



PATIENT & CAREGIVER EDUCATION

# About Your Curettage, Cryotherapy, and Internal Fixation Surgery

This guide will help you get ready for your curettage, cryotherapy, and internal fixation surgery 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/curettage-cryotherapy-internal-fixation](http://www.msk.org/pe/curettage-cryotherapy-internal-fixation) to view this guide online.

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# About your curettage, cryotherapy, and internal fixation

## Curettage

Curettage is a procedure used to treat:

- Enchondromas (non-cancerous bone tumors found in cartilage)
- Bone cysts
- Low-grade lesions (areas of abnormal tissue)
- Metastatic disease (when cancer has spread beyond where it started) to the bone

Your surgeon will use a curette, an instrument that looks like a small ice cream scoop. This instrument has sharp edges that allows it to scrape out the diseased part of your bone.

## Cryotherapy

Cryotherapy (also called cryosurgery or cryoablation) is a procedure that may be used along with your curettage procedure. It's used to destroy any remaining diseased bone by freezing it with liquid nitrogen.

Your surgeon will be extremely careful to protect your healthy bone when they remove the diseased bone.

## Internal fixation

Internal fixation protects your healthy bone from becoming weak while you have these procedures. It also helps keep your bone in the right position while it's healing.

## **Types of internal fixation**

There are different types of internal fixation, including bone graft, bone cement, and fixation with metal hardware. Your surgeon may use one or more of these. They'll talk with you about what to expect.

### **Bone graft**

A bone graft can be taken from you (autograft) or from a donor (allograft).

- If you're having an autograft, your surgeon will take the bone graft from your iliac bone (a bone in the upper part of your hip). After your surgery, you'll have another incision (surgical cut) near the top part of your hip.
- If you're having an allograft, your surgeon will use sterilized bone chips that come in a jar. They may also use coral, which has many of the same properties as bone.

Your surgeon will talk with you about which kind of bone graft will work best for you.

### **Bone cement**

Bone cement is also called polymethylmethacrylate (PMMA). It is made of a powder and a liquid. When they're mixed together they form a hard substance (like cement). This substance can fill the space where your diseased bone was removed. Bone cement is radiopaque, which means your surgeon can see it on your x-rays.

### **Fixation with metal hardware**

Your surgeon may also keep your bone in place with metal hardware, such as an orthopedic screw or pin. This hardware will be inside your bone and only visible on an x-ray.

Your surgeon will only use metal hardware if they think your bone will need extra support while it heals. Your hardware may be left in for a long period of time or removed when your bone is fully healed.

# Before your curettage, cryotherapy, and internal fixation

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 any prescription medicines, including patches and creams. A prescription medicine is one you can only get with a prescription from a healthcare provider.
- I take any over-the-counter medicines, including patches and creams. An over-the-counter medicine is one you can buy without a prescription.
- I take any dietary supplements, such as herbs, vitamins, minerals, or natural or home remedies.

These are examples of medicines. There are others.

**Always be sure your healthcare providers know all the medicines and supplements 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 surgery to keep from having problems.

- Be honest with us about how much alcohol you drink.
- Try to stop drinking alcohol once your surgery is planned. Tell us 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 us if you cannot stop drinking.
- Ask us questions about drinking and surgery. We will keep all your medical information 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.

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

## **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.

## **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. Visit [www.msk.org/parking](http://www.msk.org/parking) for parking information and directions to all MSK locations.

You can eat and take your usual medicines the day of your 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 doctors 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 medicines 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 can't 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 for People With Cancer and Their Loved Ones*. You can find it at [www.msk.org/pe/advance\\_care\\_planning](http://www.msk.org/pe/advance_care_planning) or ask for a printed copy.
- 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.

## **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®**

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

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.

Visit [www.msk.org/parking](http://www.msk.org/parking) for parking information and directions to all MSK locations.

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

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



**Stop eating at midnight (12 a.m.) the night before your surgery. This includes hard candy and gum.**

If your healthcare provider told you to stop eating earlier than midnight, follow their instructions. Some people need to fast (not eat) for longer before their surgery.

# The day of your surgery

## Instructions for drinking

Between midnight (12 a.m.) and 2 hours before your arrival time, only drink the liquids on the list below. Do not eat or drink anything else. Stop drinking 2 hours before your arrival time.

- Water.
- Clear apple juice, clear grape juice, or clear cranberry juice.
- Gatorade or Powerade.
- Black coffee or plain tea. It's OK to add sugar. Do not add anything else.
  - Do not add any amount of any type of milk or creamer. This includes plant-based milks and creamers.
  - Do not add honey.
  - Do not add flavored syrup.

If you have diabetes, pay attention to the amount of sugar in these drinks. It will be easier to control your blood sugar levels if you include sugar-free, low-sugar, or no added sugar versions of these drinks.

It's helpful to stay hydrated before surgery, so drink if you are thirsty. Do not drink more than you need. You will get intravenous (IV) fluids during your surgery.



**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

- A pair of loose-fitting pants (such as sweatpants).
- Sneakers that lace up. You may have some swelling in your feet. Lace-up sneakers can fit over this swelling.
- Your breathing device for sleep apnea (such as your CPAP machine), if you have one.
- Your rescue inhaler (such as albuterol for asthma), if you have one.
- Your incentive spirometer, 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.

## 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 place an 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.

### **Marking your surgical site**

Along with asking your name and birth date, your healthcare providers may also ask the name of your doctor, what surgery you're having, and which side is being operated on. Your surgeon or another member of your surgical team will use a marker to initial the site on your body that will be operated on. This is to make sure all members of your surgical team are clear about the plan for your surgery.

### **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.

Your surgeon will clean your leg and make an incision over your affected bone. The length of the incision will depend on how much of your bone is affected. They'll curettage the damaged bone and send it to the Pathology Department to be checked. Then your surgeon will get your bone ready for the additional procedures.



# After your curettage, cryotherapy, and internal fixation

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 may have a Jackson-Pratt (JP) or ReliaVac® drainage tube near your incision. These drain fluid from around your incision. They'll be taken out when your incision stops draining. This is usually 2 to 3 days after your surgery.

## Moving to your hospital room

Most people stay in the PACU about the same amount of time they're in the operating room. After your stay in the PACU, a staff member will bring you to your hospital room.

## In your hospital room

The length of time you're in the hospital after your surgery depends on your recovery. Some people are discharged from the hospital after 1 to 3 days, while other people stay longer.

In your hospital room, you'll meet one of the nurses who will care for you during your stay. Your care team will teach you how to care for yourself while you're healing from your surgery.

To learn what you can do to stay safe and keep from falling while you're in the hospital, read *Call! Don't Fall!* You can ask for a printed copy or find it at [www.msk.org/pe/call\\_dont\\_fall](http://www.msk.org/pe/call_dont_fall)

## 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, if needed.

You'll start physical therapy the day after your surgery. This is a very important part of your recovery. Your surgeon and physical therapist will plan your therapy based on your needs. They'll help you:

- Build strength in your affected limb (the limb where your surgery was).
- Get in and out of bed.
- Move to your chair.
- Walk with your assistive device (walker, crutches, or cane), if your surgery was on one of your legs.
- Do the exercises in the “Exercises after your surgery” section of this guide.

## 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 at [www.msk.org/pe/incentive\\_spirometer](http://www.msk.org/pe/incentive_spirometer) or ask for a printed copy.
- Do coughing and deep breathing exercises. A member of your care team will teach you how.



## **Eating and drinking**

You'll gradually start following your usual diet again when you're ready. Your healthcare provider will give you more information.

Eating a balanced diet high in protein will help you heal after surgery. Your diet should include a healthy protein source at each meal, as well as fruits, vegetables, and whole grains. For more tips on increasing the calories and protein in your diet, read the *Eating Well During Your Cancer Treatment*. You can find it at [www.msk.org/pe/eating\\_cancer\\_treatment](http://www.msk.org/pe/eating_cancer_treatment) or ask for a printed copy.

If you have questions about your diet, ask to see a clinical dietitian nutritionist.

## **Your tubes, drains, and incisions**

You'll probably have some discharge and tenderness around your incision or around your drains. Your nurses will show and tell you what's normal and expected. They'll also help you start learning how to care for your drains, tubes, and incisions.

Your drainage tubes will be removed 2 to 3 days after your surgery. Removing them won't hurt, and you won't need anesthesia. Most people go home without any tubes or drains.

If you have staples in any of your incisions, they may be taken out before you leave the hospital. You'll go home with sutures (stitches) in your incision. Your sutures will be removed at your first appointment after surgery. This is usually 2 to 3 weeks after surgery.

## **Leaving the hospital**

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 at [www.msk.org/pe/avoid\\_falling](http://www.msk.org/pe/avoid_falling) 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 for 6 months or longer. This doesn't mean something is wrong.

Follow these guidelines to help manage your pain at home.

- Take your medicines 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.

## Swelling

You may have some swelling in your affected limb after your surgery. To help with this, raise your affected limb above your chest. You can do this by lying down and resting your legs on pillows or placing your arm on pillows so

the limb is higher than heart level. You can also ice the area of your incision with a padded ice pack for 20 minutes each hour.

If the swelling doesn't go down after 4 hours, call your doctor.

## **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.
- 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 a great type of exercise that can help prevent and manage constipation.
- Drink 8 to 10 (8-ounce) cups (2 liters) of liquids daily, if you can. Choose water, juices (such as prune juice), soups, and milkshakes. Limit 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. Unpeeled fruits and vegetables, whole grains, and cereals contain fiber. If you have an ostomy or recently had bowel surgery, ask your healthcare provider before changing your diet.
- Both over-the-counter and prescription medicines can treat constipation. Ask your healthcare provider before taking any medicine for constipation. This is very important 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 medicines for constipation are:

- Docusate sodium (Colace®). This is a stool softener (medicine that makes your bowel movements softer) that causes few side effects. You can use it to help prevent constipation. Do not take it with mineral oil.
- Polyethylene glycol (MiraLAX®). This is a laxative (medicine 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 medicines cause diarrhea (loose, watery bowel movements), stop taking them. You can start again if you need to.

For more information, read *Constipation*. You can find it at [www.msk.org/pe/constipation](http://www.msk.org/pe/constipation) or ask for a printed copy.

## Changing your dressing (bandage)

If your healthcare provider gave you other instructions (such as leaving your dressing in place until your post-op visit), follow their instructions.

If your healthcare provider covered your incision with a **regular dressing** (white gauze and tape):

- Don't remove or change your dressing for 2 days after your surgery. Call your healthcare provider if your dressing becomes full.
- After 2 days, remove your dressing. Replace it with clean, dry gauze.
- Change the gauze every day and whenever it gets wet or dirty.

If your healthcare provider covered your incision with a **Mepilex® dressing** (a tan dressing with a soft, squishy center):

- Don't remove or change your Mepilex dressing for 1 week after your surgery.
- After 1 week, remove your Mepilex dressing. Replace it with clean, dry gauze.
- Change the gauze every day and whenever it gets wet or dirty.

Look at your incision each time you change your gauze. It may look slightly red, swollen, or bruised. This is normal. If your incision is getting more red or swollen or if you notice drainage (liquid) or a bad smell coming from your incision, call your healthcare provider. These things are signs of an infection.

## **Caring for your incision**

- Don't get your incision wet until you see your healthcare provider at your follow-up appointment. You can sponge bathe, but make sure to cover your incision with a cast bag, clean garbage bag and tape, or plastic wrap and tape to keep it dry. Your healthcare provider will tell you when you can start washing your incision.
- Don't put lotions or creams on your incision unless your healthcare provider tells you to.
- If your incision is closed with sutures or staples, they'll probably be removed during your follow-up appointment.
- If your incision is covered with Steri-Strips™ (thin pieces of paper tape), leave them in place until they fall off or until your healthcare provider takes them off.

## Showering

You can shower after your sutures are removed, which is usually 2 to 3 weeks after your surgery. Until then, you can take sponge baths or shower with your incision covered with a plastic bag or a waterproof dressing (such as AquaGuard®). You can buy a waterproof dressing from your local pharmacy. Remember, it's important to keep your incisions dry.

After your sutures are removed and you start showering without a waterproof dressing, remove your bandages and use soap to gently wash your incision. Pat the area dry with a clean towel after showering. Leave your incision uncovered unless there's drainage. If you still have drainage, put a new bandage on your incision after your shower. Call your doctor if you have new drainage.

Don't place your incision completely underwater (such as to take tub baths, swim in a pool, or soak in a hot tub) until all your scabs are gone and your skin is fully healed.

## Physical activity and exercise

It's normal to have less energy than usual after your surgery. Recovery time is different for everyone. Increase your activities each day as much as you can. Always balance activity periods with rest periods. Rest is an important part of your recovery.

- If your surgery was on your leg, don't sit with your legs dangling for more than 1 hour at a time. For every hour you're sitting, standing, or walking, spend 1 hour lying down with your feet raised above the level of your heart. You can rest your feet on a pillow to do this.
- Keep doing the exercises in the "Exercises after your surgery" section until your doctor tells you it's OK to stop.

## Driving

Ask your healthcare provider when you can drive. Do not drive while you're taking pain medicine that may make you drowsy. 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

Don't travel by airplane until your healthcare provider says it's OK. Talk with your healthcare provider before taking any long trips after your surgery.

## 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 pain that doesn't get better after taking pain medicine.
- You have chills.
- You have shortness of breath (trouble breathing).
- You have bleeding that will not stop.
- There's redness, drainage, or swelling around your incisions.
- Your incisions smell bad.
- There's swelling in your legs that doesn't get better after you raise your legs for 4 hours.
- You have any problems you didn't expect.
- 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.

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# Exercises after your surgery

After your surgery, you'll need to do exercises to build strength in your affected limb. Your physical therapist will show you how to do each exercise. They'll also tell you when to start each one. You will not be able to do all these exercises right away. You'll slowly add exercises to your therapy during your hospital stay and when you go home.

## Exercise tips

- Dress comfortably. You should wear clothing that won't limit your movements. You can wear a hospital gown, pajamas, or athletic clothing.
- You can do these exercises while you're in bed. Support your head and shoulders on 1 or more pillows. Make sure you're comfortable.
- Breathe in through your nose and out through your mouth. Do the exercise movements when you breathe out.
- Don't hold your breath while doing any of these exercises. Count out loud during the exercises to keep your breaths evenly paced.
- Stop any exercise that causes you pain or discomfort and tell your physical therapist which exercises are hurting you. You can continue to do the other exercises.

## Exercises

**Do not do any of the exercises in this section without talking with your doctor and physical therapist. Your doctor or therapist may advise you to do additional exercises as well.**

## Ankle pumps

1. Lie on your back with your head and shoulders supported on pillows. You can also do this exercise while sitting.
2. Point your toes up toward your nose (see Figure 1). You can do this with both feet at the same time.
3. Then, point them toward the floor.
4. Repeat 10 times.

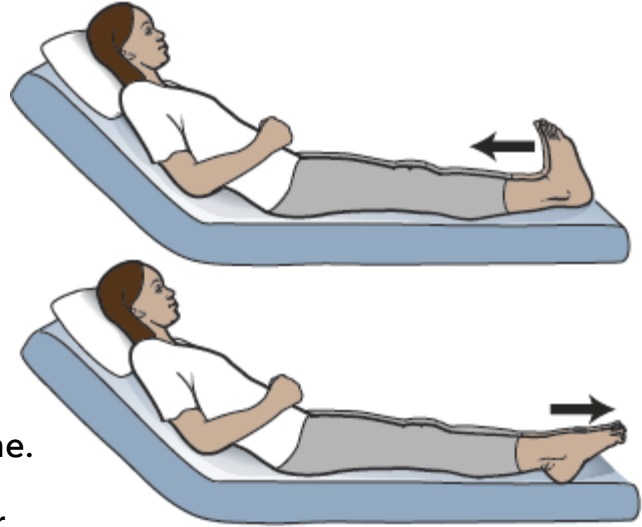


Figure 1. Ankle pumps

Do this exercise every hour you're awake.

## Quad sets

1. Lie on your back with your head and shoulders supported on pillows.
2. Straighten your legs as much as you can.
3. Push the backs of your knees down into the bed while tightening the muscles on the top of your thighs (see Figure 2).
4. Hold the position and count out loud to 5.
5. Relax.
6. Repeat 10 times.

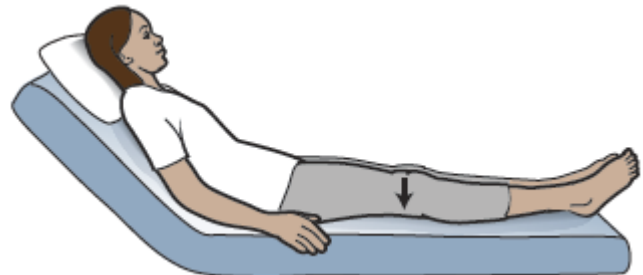


Figure 2. Quad sets

Do this exercise every hour you're awake.

## Glute sets

1. Lie on your back with your head and shoulders supported on pillows.
2. Straighten your legs as much as you can.
3. Squeeze your buttock muscles together tightly (see Figure 3).
4. Hold the position and count out loud to 5.
5. Relax your buttocks.
6. Repeat 10 times.

Do this exercise every hour you're awake.

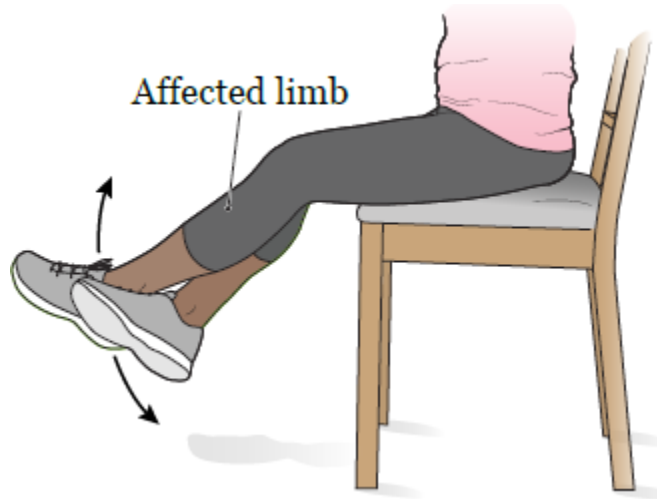


Figure 3. Glute sets

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# 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

332-699-7968

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 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))
- ***Advance Care Planning for Cancer Patients and Their Loved Ones*** ([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 Well During Your Cancer Treatment*** ([www.msk.org/pe/eating\\_cancer\\_treatment](http://www.msk.org/pe/eating_cancer_treatment))
- ***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\\_mymsk](http://www.msk.org/pe/enroll_mymsk))
- ***How to Use Your Incentive Spirometer*** ([www.msk.org/pe/incentive\\_spirometer](http://www.msk.org/pe/incentive_spirometer))
- ***Information for Family and Friends for the Day of Surgery*** ([www.msk.org/pe/info\\_family\\_friends](http://www.msk.org/pe/info_family_friends))
- ***Patient-Controlled Analgesia (PCA)*** ([www.msk.org/pe/pca](http://www.msk.org/pe/pca))
- ***Preventing an Infection in Your Bone or Joint Replacement Prosthesis*** ([www.msk.org/pe/preventing\\_infection\\_prosthesis](http://www.msk.org/pe/preventing_infection_prosthesis))
- ***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

# 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](http://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](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).

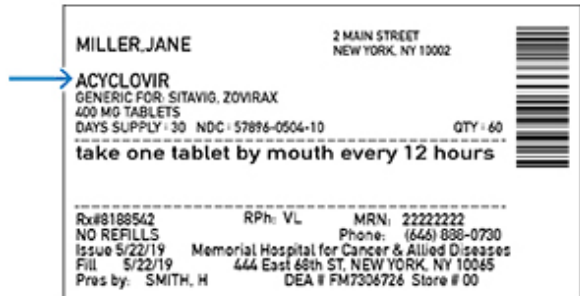


Figure 2. Active ingredients on a prescription medicine label

# 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.

	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)	90 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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# Preventing an Infection in Your Bone or Joint Replacement Prosthesis

This information will explain how to take antibiotics to prevent an infection in the area of your bone or joint replacement prosthesis.

## When to Take Antibiotics

An infection in your prosthesis can lead to serious health problems. To prevent an infection, you must take an antibiotic when you have a bacterial infection.

You'll also need to take antibiotics before having a procedure done if you'll be at risk of an infection or if you have a cut or injury. Taking antibiotics before a procedure to prevent an infection is called taking antibiotics prophylactically.

## Treating infections

If you get a bacterial infection anywhere in your body, including your throat, chest, bladder, or on your skin, let your healthcare provider know that you have a prosthesis and need antibiotics. It's important that you start the antibiotics as soon as possible. Your doctor will prescribe the antibiotic that best treats your infection.

If you get a bacterial infection, you should also call the surgeon who replaced your joint or bone.

## Taking antibiotics prophylactically

Some procedures may put you at risk for an infection that could spread to the area of your prosthesis. These include:

- Anything that may cause bleeding or a break in your skin, such as dental work, removal of a corn or callus, or injury when cutting your toenails. Unclean tools can cause infection anywhere if you break the skin.
- Procedures done on your bladder, such as a cystoscopy or catheterization.
- Procedures done on your bowel, such as a colonoscopy.
- A gynecologic procedure that may cause bleeding.

If you're going to have a procedure that has a risk of causing infection, you should take an antibiotic before the procedure. Tell your healthcare provider doing the procedure that you have a prosthesis and that you need to take an antibiotic before your procedure. You should also take an antibiotic if you have a cut or injury that causes bleeding.

If your healthcare provider isn't sure what to prescribe or if you have a cut or injury, call the surgeon who replaced your joint or bone. Take the antibiotics as prescribed. Usually, 1 dose is enough, but you may need to take more if you have bleeding after your procedure.

# Antibiotics for Dental Work

The chart below lists common antibiotics used for dental work. Your dentist, oral surgeon, or nurse may use other antibiotics depending on the procedure you're having. Follow their instructions.

Call your surgeon who replaced your joint if you don't get a prescription for one of these antibiotics.

Antibiotic	How to take it
Amoxicillin	By mouth, 1 hour before the procedure. Adults: 2 grams Children: 50 milligrams (mg)/kilograms (kg)
Ampicillin (If you can't take an oral antibiotic (antibiotic you take by mouth).)	A shot in the muscle (IM) or in the vein (IV) within 30 minutes of having the procedure. Adults: 2 grams Children: 50 mg/kg
Clindamycin (If you're allergic to penicillin.)	By mouth, 1 hour before the procedure. Adults: 800 mg or 600 mg Children: 20 mg/kg

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.

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