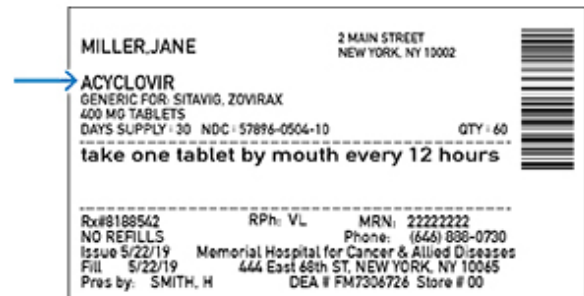


Figure 2. Active ingredients on a prescription medicine label

## Dietary supplements

Dietary supplements list their active ingredients in the "Supplement Facts" label (see Figure 3). The active ingredients always have an amount per serving and % daily value included.

<b>Supplement Facts</b>		
Serving Size 1 Tablet		
	Amount Per Serving	% Daily Value
Vitamin A (as retinyl acetate and 50% as beta-carotene)	5000 IU	100%
Vitamin C (as ascorbic acid)	60 mg	100%
Vitamin D (as cholecalciferol)	400 IU	100%
Vitamin E (as di-alpha tocopheryl acetate)	30 IU	100%
Thiamin (as thiamin mononitrate)	1.5 mg	100%
Riboflavin	1.7 mg	100%
Niacin (as niacinamide)	20 mg	100%
Vitamin B <sub>6</sub> (as pyridoxine hydrochloride)	2.0 mg	100%
Folate (as folic acid)	400 mcg	100%
Vitamin B <sub>12</sub> (as cyanocobalamin)	6 mcg	100%
Biotin	30 mcg	10%
Pantothenic Acid (as calcium pantothenate)	10 mg	100%
Other ingredients: Gelatin, lactose, magnesium stearate, microcrystalline cellulose, FD&C Yellow No. 6, propylene glycol, propylparaben, and sodium benzoate.		

Figure 3. Active ingredients on a supplement label

## Active ingredients to look for

If your medicine or supplement has any of these active ingredients, you may need to stop taking it before, during, or after your cancer treatment or surgery. Follow your care team's instructions.

Active ingredients to look for		
<ul style="list-style-type: none"><li>• Acetylsalicylic acid</li><li>• Alpha-linolenic acid (ALA)</li><li>• Aspirin</li><li>• Acetaminophen*</li><li>• Celecoxib</li><li>• Diclofenac</li><li>• Diflunisal</li><li>• Docosahexaenoic acid (DHA)</li><li>• Eicosapentaenoic acid (EPA)</li></ul>	<ul style="list-style-type: none"><li>• Etodolac</li><li>• Fish oil</li><li>• Fenoprofen Flurbiprofen</li><li>• Ibuprofen</li><li>• Indomethacin</li><li>• Ketoprofen</li><li>• Ketorolac</li><li>• Meclofenamate</li><li>• Mefenamic acid</li><li>• Meloxicam</li></ul>	<ul style="list-style-type: none"><li>• Nabumetone</li><li>• Naproxen</li><li>• Omega-3 fatty acids</li><li>• Omega-6 fatty acids</li><li>• Oxaprozin</li><li>• Piroxicam</li><li>• Sulindac</li><li>• Tolmetin</li><li>• Vitamin E</li></ul>

\* The full name acetaminophen isn't always written out. Look for the common abbreviations listed below, especially on prescription pain relievers.

Common abbreviations for acetaminophen		
<ul style="list-style-type: none"><li>• APAP</li><li>• Acetamin</li></ul>	<ul style="list-style-type: none"><li>• AC</li><li>• Acetam</li></ul>	<ul style="list-style-type: none"><li>• Acetaminop</li><li>• Acetaminoph</li></ul>

## About acetaminophen (Tylenol)

In general, acetaminophen is safe to take during cancer treatment. It doesn't affect platelets. That means it will not raise your chance of bleeding. If you're getting chemotherapy, talk with your healthcare provider before taking acetaminophen.

There is a limit to how much acetaminophen you can take in a day. Always follow the instructions from your care team or on the medicine's label.

Acetaminophen is in many different prescription and over-the-counter medicines. It's possible to take too much without knowing. **Always read the label on the medicines you take.** Do not take more than 1 medicine that has acetaminophen at a time without talking with a member of your care team.

## Instructions before your cancer treatment

Tell your healthcare provider if you take aspirin, other NSAIDs, vitamin E, or fish oil. They'll tell you if you need to stop taking it. You'll also find instructions in the information about your treatment.

### Before your surgery

Follow these instructions if you're having surgery or a surgical procedure. **If your healthcare provider gives you other instructions, follow those instead.**

- If you take aspirin or a medicine that has aspirin, you may need to change your dose or stop taking it 7 days before your surgery. Follow your healthcare provider's instructions. **Do not stop taking aspirin unless your healthcare provider tells you to.**
- If you take vitamin E, fish oil, or a supplement that has vitamin E or fish oil, stop taking it 7 days before your surgery or as directed by your healthcare provider.
- If you take an NSAID or a medicine that has an NSAID, stop taking it 48 hours (2 days) before your surgery or as directed by your healthcare provider.

## Before your radiology procedure

Follow these instructions if you're having a radiology procedure (including Interventional Radiology, Interventional Mammography, Breast Imaging, and General Radiology). **If your healthcare provider gives you other instructions, follow those instead.**

- If you take aspirin or a medicine that has aspirin, you may need to stop taking it 5 days before your procedure. Follow your healthcare provider's instructions. **Do not stop taking aspirin unless your healthcare provider tells you to.**
- If you take an NSAID or a medicine that has an NSAID, you may need to stop taking it 24 hours (1 day) before your procedure. Follow your healthcare provider's instructions.

## Before and during your chemotherapy

Chemotherapy can lower your platelet count, which can increase your risk of bleeding. No matter if you're just starting chemotherapy or have been getting it, talk with your healthcare provider before taking aspirin, other NSAIDs, vitamin E, or fish oil.

If you have any questions, contact a member of your care team directly. If you're a patient at MSK and you need to reach a provider after 5 p.m., during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit [www.mskcc.org/pe](http://www.mskcc.org/pe) to search our virtual library.

How To Check if a Medicine or Supplement Has Aspirin, Other NSAIDs, Vitamin E, or Fish Oil - Last updated on November 29, 2023

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## PATIENT & CAREGIVER EDUCATION

# How To Use Your Incentive Spirometer

This information will help you learn how to use your incentive spirometer (in-SEN-tiv spy-rah-MEE-ter). It also answers some common questions about it.

## About your incentive spirometer

After your surgery you may feel weak and sore, and it may be uncomfortable to take deep breaths. Your healthcare provider may recommend using a device called an incentive spirometer (see Figure 1). It helps you practice taking deep breaths.

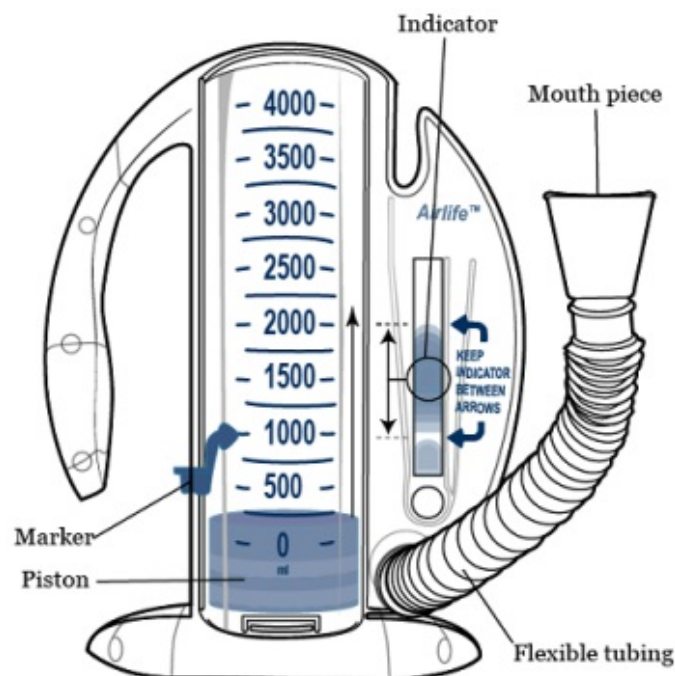


Figure 1. Parts of an incentive spirometer

It's important to use your incentive spirometer after your surgery. Using an incentive spirometer:

- Helps your lungs expand so you can take deep, full breaths.
- Exercises your lungs and makes them stronger as you heal from surgery.

**If you have a respiratory infection, do not use your incentive spirometer around other people.** A respiratory infection is an infection in your nose, throat, or lungs, such as pneumonia (noo-MOH-nyuh) or COVID-19. This kind of infection can spread from person to person through the air.

## How to use your incentive spirometer

Here is a video that shows how to use your incentive spirometer:



Please visit [www.mskcc.org/pe/incentive\\_spirometer\\_video](http://www.mskcc.org/pe/incentive_spirometer_video) to watch this video.

## Setting up your incentive spirometer

Before you use your incentive spirometer for the first time, you will need to set it up. First, take the flexible (bendable) tubing out of the bag and stretch it out. Then, connect the tubing to the outlet on the right side of the base (see Figure 1). The mouthpiece is attached to the other end of the tubing.

## Knowing what number to aim for on your incentive spirometer

Your healthcare provider will teach you how to use your incentive spirometer before you leave the hospital. They will help you set a goal and tell you what number to aim for when using your spirometer. If a goal was not set for you, talk with your healthcare provider. Ask them what number you should aim for.

You can also check the package your incentive spirometer came in. It may have a chart to help you figure out what number to aim for. To learn more, read “What number I should aim for?” in the “Common questions about your

incentive spirometer” section.

## Using your incentive spirometer

When using your incentive spirometer, make sure to breathe through your mouth. If you breathe through your nose, your spirometer will not work right.

Follow these steps to use your incentive spirometer. Repeat these steps every hour you’re awake. Follow the instructions from your healthcare provider if they’re different from the ones here.

1. Sit upright in a chair or in bed. Hold your incentive spirometer at eye level.
2. Put the mouthpiece in your mouth and close your lips tightly around it. Make sure you do not block the mouthpiece with your tongue.
3. With the mouthpiece in your mouth, breathe out (exhale) slowly and fully.
  - Some people may have trouble exhaling with the mouthpiece in their mouth. If you do, take the mouthpiece out of your mouth, and then exhale slowly and fully. After you exhale, put the mouthpiece back in your mouth and go on to step 4.
4. Breathe in (inhale) slowly through your mouth, as deeply as you can. You will see the piston slowly rise inside the spirometer. The deeper you breathe in, the higher the piston will rise.
5. As the piston rises, the coaching indicator on the right side of the spirometer should also rise. It should float between the 2 arrows (see Figure 1).
  - The coaching indicator measures the speed of your breath. If it does not stay between the 2 arrows, you’re breathing in either too fast or too slow.
    - If the indicator rises above the higher arrow, you’re breathing in too fast. Try to breathe in slower.
    - If the indicator stays below the lower arrow, you’re breathing in too slow. Try to breathe in faster.

6. When you cannot breathe in any further, hold your breath for at least 3 to 5 seconds. Hold it for longer if you can. You will see the piston slowly fall to the bottom of the spirometer.
7. Once the piston reaches the bottom of the spirometer, breathe out slowly and fully through your mouth. If you want, you can take the mouthpiece out of your mouth first and then breathe out.
8. Rest for a few seconds. If you took the mouthpiece out of your mouth, put it back in when you're ready to start again.
9. Repeat steps 1 to 8 at least 10 times. Try to get the piston to the same level with each breath. After you have done the exercise 10 times, go on to step 10.
10. Use the marker on the left side of the spirometer to mark how high the piston rises (see Figure 1). **Look at the very top of the piston, not the bottom. The number you see at the top is the highest number the piston reached. Put the marker there.** This is how high you should try to get the piston the next time you use your spirometer.
  - Write down the highest number the piston reached. This can help you change your goals and track your progress over time.

**Take 10 breaths with your incentive spirometer every hour you're awake.**

Cover the mouthpiece of your incentive spirometer when you're not using it.

## **Tips for using your incentive spirometer**

Follow these tips when using your incentive spirometer:

- If you had surgery on your chest or abdomen (belly), it may help to splint your incision (surgical cut). To do this, hold a pillow firmly against your incision. This will keep your muscles from moving as much while you're using your incentive spirometer. It will also help ease pain at your incision.
- If you need to clear your lungs, you can try to cough a few times. As



you're coughing, hold a pillow against your incision, as needed.

- If you feel dizzy or lightheaded, take the mouthpiece out of your mouth. Then, take a few normal breaths. Stop and rest for a while, if needed. When you feel better, you can go back to using your incentive spirometer.
- You may find it hard to use your incentive spirometer at first. If you cannot make the piston rise to the number your healthcare provider set for you, it's OK. Reaching your goal takes time and practice. It's important to keep using your spirometer as you heal from surgery. The more you practice, the stronger your lungs will get.

## **Common questions about your incentive spirometer**

### **How often should I use my incentive spirometer?**

How often you will need to use your incentive spirometer is not the same for everyone. It depends on the type of surgery you had and your recovery process.

Most people can take 10 breaths with their spirometer every hour they're awake.

Your healthcare provider will tell you how often to use your spirometer. Follow their instructions.

### **How long after my surgery will I need to use my incentive spirometer?**

The length of time you will need to use your incentive spirometer is not the same for everyone. It depends on the type of surgery you had and your recovery process.

Your healthcare provider will tell you how long you need to use your spirometer. Follow their instructions.

## **How do I clean my incentive spirometer?**

An incentive spirometer is a disposable device and only meant to be used for a short time. Because of this, you may not find cleaning instructions in the package your spirometer came in. If you have questions about cleaning your spirometer, talk with your healthcare provider.

## **What do the numbers on my incentive spirometer measure?**

The large column of your incentive spirometer has numbers on it (see Figure 1). These numbers measure the volume of your breath in milliliters (mL) or cubic centimeters (cc). The volume of your breath is how much air you can breathe into your lungs (inhale).

For example, if the piston rises to 1500, it means you can inhale 1500 mL or cc of air. The higher the number, the more air you're able to inhale, and the better your lungs are working.

## **What number I should aim for?**

The number you should aim for depends on your age, height, and sex. It also depends on the type of surgery you had and your recovery process. Your healthcare provider will look at these things when setting a goal for you. They will tell you what number to aim for.

Most people start with a goal of 500 mL or cc. Your healthcare provider may change your goal and have you aim for higher numbers as you heal from surgery.

The package your incentive spirometer came in may have a chart. You can use the chart to set your goal based on your age, height, and sex. If you cannot find this information, ask your healthcare provider what your goal should be.

## What does the coaching indicator on my incentive spirometer measure?

The coaching indicator on your incentive spirometer measures the speed of your breath. As the speed of your breath changes, the indicator moves up and down.

Use the indicator to guide your breathing. If the indicator rises above the higher arrow, it means you're breathing in too fast. If the indicator stays below the lower arrow, it means you're breathing in too slow.

Aim to keep the indicator between the 2 arrows (see Figure 1). This means your breath is steady and controlled.

## When to call your healthcare provider

Call your healthcare provider if you have any of these when using your incentive spirometer:

- Feel dizzy or lightheaded.
- Pain in your lungs or chest.
- Severe (very bad) pain when you take deep breaths.
- Trouble breathing.
- Coughing up blood.
- Fluid or blood coming from your incision site when you cough.
- Trouble using your spirometer for any reason.

If you have any questions, contact a member of your care team directly. If you're a patient at MSK and you need to reach a provider after 5 p.m., during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit [www.mskcc.org/pe](http://www.mskcc.org/pe) to search our virtual library.

How To Use Your Incentive Spirometer - Last updated on November 24, 2023

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PATIENT & CAREGIVER EDUCATION

# What You Can Do to Avoid Falling

This information describes what you can do to keep from falling when you come for your appointments at Memorial Sloan Kettering (MSK). It also describes how you can keep from falling while you're at home.

## About Falls

Falls can be very harmful, but there are many ways you can prevent them. Falls can delay your treatment and can make your hospital stay longer. They can also cause you to need more tests, such as magnetic resonance imaging (MRI). Ongoing cancer treatment may also increase your chances of falling and getting hurt.

## Things That Can Make You Fall

Anyone can fall, but some things make you more likely to fall. You're at higher risk for falling if you:

- Are 60 years old or older
- Have fallen before
- Are afraid of falling
- Feel weak, tired, or forgetful
- Have numbness or tingling in your legs or feet
- Have trouble walking or are unsteady
- Can't see well
- Can't hear well
- Feel dizzy, lightheaded, or confused

- Use a walker or cane
- Have depression (strong feelings of sadness) or anxiety (strong feelings of worry or fear)
- Have had a recent surgery with anesthesia (medication that makes you sleep)
- Take certain medications, such as:
  - Laxatives (pills to cause a bowel movement)
  - Diuretics (water pills)
  - Sleeping pills
  - Medications to prevent seizures
  - Some medications for depression and anxiety
  - Pain medications, such as opioid medications
  - Intravenous (IV) fluids (fluids into your vein)
  - Any medication that makes you feel sleepy or dizzy

## How to Avoid Falling During Your MSK Appointments

The following are tips to help you stay safe and avoid falling while you're at MSK:

- Come to your appointment with someone who can help you get around.
- If you use an assistive device such as a wheelchair or cane, bring it to your appointment.
- Wear safe, supportive shoes. Examples include shoes that have a low heel height, a thin, firm midsole, a slip-resistant sole, and laces or Velcro® to close the shoe. Don't wear shoes with an open back. For more information on choosing safe shoes, read the resource *How to Choose Safe Shoes to Prevent Falling* ([www.mskcc.org/pe/safe\\_shoes](http://www.mskcc.org/pe/safe_shoes)).
- Ask a member of our staff, such as a security guard or person at the front desk, for help while you're at MSK. They can also bring you a wheelchair to use

during your appointment.

- Have someone help you while you're in the dressing room or bathroom. If you don't have anyone with you, tell the person at the reception desk. They will find a nurse to help you.
- Use the grab bars while you're in the bathroom.
- When getting up after lying down, sit at the side of the bed or exam table before you stand up
- When getting up after sitting, don't rush and take your time to stand up, so you don't lose your balance.
- If you feel dizzy or weak, tell someone. If you're in a bathroom, look for a call bell that you can use to call for help.

## How to Avoid Falling at Home

The following are tips to help you stay safe and avoid falling at home:

- Set up your furniture so that you can walk around without anything blocking your way.
- Use a nightlight or keep a flashlight close to you at night.
- Remove rugs and other loose items from your floor. If you have a rug covering a slippery floor, make sure the rug doesn't have any loose or fringed edges.
- If your bathroom isn't close to your bedroom (or wherever you spend most of your time during the day), get a commode. A commode is a type of portable toilet that you can put anywhere in your home. Place it nearby so you don't have to walk to the bathroom.
- Put grab bars and handrails next to your toilet and inside your shower. Never use towel racks to pull yourself up. They aren't strong enough to hold your weight.
- Put anti-slip stickers on the floor of your tub or shower.
- Buy a shower chair and a hand-held shower head so you can sit while taking a shower.

- When getting up after you're lying down, sit for a few minutes before you stand up.
- Place items in your kitchen and bathroom cabinets at shoulder height so you don't have to reach too high or bend too low.
- When you're at an appointment with your provider at MSK, tell them about all the medications you take. Some medications can increase your risk of falling. This includes prescription and over-the-counter medications.
- Stay physically active. Doing simple daily activities, such as walking, can help you stay strong and move around better.

**If you're concerned about your risk for falling, talk with your healthcare provider.**

## Additional Resources

For more information about how to keep from falling at home, read the Centers for Disease Control and Prevention (CDC) booklet *Check for Safety: A Home Fall Prevention Checklist for Older Adults*. It's available in English and Spanish on [www.cdc.gov/steady/patient.html](http://www.cdc.gov/steady/patient.html) or by calling 800-CDC-INFO (800-232-4636).

If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit [www.mskcc.org/pe](http://www.mskcc.org/pe) to search our virtual library.

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