

PATIENT & CAREGIVER EDUCATION

# About Your Robotic-Assisted or Laparoscopic Hysterectomy

This guide will help you get ready for your robotic-assisted or laparoscopic hysterectomy at MSK. It will also help you understand what to expect during your recovery.

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 healthcare team will refer to it as you learn more about your recovery.

Your healthcare team	
Doctor:	
Nurse:	
Phone number:	
Fax number:	

#### Your caregiver

It's important to choose a person to be your caregiver. They'll learn about your surgery with you and help you care for yourself while you're recovering after surgery. Write down your caregiver's name below.

Caregiver:



To view this guide online, visit www.mskcc.org/pe/robotic\_laparoscopic\_hysterectomy

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## **About Your Surgery**

A hysterectomy (HIS-teh-REK-toh-mee) is a surgery to remove your uterus. You may be having a hysterectomy because you have:

- Uterine cancer, cervical cancer, or ovarian cancer
- Uterine fibroids
- Endometriosis
- Heavy vaginal bleeding
- Pelvic pain

Your healthcare provider will talk with you about why you're having the surgery.

### About your reproductive system

Your reproductive system includes your ovaries, fallopian tubes, uterus, cervix, and vagina (see Figure 1). Your uterus is in your lower abdomen (belly) between your bladder and rectum. The lower narrow end of your uterus is called your cervix. Your ovaries and fallopian tubes are attached to your uterus.

After your hysterectomy, you won't be able to have children naturally. You'll also stop menstruating (getting your monthly period). A hysterectomy doesn't cause menopause unless your ovaries are removed.

If you want to have biological children in the future, ask your healthcare provider for a referral to a fertility specialist.

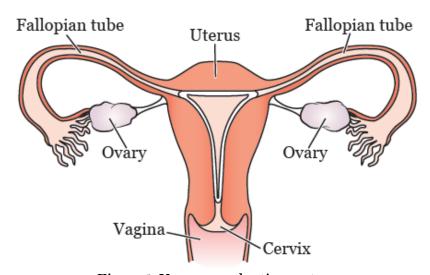


Figure 1. Your reproductive system

### Robotic-assisted or laparoscopic hysterectomy

You'll have either a robotic-assisted or a laparoscopic hysterectomy.

With both types of hysterectomies, your surgeon will make several small incisions (surgical cuts) on your abdomen. They'll put a laparoscope (long, thin surgical tool with a video camera) through one of the incisions into your abdomen. The laparoscope lets your surgeon see the inside of your abdomen.

Carbon dioxide gas will be pumped into your abdomen to make space. This gives your surgeon more room to do your surgery. Your surgeon will also put long, skinny surgical tools into the other incisions on your abdomen.

- With a **laparoscopic hysterectomy**, your surgeon directly controls the surgical tools with their hands. They can see the images from the laparoscope on a television monitor.
- With a **robotic-assisted hysterectomy**, your surgeon sits at a console and controls a robot that moves the surgical tools. The console has a special monitor where they can see the images from the laparoscope in 3 dimensions (3-D).

With both types of hysterectomies, your surgeon will remove your uterus and cervix through your vagina, if possible. If your uterus or cervix can't be removed through your vagina, your surgeon will make one of your incisions bigger and remove your uterus and cervix from there. Then they'll close your incisions with sutures (stitches).

You might also have one or both of the following procedures during your hysterectomy. Your surgeon will talk with you about the plan for your specific surgery.

## Salpingo-oophorectomy

A salpingo-oophorectomy (sal-PIN-goh-oh-oh-foh-REK-toh-mee) is a surgery to remove your ovary and fallopian tube on 1 or both sides of your body.

If you haven't started menopause, you'll go into menopause if both of your ovaries are removed. You may have some of the common symptoms, including night sweats, hot flashes, and vaginal dryness. Talk with your healthcare provider about ways to manage these symptoms. If you've already gone through menopause, you shouldn't notice any changes.

## Sentinel lymph node mapping and lymph node dissection

Lymph nodes are small, bean-shaped glands that make and store the cells that help your body fight infections. Lymph nodes are found throughout your body. Sentinel lymph nodes are the lymph nodes most likely to be affected if you have cancer and it has spread.

If your surgeon thinks you may have cancer, they may do sentinel lymph node mapping and remove some of your lymph nodes during your surgery. This is called a lymph node dissection.

For sentinel lymph node mapping, your surgeon will inject a small amount of dye in the area where the cancer may be. They'll talk with you about the type of dye they'll use. This dye will travel to the sentinel lymph node(s) and turn them blue or green.

Once the sentinel node(s) are located, your surgeon will make a small incision. They'll remove the sentinel node(s) and send them to the Pathology Department to be checked for cancer cells.

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## **Before Your Surgery**

The information in this section will help you get ready for your surgery. Read this section when your surgery is scheduled and refer to it as your surgery date gets closer. It has important information about what you need to do before your surgery.

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

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## Getting ready for your surgery

You and your healthcare team will work together to get ready for your surgery.

Help us keep you safe during your surgery by telling us if any of the following statements apply to you, even if you aren't sure.

□ I take	a blood thinner, such as:		I take dietary supplements, such
•	Aspirin		as herbs, vitamins, minerals, or natural or home remedies.
•	Heparin	П	I have a pacemaker, automatic
•	Warfarin (Jantoven® or Coumadin®)	_	implantable cardioverter- defibrillator (AICD), or other
•	Clopidogrel (Plavix®)		heart device.
•	Enoxaparin (Lovenox®)		I have sleep apnea.
•	Dabigatran (Pradaxa®)		I've had a problem with anesthesia (medication to make
•	Apixaban (Eliquis®)		me sleep during surgery) in the
•	Rivaroxaban (Xarelto®)		past.
health	e are others, so be sure your ncare provider knows all edications you're taking.		I'm allergic to certain medication(s) or materials, including latex.
□ I take	prescription medications cations my healthcare		I'm not willing to receive a blood transfusion.
provid	der prescribes), including		I drink alcohol.
_	es and creams.		I smoke or use an electronic
	over-the-counter cations (medications I buy		smoking device (such as a vape pen, e-cigarette, or Juul®).
	ut a prescription), ling patches and creams.		I use recreational drugs.

#### **About drinking alcohol**

The amount of alcohol you drink can affect you during and after your surgery. It's important to talk with your healthcare providers about how much alcohol you drink. This will help us plan your care.

- If you stop drinking alcohol suddenly, it can cause seizures, delirium, and death. If we know you're at risk for these complications, we can prescribe medications to help keep them from happening.
- If you drink alcohol regularly, you may be at risk for other complications during and after your surgery. These include bleeding, infections, heart problems, and a longer hospital stay.

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. If you develop a headache, nausea (feeling like you're going to throw up), increased anxiety, or can't sleep after you stop drinking, tell your healthcare provider right away. These are early signs of alcohol withdrawal and can be treated.
- Tell your healthcare provider if you can't stop drinking.
- Ask your healthcare provider questions about drinking and surgery. As always, all your medical information will be kept confidential.

#### **About smoking**

If you smoke, you can have breathing problems when you have surgery. Stopping even for a few days before surgery can help. If you smoke, your healthcare provider will refer you to our Tobacco Treatment Program. You can also reach the program by calling 212-610-0507.

#### About sleep apnea

Sleep apnea is a common breathing disorder that causes you to stop breathing for short periods of time while sleeping. The most common type is obstructive sleep apnea (OSA). With OSA, your airway becomes completely blocked during sleep. OSA can cause serious problems during and after surgery.

Please tell us if you have sleep apnea or if you think you might have it. If you use a breathing device (such as a CPAP device) for sleep apnea, bring it with you the day of your surgery.

#### **Using MyMSK**

MyMSK (my.mskcc.org) is your MSK patient portal account. You can use MyMSK to send and receive messages from your healthcare team, view your test results, see your appointment dates and times, and more. You can also invite your caregiver to create their own account so they can see information about your care.

If you don't have a MyMSK account, you can visit my.mskcc.org, call 646-227-2593, or call your doctor's office for an enrollment ID to sign up. You can also watch our video *How to Enroll in MyMSK: Memorial Sloan Kettering's Patient Portal* (www.mskcc.org/pe/enroll\_mymsk). For help, contact the MyMSK Help Desk by emailing mymsk@mskcc.org or calling 800-248-0593.

## Within 30 days of your surgery

#### **Presurgical Testing (PST)**

Before your surgery, you'll have an appointment for presurgical testing (PST). The date, time, and location will be printed on the appointment reminder from your surgeon's office. You can eat and take your usual medications the day of your appointment.

During your PST appointment, you'll meet with a nurse practitioner (NP) who works closely with anesthesiology staff (specialized healthcare providers who will give you anesthesia during your surgery). Your NP will review your medical and surgical history with you. You may have tests, such as an electrocardiogram (EKG) to check your heart rhythm, a chest x-ray, blood tests, and any other tests needed to plan your care. Your NP may also recommend that you see other healthcare providers.

Your NP will talk with you about which medications you should take the morning of your surgery.

It's helpful to bring the following things to your PST appointment:

- A list of all the medications you're taking, including prescription and over-the-counter medications, patches, and creams.
- Results of any tests done outside of MSK, such as a cardiac stress test, echocardiogram, or carotid doppler study.
- The name(s) and telephone number(s) of your healthcare provider(s).

### **Identify your caregiver**

Your caregiver plays 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 from the hospital. They'll also help you care for yourself at home.



#### For caregivers

Resources and support are available to help manage the responsibilities that come with caring for a person going through cancer treatment. For support resources and information, visit www.mskcc.org/caregivers or read *A Guide for Caregivers*. You can find it online at www.mskcc.org/pe/guide\_caregivers or ask your healthcare provider for a copy.

#### Arrange for someone to take you home

You must have a responsible care partner take you home after your surgery. A responsible care partner is someone who can help you get home safely and report concerns to your healthcare providers, if needed. Make sure to plan this before the day of your surgery.

If you don't have a responsible care partner to take you home, call one of the agencies below. They'll send someone to go home with you. There's usually a charge for this service, and you'll need to provide transportation. It's OK to use a taxi or car service, but you must still have a responsible care partner with you.

#### **Agencies in New York**

#### **Agencies in New Jersey**

• Partners in Care: 888-735-8913

• Caring People: 877-227-4649

• Caring People: 877-227-4649

#### Complete a Health Care Proxy form

If you haven't already completed a Health Care Proxy form, we recommend you complete one now. If you've already completed one or have any other advance directives, bring them to your next appointment.

A health care proxy is a legal document that identifies the person who will speak for you if you can't communicate for yourself. The person you identify is called your health care agent.

Talk with your healthcare provider if you'd like to complete a health care proxy. You can also read the resources *Advance Care Planning for Cancer Patients and Their Loved Ones* and *How to Be a Health Care Agent* for information about health care proxies, other advance directives, and being a health care agent. You can find them online at www.mskcc.org/pe/advance\_care\_planning and www.mskcc.org/pe/health\_care\_agent or ask your healthcare provider for a copy.

#### 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. For more information, read the resource *How to Use Your Incentive Spirometer*. You can find it in the "Educational Resources" section of this guide.

#### **Exercise**

Try to do aerobic exercise every day. Aerobic exercise is any exercise that makes your heart beat faster, such as walking, swimming, or biking. If it's cold outside, use stairs in your home or go to a mall or shopping center. Exercising will help your body get into its best condition for your surgery and make your recovery faster and easier.

#### 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.

## Buy a 4% chlorhexidine gluconate (CHG) solution antiseptic skin cleanser (such as Hibiclens®), if needed

Your nurse will tell you if you need to wash with a 4% CHG solution antiseptic skin cleanser before your surgery. Follow their instructions.

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. You can buy a 4% CHG solution antiseptic skin cleanser at your local pharmacy without a prescription.

## 7 days before your surgery

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

If you take aspirin or a medication that contains aspirin, you may need to change your dose or stop taking it 7 days before your surgery. Aspirin can cause bleeding.

Follow your healthcare provider's instructions. **Don't stop taking aspirin unless they tell you to.** For more information, 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

Stop taking vitamin E, multivitamins, herbal remedies, and other dietary supplements 7 days before your surgery. These things can cause bleeding. For more information, read the resource *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)

Stop taking NSAIDs, such as ibuprofen (Advil® and Motrin®) and naproxen (Aleve®), 2 days before your surgery. These medications can cause bleeding. For more information, 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 from the Admitting Office will call you after 2:00 PM the day before your surgery. If your surgery is scheduled for a Monday, they'll call you on the Friday before. If you don't get a call by 7:00 PM, call 212-639-5014.

The staff member will tell you what time to arrive at the hospital for your surgery. They'll also remind you where to go.

## Shower with a 4% CHG solution antiseptic skin cleanser (such as Hibiclens), if needed

If your healthcare provider told you to, shower using a 4% CHG solution antiseptic skin cleanser the night before your surgery.

- 1. Use your normal shampoo to wash your hair. Rinse your head well.
- 2. Use your normal soap to wash your face and genital area. 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. Don't 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 after your shower.
- 7. Don't 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:
  - o Water.
  - o 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).
  - o Sports drinks, such as Gatorade®.
  - ClearFast CF(Preop)® or Ensure® Pre-Surgery clear carbohydrate drink.
  - o Gelatin, such as Jell-O<sup>®</sup>.

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



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), if needed

If your healthcare provider told you to, 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.

Don't 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.
- Don't wear any metal objects. Remove 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. You'll get disposable underwear, as well as a pad if needed.

#### What to bring

- Your breathing device for sleep apnea (such as your CPAP device), if you have one.
- Your incentive spirometer, if you have one.
- Your Health Care Proxy form and other advance directives, if you completed them.
- Your cell phone and charger.
- Only the money you may want for small purchases (such as a newspaper).
- A case for your personal items (such as eyeglasses, hearing aids, dentures, prosthetic devices, wig, or religious articles), if you have any.
- This guide. Your healthcare team will use it to teach you how to care for yourself after surgery.

#### Once you're in the hospital

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

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

#### Meet with a nurse

You'll meet with a nurse before surgery. Tell them the dose of any medications you took after midnight (including prescription and over-the-counter medications, patches, and creams) and the time you took them.

Your nurse may place an intravenous (IV) line in one of your veins, usually in your arm or hand. If your nurse doesn't place the IV, your anesthesiologist 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, including 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.

#### Get ready for your surgery

When it's time for your surgery, you'll need to remove your hearing aids, dentures, prosthetic device(s), wig, and religious articles, if you have them.

You'll either walk into the operating room or be taken in on a stretcher. A member of the operating room team will help you onto the operating bed and place compression boots on your lower legs. These gently inflate and deflate to help blood flow in your legs. You may also have a blood pressure cuff and EKG pads to monitor you during your surgery.

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, a breathing tube will be placed through your mouth and into your windpipe to help you breathe. A urinary (Foley) catheter will also be placed to drain urine (pee) from your bladder.

Once your surgery is finished, your surgeon will close your incisions with sutures and cover them with Steri-Strips  $^{\text{\tiny TM}}$  (thin pieces of surgical tape) or Dermabond  $^{\text{\tiny ®}}$  (surgical glue). They may also cover them with a dry, square, white dressing (bandage) called a Primapore  $^{\text{\tiny ®}}$  dressing.

Your breathing tube is usually taken out while you're still in the operating room.

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## **After Your Surgery**

The information in this section will tell you what to expect after your surgery, both during your hospital stay and after you leave the hospital. You'll learn how to safely recover from your surgery.

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

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## In the Post-Anesthesia Care Unit (PACU) or your recovery room

When you wake up after your surgery, you'll be in the PACU or your recovery room. A nurse will be keeping track of your body temperature, blood pressure, pulse, and oxygen levels. You may be getting oxygen through a thin tube that rests below your nose. You'll also have compression boots on your lower legs.

You may have a urinary catheter in your bladder to help keep track of how much urine (pee) you're making. If you do, it should be removed before you go home.

#### Managing your pain

You'll get pain medication through your IV line or as a tablet that you swallow. Your healthcare providers will ask you about your pain often and give you medication as needed. If your pain isn't relieved, tell one of your healthcare providers. It's important to control your pain so you can use your incentive spirometer and move around.

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

#### 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 or physical therapist will help you move around, if needed.

Read the resource *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 ask your healthcare provider for a copy or find it online at www.mskcc.org/pe/call\_dont\_fall

#### Using your incentive spirometer

Use your incentive spirometer 10 times every hour you're awake. This will help your lungs expand fully, which helps prevent pneumonia. For more information, read *How to Use Your Incentive Spirometer*. You can find it in the "Educational Resources" section of this guide.

#### Leaving the hospital

Before you leave, look at your incisions with one of your healthcare providers. Knowing what they look like will help you notice any changes later.

Most people don't need any supplies after surgery. If you do, such as if you're leaving the hospital with tubes or drains, your nurse will order them for you.

Before you leave, your healthcare provider will write your discharge order and prescriptions. You'll also get written discharge instructions. One of your healthcare providers will review them with you before you leave.

#### At home

#### Filling out your Recovery Tracker

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

Fill out your Recovery Tracker every day before midnight (12:00 AM). 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 or ask you to call your surgeon's office. You can always contact your surgeon's office if you have any questions. For more information, read the resource *About Your Recovery Tracker*. You can find it in the "Educational Resources" section of this guide.

#### **Eating and drinking**

You'll be able to eat after your surgery. Start with foods that are soft and easy to digest, such as applesauce and chicken noodle soup. Eat small meals often. Then start adding your regular foods to your diet.

If you have bloating, gas, or cramps, limit high-fiber foods, such as:

•	Who.	le grain	breads	s and	cereal
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Nuts

• Seeds

Salads

• Fresh fruit

Broccoli

Cabbage

Cauliflower

#### Managing your pain

You'll have some pain after your surgery, especially in the first few days. The length of time each person has pain or discomfort varies.

Follow the guidelines below to help manage your pain at home.

- Take your medications as directed and as needed.
- Call your healthcare provider if the medication prescribed for you doesn't ease your pain.
- Don't drive or drink alcohol while you're taking prescription pain medication. Some prescription pain medications can make you drowsy. Alcohol can make the drowsiness worse.
- As your incisions heal, you'll have less pain and need less pain medication. An over-the-counter pain reliever such as acetaminophen (Tylenol®) or ibuprofen (Advil® or Motrin®) will ease aches and discomfort.
  - Follow your healthcare provider's instructions for stopping your prescription pain medication.
  - o Don't take more of any medication than the amount directed on the label or as instructed by your healthcare provider.
  - Read the labels on all the medications you're taking, especially if you're taking acetaminophen. Acetaminophen is an ingredient in many overthe-counter and prescription medications. Taking too much can harm your liver. Don't take more than 1 medication that contains acetaminophen at a time without talking with a member of your healthcare team.
- Pain medication should help you resume your normal activities. Take enough medication to do your activities and exercises comfortably. It's normal for your pain to increase a little as you start to be more active.
- Keep track of when you take your pain medication. 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.

It's also common to have some discomfort after surgery from the air that was pumped into your abdomen during surgery. To help with this, walk, drink plenty of liquids, and make sure to take the stool softeners your healthcare provider gave you.

#### Preventing and managing constipation

Some prescription pain medications (such as opioids) may cause constipation (having fewer bowel movements than usual). Talk with your healthcare provider about how to prevent and manage constipation. You can also follow the guidelines below.

- Go to the bathroom at the same time every day. Your body will get used to going at that time. If you feel like you need to go, though, don't put it off.
- Try to use the bathroom 5 to 15 minutes after meals. After breakfast is a good time to go. That's when the reflexes in your colon are strongest.
- Exercise, if you can. Walking is an excellent form of exercise.
- Drink 8 to 10 (8-ounce) glasses (2 liters) of liquids daily, if you can.
  - o Choose liquids such as water, juices (such as prune juice), soups, and ice cream shakes.
  - o Avoid liquids with caffeine (such as coffee and soda). Caffeine can pull fluid out of your body.
- Slowly increase the fiber in your diet to 25 to 35 grams per day. Fruits, vegetables, whole grains, and cereals contain fiber. If you have an ostomy or have had recent bowel surgery, check with your healthcare provider before making any changes in your diet.
- Both over-the-counter and prescription medications are available to treat constipation. Check with your healthcare provider before taking any medications for constipation, especially if you have an ostomy or have had bowel surgery. Follow the instructions on the label or from your healthcare provider. Examples of over-the-counter medications for constipation include:
  - Occusate sodium (Colace®). This is a stool softener (medication that makes your bowel movements softer) that causes few side effects. You can use it to help prevent constipation. Don't take it with mineral oil.
  - Polyethylene glycol (MiraLAX®). This is a laxative (medication that causes bowel movements) that causes few side effects. Take it with 8 ounces (1 cup) of a liquid. Only take it if you're already constipated.
  - Senna (Senokot®). This is a stimulant laxative, which can cause cramping.
     It's best to take it at bedtime. Only take it if you're already constipated.

If any of these medications cause diarrhea (loose, watery bowel movements), stop taking them. You can start again if needed.

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

#### Caring for your incisions

You'll have several small incisions on your abdomen. They'll be closed with Steri-Strips or Dermabond. They may also be covered with square white Primapore dressings.

- If you have Primapore dressings, you can take them off in the shower 24 hours after your surgery.
- If you have Steri-Strips or Dermabond, they'll loosen and may fall or peel off on their own. If they haven't fallen off within 10 days, you can take them off. Don't take them off before then.

Don't get your incisions wet for the first 24 hours (1 day) after your surgery. After that, clean them with soap and water in the shower every day.

#### **Showering**

Don't shower for the first 24 hours after your surgery. After that, take a shower every day to clean your incisions. Taking a warm shower is also relaxing and can help muscle aches.

During your shower, use soap to gently wash your incisions. After your shower, pat the areas dry with a clean towel and leave your incisions uncovered (unless there's drainage). Call your healthcare provider if you see any redness or drainage from your incision.

Don't take tub baths until you talk with your healthcare provider at your first appointment after your surgery.

#### Managing vaginal spotting or bleeding

It's common to have some vaginal spotting or light bleeding after surgery. Use a pad or a panty liner so you can see how much you're spotting or bleeding. Don't use a tampon.

If you have heavy bleeding (you're bleeding through a pad or liner every 1 to 2 hours), call your healthcare provider right away.

### **Sexual activity**

Don't put anything in your vagina or have vaginal intercourse (sex) for 8 weeks after your surgery. Some people will need to wait longer than 8 weeks, so speak with your healthcare provider before starting to have vaginal sex again.

#### **Driving and traveling**

You can start driving again 2 weeks after surgery as long as you aren't taking pain medication that may make you drowsy.

It's OK to travel after your surgery. If you're traveling by plane within a few weeks after your surgery, make sure you get up and walk every hour. Be sure to stretch your legs, drink plenty of liquids, and keep your feet elevated when possible.

#### Going back to work

Most people can return to work about 2 to 4 weeks after the surgery. Talk with your healthcare provider about your job and when it may be safe for you to start working again. The time it takes to return to work depends on the type of work you do, the type of surgery you had, and how fast your body heals.

#### Physical activity and exercise

Don't lift anything heavier than 10 pounds (4.5 kilograms) for at least 4 weeks after surgery. Speak with your healthcare provider about when you can do heavy lifting.

Doing aerobic exercise, such as walking and stair climbing, will help you gain strength and feel better. Gradually increase the distance you walk. Climb stairs slowly, resting or stopping as needed. Ask your healthcare provider before starting more strenuous exercises.

#### Managing your feelings

After surgery for a serious illness, you may have new and upsetting feelings. Many people say they felt weepy, sad, worried, nervous, irritable, and angry at one time or another. You may find that you can't 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. Your healthcare providers can 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. Whether you're in the hospital or at home, we're here to help you and your family and friends handle the emotional aspects of your illness.

#### Follow-up appointments after surgery

Your first appointment after surgery will be 2 to 4 weeks after surgery. Your nurse will give you instructions on how to make this appointment, including the phone number to call.

## When to call your healthcare provider



Call your healthcare provider if:

- You have a fever of 101 °F (38.3 °C) or higher.
- You have pain that doesn't get better with pain medication.
- There's redness, drainage, or swelling around your incisions.
- Your calves or thighs are swollen or tender.
- You cough up blood.
- You have any shortness of breath or difficulty breathing.
- You don't pass gas or have any bowel movement for 3 days or longer.
- You have nausea, vomiting, or diarrhea.
- 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 that may help you get ready for your surgery and recover safely.

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

Notes	

### MSK support services

#### **Admitting Office**

212-639-7606

Call if you have questions about your hospital admission, including requesting a private room.

#### Anesthesia

212-639-6840

Call if you have questions about anesthesia.

#### **Blood Donor Room**

212-639-7643

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

#### **Bobst International Center**

332-699-7968

MSK welcomes patients from around the world. If you're an international patient, call for help arranging your care.

#### **Chaplaincy Service**

212-639-5982

At MSK, our chaplains are available to listen, help support family members, pray, contact community clergy or faith groups, or simply be a comforting companion and a spiritual presence. Anyone can request spiritual support, regardless of formal religious affiliation. The interfaith chapel is located near the main lobby of Memorial Hospital and is open 24 hours a day. If you have an emergency, please call the hospital operator and ask for the chaplain on call.

#### **Counseling Center**

646-888-0200

Many people find that counseling helps them. We provide counseling for individuals, couples, families, and groups, as well as medications to help if you feel anxious or depressed. To make an appointment, ask your healthcare provider for a referral or call the number above.

#### Female Sexual Medicine and Women's Health Program

646-888-5076

This program helps people who are dealing with cancer-related sexual health challenges, including premature menopause and fertility issues. For more information or to make an appointment, call the number above.

#### **Food Pantry Program**

646-888-8055

The food pantry program provides food to people in need during their cancer treatment. For more information, talk with your healthcare provider or call the number above.

#### **Integrative Medicine Service**

646-888-0800

Integrative Medicine Service offers many services to complement (go along with) traditional medical care, including music therapy, mind/body therapies, dance and movement therapy, yoga, and touch therapy.

#### MSK Library

library.mskcc.org

212-639-7439

You can visit our library website or speak with the library reference staff to find more information about your specific cancer type. You can also visit LibGuides on MSK's library website at libguides.mskcc.org

#### **Patient and Caregiver Education**

www.mskcc.org/pe

Visit the Patient and Caregiver Education website to search our virtual library. There you can find written educational resources, videos, and online programs.

#### Patient and Caregiver Peer Support Program

212-639-5007

You may find it comforting to speak with someone who has been through a treatment similar to yours. You can talk with a former MSK patient or caregiver through our Patient and Caregiver Peer Support Program. These conversations are confidential. They may take place in person or over the phone.

#### **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 if you have 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 Nursing Office**

212-639-6892

You may request private nurses or companions. Call for more information.

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

646-888-8106

At MSK, care doesn't end after active treatment. The RLAC Program is for patients and their families who have finished treatment. This program has many services, including seminars, workshops, support groups, counseling on life after treatment, and help with insurance and employment issues.

#### **Social Work**

212-639-7020

Social workers help patients, family, and friends deal with issues that are common for cancer patients. They provide individual counseling and support groups throughout the course of treatment and can help you communicate with children and other family members. Our social workers can also help refer you to community agencies and programs, as well as financial resources if you're eligible.

#### **Tobacco Treatment Program**

212-610-0507

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

#### **Virtual Programs**

www.mskcc.org/vp

MSK's Virtual Programs offer online education and support for patients and caregivers, even when you can't come to MSK in person. Through live, interactive sessions, you can learn about your diagnosis, what to expect during treatment, and how to prepare for the various stages of your cancer care. Sessions are confidential, free, and led by expert clinical staff. If you're interested in joining a Virtual Program, visit our website at www.mskcc.org/vp for more information.

For more online information, visit the Cancer Types section of www.mskcc.org

### External support services

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

Visit www.mskcc.org/pe/external\_support\_services for a list of these support services. You can also talk with an MSK social worker by calling 212-639-7020.

## **Educational Resources**

This section has the educational resources mentioned in this guide. These resources will help you get ready for your surgery and recover safely after surgery.

As you read through these resources, you can use space below to write down any questions you want to ask your healthcare provider.

Notes	

Notes	

## **About Your Recovery Tracker**

This information explains your Recovery Tracker and how to use it.

## What is the Recovery Tracker?

After your surgery, you may have some pain or other symptoms. To help us care for you, we'll send a group of questions to your MyMSK account. These questions are known as your Recovery Tracker. Your responses to these questions will help us understand how you're feeling after your surgery.

### How do I use it?



Please visit www.mskcc.org/pe/recovery\_tracker\_video to watch this video.

- You must be signed up for MyMSK. You can access MyMSK at my.mskcc.org. If you're not sure if you signed up for MyMSK or if you don't remember how to use it, ask your healthcare provider or call 646-227-2593 for help.
  - If you don't have a MyMSK account, you can visit my.mskcc.org, call 646-227-2593, or call your doctor's office for an enrollment ID to sign up. You can also watch our video *How to Enroll in MyMSK: Memorial Sloan Kettering's Patient Portal* (www.mskcc.org/pe/enroll\_mymsk).
- After you leave the hospital, we'll send questions to your MyMSK account every day for 5 to 10 days.
- Make sure to answer the questions in your recovery tracker every day before midnight (12:00 AM). After midnight, the questions will be removed and you'll get new questions the next day.

• Answering the questions in your Recovery Tracker will only take you 2 to 3 minutes to complete. You can have your caregiver help you fill them out.

## What happens to the information I enter?

- Your responses will be sent to your MSK healthcare team. Based on your responses, someone may contact you or you may be told to call your surgeon's office to provide more information.
- Your information is secure. It will be stored at Memorial Sloan Kettering (MSK) and only your healthcare team will see it.



If you need medical care right away, call 911 or go to your local emergency room.

## **Contact Information**

If you have a question or concern, call your surgeon's office from 9:00 AM to 5:00 PM Monday through Friday. After 5:00 PM, during the weekend, or on holidays, call 212-639-2000 and ask for the doctor on call for your surgeon.

For more resources, visit www.mskcc.org/pe to search our virtual library.

About Your Recovery Tracker - Last updated on November 23, 2020 All rights owned and reserved by Memorial Sloan Kettering Cancer Center



#### 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) 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.

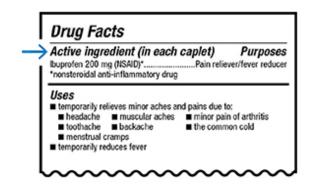


Figure 1. Active ingredients on an over-the-counter medicine label

#### **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).

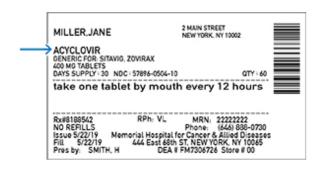


Figure 2. Active ingredients on a prescription medicine label

#### **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.

	Amount Per Serving	% Daily Value
itamin A (as retinyl acetate and 50% as beta-carotene)	5000 IU	100%
itamin C (as ascorbic acid)	60 mg	100%
itamin D (as cholecalciferol)	400 IU	100%
itamin E (as di-alpha tocopheryl acetate)	30 IU	100%
hiamin (as thiamin monoitrate)	1.5 mg	100%
iboflavin	1.7 mg	100%
liacin (as niacinamide)	20 mg	100%
tamin B <sub>e</sub> (as pyridoxine hydrocholride)	2.0 mg	100%
olate (as folic acid)	400 mcg	100%
itamin B <sub>12</sub> (as cyanocobalamin)	6 mcg	100%
iotin	30 mog	10%
antothenic Acid (as calcium pantothenate)	10 mg	100%

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> <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> <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> <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>	

<sup>\*</sup> 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			
• APAP	• AC	Acetaminop	
Acetamin	Acetam	Acetaminoph	

#### **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 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

### 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.aboutherbs.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.

#### Gingko (also known as Gingko 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 or read Integrative Medicine Therapies and Your Cancer Treatment (www.mskcc.org/pe/integrative\_therapies).

For more resources, visit www.mskcc.org/pe to search our virtual library.

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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.

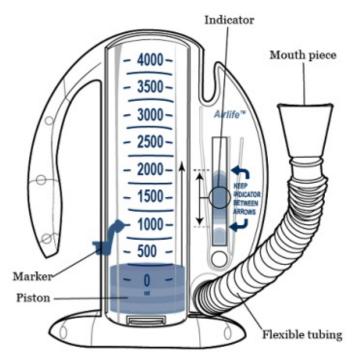


Figure 1. Parts of an incentive spirometer

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 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 to search our virtual library.

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