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About Your Surgery

This guide will help you prepare for your salivary gland surgery at Memorial Sloan Kettering (MSK), and help you understand what to expect during your recovery. Read through this guide at least once before your surgery and then use it as a reference in the days leading up to your surgery. Bring this guide with you every time you come to MSK, including the day of your surgery, so that you and your healthcare team can refer to it throughout your care.

Your Salivary Glands

Your salivary glands make saliva, which helps your body digest food and keeps your mouth moist. Most of your saliva comes from the parotid, submandibular, and sublingual glands (see Figure 1). There are also hundreds of smaller salivary glands in your mouth. They are located under the membranes that line your mouth and throat.

Parotid Glands

The parotid glands are the largest of all your salivary glands. They are located in front of your ears (see Figure 1). Your facial nerve runs through each parotid gland. This nerve controls the muscles in your face, which allow movements such as raising your eyebrows, closing your eyelids, and smiling. Most tumors found in the parotid gland are benign (not cancerous).

Submandibular Glands

The submandibular glands are the second largest of all your salivary glands. They are located below your mandible, or jawbone (see Figure 1). Most tumors found in the submandibular gland are benign.

Sublingual Glands

The sublingual glands are the smallest of all your salivary glands. They lie on either side of your tongue, in the floor of your mouth (see Figure 1). Most tumors found in the sublingual gland are benign. These tumors are rare.
Types of Surgery

The type of surgery you have for your salivary gland tumors depends on where the tumors are located. The different types of surgeries are described below. Your surgeon will tell you which surgery you are having.

Parotid Gland Surgery

Most salivary gland tumors are located in the parotid gland. There are 2 types of parotid gland tumors:

- A superficial parotid gland tumor develops in the part of the gland that lies over your facial nerve.
- A deep lobe parotid gland tumor develops in the part of the gland that lies under your facial nerve.

Surgery to treat parotid gland tumors is very precise. This is because your facial nerve needs to be protected during surgery. The goal is to remove the entire tumor without harming your facial nerve.

Your surgeon will use a nerve monitor to find your facial nerve. Once your facial nerve is located, your surgeon will make an incision (surgical cut) in the front of your ear, down into your neck. He or she will carefully separate your facial nerve and its branches from your parotid gland tumor. Your surgeon will carefully remove the parotid gland tumor and send it to the Pathology Department to see if it contains cancer cells. He or she will close your incision with sutures (stitches).

Submandibular Gland Surgery

Your surgeon will make an incision in your upper neck, along your jaw. He or she will remove the tumor through this incision and send it to the Pathology Department to see if it contains cancer cells.

Sublingual Gland Surgery

Sublingual gland tumors are rare. Your surgeon will tell you your options for treating this tumor.
The information in this section will help you prepare for your surgery. Read through this section when your surgery is scheduled and refer to it as your surgery date gets closer. It contains important information about what you need to do before your surgery. Write down any questions you have and be sure to ask your doctor or nurse.
Preparing for Your Surgery

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

About Drinking Alcohol

The amount of alcohol you drink can affect you during and after your surgery. It is important that you talk with your healthcare providers about your alcohol intake so that we can plan your care.

- Stopping alcohol suddenly can cause seizures, delirium, and death. If we know you are at risk for these complications, we can prescribe medications to help prevent them.
- If you drink alcohol regularly, you may be at risk for other complications during and after your surgery. These include bleeding, infections, heart problems, greater dependence on nursing care, and longer hospital stay.

Here are things you can do to prevent problems before your surgery:

- Be honest with your healthcare provider about how much alcohol you drink.
- Try to stop drinking alcohol once your surgery is planned. If you develop a headache, nausea, increased anxiety, or cannot sleep after you stop drinking, tell your doctor right away. These are early signs of alcohol withdrawal and can be treated.
- Tell your healthcare provider if you cannot stop drinking.
- Ask us any questions you have about drinking and surgery. As always, all of your treatment information will be kept confidential.

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. Some examples are heparin, warfarin (Coumadin®), clopidogrel (Plavix®), enoxaparin (Lovenox®), and tinzaparin (Innohep®). There are others, so be sure your doctor knows all the medications you’re taking.
- I take prescription medications.
- I take any over-the-counter medications, herbs, vitamins, minerals, or natural or home remedies.
- I have a pacemaker, automatic implantable cardioverter-defibrillator (AICD), or other heart device.
- I have sleep apnea.
- I have had a problem with anesthesia in the past.
- I have allergies, including to latex.
- I am not willing to receive a blood transfusion.
- I drink alcohol.
- I smoke.
- I use recreational drugs.

About Smoking

People who smoke can have breathing problems when they have surgery. Stopping even for a few days before surgery can help. If you smoke, your nurse will refer you to our Tobacco Treatment Program. You can also reach the program at 212-610-0507.
About Sleep Apnea

Sleep apnea is a common breathing disorder that causes a person to stop breathing for short periods while sleeping. The most common type is obstructive sleep apnea (OSA). This means that the airway becomes completely blocked during sleep, so no air can get through. OSA can cause serious problems when you have surgery. Please tell us if you have sleep apnea or if you think you might have it. If you use a breathing machine (such as a CPAP) for sleep apnea, bring it with you the day of your surgery.

Within 30 Days of Your Surgery

Presurgical Testing

Before your surgery, you will have an appointment for presurgical testing (PST). The date, time, and location of your PST appointment will be printed on the appointment reminder from your surgeon’s office.

You can eat and take your usual medications the day of your PST appointment. During your appointment, you will meet with a nurse practitioner who works closely with anesthesiology staff (doctors and specialized nurses who will be giving you medication to put you to sleep during your surgery). He or she will review your medical and surgical history with you. You will have tests, including an electrocardiogram (EKG) to check your heart rhythm, a chest x-ray, blood tests, and any other tests necessary to plan your care. Your nurse practitioner may also recommend you see other healthcare providers.

Your nurse practitioner will talk with you about which medications you should take the morning of your surgery. To help you remember, we’ve left space for you to write these medications down in “The Morning of Your Surgery” section of this guide.

- □ A list of all the medications you are taking, including patches and creams.
- □ Results of any tests done outside of MSK, such as a cardiac stress test, echocardiogram (echo), or carotid doppler study.
- □ The name(s) and telephone number(s) of your doctor(s).

Complete a Health Care Proxy Form

If you haven’t already completed a Health Care Proxy form, we recommend you complete one now. A health care proxy is a legal document that identifies the person who will speak for you if you are unable to communicate for yourself. The person you identify is called your health care agent. If you are interested in completing a Health Care Proxy form, talk with your nurse. If you have completed one already, or if you have any other advanced directive, bring it with you to your next appointment.
Exercise

Try to do aerobic exercise every day, such as walking at least 1 mile, swimming, or biking. If it is cold outside, use stairs in your home or go to a mall or shopping market. Walking will help your body get into its best condition for your surgery and make your recovery faster and easier.

Eat a Healthy Diet

You should eat a well-balanced, healthy diet before your surgery. If you need help with your diet talk to your doctor or nurse about meeting with a dietitian.

10 Days Before Your Surgery

Stop Taking Vitamin E

If you take vitamin E, stop taking it 10 days before your surgery, because it can cause bleeding. For more information, read Common Medications Containing Aspirin and Other Nonsteroidal Anti-inflammatory Drugs (NSAIDs), located in this section.

7 Days Before Your Surgery

Stop Taking Certain Medications

If you take aspirin, ask your surgeon whether you should continue. Aspirin and medications that contain aspirin can cause bleeding. For more information, read Common Medications Containing Aspirin and Other Nonsteroidal Anti-inflammatory Drugs (NSAIDs), located in this section.

Stop Taking Herbal Remedies and Supplements

Stop taking herbal remedies or supplements 7 days before your surgery. If you take a multivitamin, talk with your doctor or nurse about whether you should continue. For more information, please read Herbal Remedies and Cancer Treatment, located in this section.

Watch a Virtual Tour

This video will give you an idea of what to expect when you come to Memorial Sloan Kettering’s main hospital on the day of your surgery.

www.mskcc.org/pe/day-your-surgery
Days Before Your Surgery

Stop Taking Certain Medications

Stop taking nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (e.g., Advil®, Motrin®) and naproxen (e.g., Aleve®). These medications can cause bleeding. For more information, please read Common Medications Containing Aspirin and Other Nonsteroidal Anti-inflammatory Drugs (NSAIDs), located in this section.

Day Before Your Surgery

Note the Time of Your Surgery

A clerk from the Admitting Office will call you after 2:00 PM the day before your surgery. He or she will tell you what time you should arrive at the hospital for your surgery. If you are scheduled for surgery on a Monday, you will be called on the Friday before. If you do not receive a call by 7:00 PM, please call 212-639-5014.

Use this area to write in information when the clerk calls:

Date: ______________    Time: ______________

Both locations are at 1275 York Avenue between East 67th and East 68th streets.

- Surgical Day Hospital (SDH)
  M elevator to 2nd floor
- Presurgical Center (PSC)
  B elevator to 6th floor

Sleep

Go to bed early and get a full night’s sleep.

Instructions for eating and drinking before your surgery

- Do not eat anything after midnight the night before your surgery. This includes hard candy and gum.
- Between midnight and up until 2 hours before your scheduled arrival time, you may drink a total of 12 ounces of water (see figure).
- Starting 2 hours before your scheduled arrival time, do not eat or drink anything. This includes water.
The Morning of Your Surgery

Take Your Medications as Instructed

If your doctor or nurse practitioner instructed you to take certain medications the morning of your surgery, take only those medications with a sip of water. Depending on what medications you take and the surgery you’re having, this may be all, some, or none of your usual morning medications.

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose</th>
<th>Doctor/Nurse</th>
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Things to Remember

- Do not put on any lotions, creams, deodorants, makeup, powders, or perfumes.
- Do not wear any metal objects. Remove all jewelry, including body piercings. The equipment used during your surgery can cause burns if it touches metal.
- Leave valuables, such as credit cards, jewelry, or your checkbook at home.
- Before you are taken into the operating room, you will need to remove your eyeglasses, hearing aids, dentures, prosthetic device(s), wig, and religious articles, such as a rosary.
- If you wear contact lenses, wear your glasses instead.
What to Bring

- Only the money you may need for a newspaper, bus, taxi, or parking.
- Your portable music player, if you choose. However, someone will need to hold this item for you when you go into surgery.
- Your breathing machine for sleep apnea (such as your CPAP), if you have one.
- If you have a case for your personal items, such as eyeglasses, hearing aid(s), dentures, prosthetic device(s), wig, and religious articles such as a rosary, bring it with you.
- Your Health Care Proxy form, if you have completed one.
- This guide. Your healthcare team will use this guide to teach you how to care for yourself after your surgery.

Parking When You Arrive

Parking at MSK is available in the garage on East 66th Street between York and First Avenues. To reach the garage, turn onto East 66th Street from York Avenue. The garage is located about a quarter of a block in from York Avenue, on the right-hand (north) side of the street. There is a pedestrian tunnel that you can walk through that connects the garage to the hospital. If you have questions about prices, call 212-639-2338.

There are also other garages located on East 69th Street between First and Second Avenues, East 67th Street between York and First Avenues, and East 65th Street between First and Second Avenues.
Once You’re in the Hospital

You will be asked to state and spell your name and date of birth many times. This is for your safety. People with the same or similar names may be having surgery on the same day.

Get Dressed for Surgery

You will be given a hospital gown, robe, and nonskid socks.

Meet With Your Nurse

Your nurse will meet with you before your surgery. Tell him or her the dose of any medications (including patches and creams) you took after midnight and the time you took them.

Meet With Your Anesthesiologist

He or she will:

- Review your medical history with you.
- Talk with you about your comfort and safety during your surgery.
- Talk with you about the kind of anesthesia you will receive.
- Answer any questions you may have about your anesthesia.

Prepare for Surgery

Once your nurse has seen you, 1 or 2 visitors can keep you company as you wait for your surgery to begin. When it is time for your surgery, your visitor(s) will be shown to the waiting area. Your visitors should read Information for Family and Friends for the Day of Surgery located in this section.

You will walk into the operating room or you can be taken in on a stretcher. A member of the operating room team will help you onto the operating bed. Compression boots will be placed on your lower legs. These gently inflate and deflate to help circulation in your legs.

Your anesthesiologist will place an intravenous (IV) line into a vein, usually in your arm or hand. The IV line will be used to give you fluids and anesthesia (medication to make you sleep) during your surgery.
Common Medications Containing Aspirin and Other Nonsteroidal Anti-inflammatory Drugs (NSAIDs)

This information will help you identify medications that contain aspirin and other nonsteroidal anti-inflammatory drugs (NSAIDs). It’s important to stop these medications before many cancer treatments.

Aspirin, other NSAIDs (such as ibuprofen), and vitamin E can increase your risk of bleeding during cancer treatment. These medications affect your platelets, which are blood cells that clot to prevent bleeding.

Read the section “Examples of Medications” to see if your medications contain aspirin, other NSAIDs, or vitamin E.

If you take aspirin, medications that contain aspirin, other NSAIDs, or vitamin E, tell your doctor or nurse. They will tell you if you need to stop taking these medications before your treatment. You will also find instructions in the information about the treatment you’re having.

Before Your Surgery

If you’re having surgery, follow the instructions below.

- Stop taking medications that contain vitamin E 10 days before your surgery or as directed by your doctor.
- Stop taking medications that contain aspirin 7 days before your surgery or as directed by your doctor. If you take aspirin because you’ve had a problem with your heart or you’ve had a stroke, be sure to talk with your doctor.
before you stop taking it.

- Stop taking NSAIDs 48 hours before your surgery or as directed by your doctor.

**Before Your Radiology Procedure**

If you’re having a radiology procedure (including Interventional Radiology, Interventional Mammography, and General Radiology), follow the instructions below.

- Stop taking medications that contain vitamin E 10 days before your procedure, or as directed by your doctor.
- If your doctor tells you to stop taking aspirin, stop taking it 5 days before your procedure or as directed by your doctor. If you take aspirin because you’ve had a problem with your heart or you’ve had a stroke, be sure talk with your doctor before you stop taking it.
  - If you take low dose aspirin (81 mg), you may not need to stop it before your procedure. Your doctor will tell you if you should stop taking low dose aspirin.
- Stop taking NSAIDs 24 hours before your procedure or as directed by your doctor.

**Before and During Your Chemotherapy**

Chemotherapy can decrease your platelet count, which can increase your risk of bleeding. Whether you’re just starting chemotherapy or you’ve been receiving it, talk with your doctor or nurse before taking aspirin or NSAIDs.

**Examples of Medications**

Medications are often called by their brand name, which can make it hard to know their ingredients. To help you identify medications that contain aspirin, other NSAIDs, and vitamin E, please review the lists below.

These lists include the most common products, but there are others. Check with your healthcare provider if you aren’t sure. Always be sure your doctor knows all
the medications you’re taking, both prescription and over-the-counter.

**Common medications that contain aspirin**

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Common Medications Containing Aspirin</th>
<th>Common Medications Containing Aspirin</th>
<th>Common Medications Containing Aspirin</th>
<th>Common Medications Containing Aspirin</th>
<th>Common Medications Containing Aspirin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggrenox®</td>
<td>Bayer® (most formulations)</td>
<td>Equagesic Tablets</td>
<td>Isollyl®</td>
<td>Panasal®</td>
<td>Synalgos®-DC Capsules</td>
</tr>
<tr>
<td>Alka Seltzer®</td>
<td>BC® Powder and Cold Formulations</td>
<td>Equazin®</td>
<td>Lanorinal®</td>
<td>Percodan® Tablets</td>
<td>Tenol-Plus®</td>
</tr>
<tr>
<td>Anacin®</td>
<td>Bufferin® (most formulations)</td>
<td>Excedrin® Extra-Strength Analgesic Tablets and Caplets</td>
<td>Lortab® ASA Tablets</td>
<td>Persistin®</td>
<td>Trigesic®</td>
</tr>
<tr>
<td>Arthritis Pain Formula</td>
<td>Buffets II®</td>
<td>Excedrin® Migraine</td>
<td>Magnaprin®</td>
<td>Robaxisal® Tablets</td>
<td>Talwin® Compound</td>
</tr>
<tr>
<td>Arthritis Foundation Pain Reliever®</td>
<td>Buffex®</td>
<td>Fiorinal®</td>
<td>Marnal®</td>
<td>Roxiprin®</td>
<td>Vanquish® Analgesic Caplets</td>
</tr>
<tr>
<td>ASA Enseals®</td>
<td>Cama® Arthritis Pain Reliever</td>
<td>Fiorinal® (most formulations)</td>
<td>Micrainin®</td>
<td>Saleto®</td>
<td>Wesprin® Buffered</td>
</tr>
<tr>
<td>ASA Suppositories®</td>
<td>COPE®</td>
<td>Fiortal®</td>
<td>Momentum®</td>
<td>Salocol®</td>
<td>Zee-Seltzer®</td>
</tr>
<tr>
<td>Ascriptin® and Ascriptin A/D®</td>
<td>Dasin®</td>
<td>Gelpirin®</td>
<td>Norgesic Forte® (most formulations)</td>
<td>Sodol®</td>
<td>ZORprin®</td>
</tr>
<tr>
<td>Aspergum®</td>
<td>Easprin®</td>
<td>Genprin®</td>
<td>Norwich® Aspirin</td>
<td>Soma® Compound Tablets</td>
<td></td>
</tr>
<tr>
<td>Asprimox®</td>
<td>Ecotrin® (most formulations)</td>
<td>Gensan®</td>
<td>PAC® Analgesic Tablets</td>
<td>Soma® Compound with Codeine Tablets</td>
<td></td>
</tr>
<tr>
<td>Axotal®</td>
<td>Empirin® Aspirin (most formulations)</td>
<td>Heartline®</td>
<td>Orphengesic®</td>
<td>St. Joseph® Adult</td>
<td></td>
</tr>
</tbody>
</table>
### Common medications that are NSAIDs that don’t contain aspirin

<table>
<thead>
<tr>
<th>Advil®</th>
<th>Celecoxib</th>
<th>Flurbiprofen</th>
<th>Meclofenamate</th>
<th>Nalfon®</th>
<th>Ponstel®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advil Migraine®</td>
<td>Children’s Motrin®</td>
<td>Genpril®</td>
<td>Mefenamic Acid</td>
<td>Naproxen</td>
<td>Relafen®</td>
</tr>
<tr>
<td>Aleve®</td>
<td>Clinoril®</td>
<td>Ibuprofen</td>
<td>Meloxicam</td>
<td>Naprosyn®</td>
<td></td>
</tr>
<tr>
<td>Anaprox DS®</td>
<td>Daypro®</td>
<td>Indomethacin</td>
<td>Menadol®</td>
<td>Nuprin®</td>
<td>Saleto 200®</td>
</tr>
<tr>
<td>Ansaid®</td>
<td>Diclofenac</td>
<td>Indocin®</td>
<td>Midol®</td>
<td>Orudis®</td>
<td>Sulindac</td>
</tr>
<tr>
<td>Arthrotec®</td>
<td>Etodolac®</td>
<td>Ketoprofen</td>
<td>Mobic®</td>
<td>Oxaprozin</td>
<td>Toradol®</td>
</tr>
<tr>
<td>Bayer® Select Pain Relief Formula Caplets</td>
<td>Feldene®</td>
<td>Ketorolac</td>
<td>Motrin®</td>
<td>PediaCare Fever®</td>
<td>Voltaren®</td>
</tr>
<tr>
<td>Celebrex®</td>
<td>Fenoprofen</td>
<td>Lodine®</td>
<td>Nabumetone</td>
<td>Piroxicam</td>
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</tbody>
</table>

### Products with Vitamin E

Most multivitamins contain vitamin E. If you take a multivitamin be sure to check the label. The following products contain vitamin E:

<table>
<thead>
<tr>
<th>Amino-Opt-E</th>
<th>Aquavit</th>
<th>E-400 IU</th>
<th>E complex-600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquasol E</td>
<td>D’alpha E</td>
<td>E-1000 IU Softgels</td>
<td>Vita-Plus E</td>
</tr>
</tbody>
</table>

### About Acetaminophen

Acetaminophen (Tylenol®) is generally safe to take during your cancer treatment. It doesn’t affect platelets, so it won’t increase your chance of bleeding. However, talk with your doctor before taking acetaminophen if you’re getting chemotherapy.
The following common medications contain acetaminophen.

<table>
<thead>
<tr>
<th>Acephy®</th>
<th>Datril®</th>
<th>Lortab®</th>
<th>Roxicet®</th>
<th>Vicodin®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aceta® with Codeine</td>
<td>Di-Gesic®</td>
<td>Naldegesic®</td>
<td>Talacen®</td>
<td>Wygesic®</td>
</tr>
<tr>
<td>Acetaminophen with Codeine</td>
<td>Esgic®</td>
<td>Norco®</td>
<td>Tempra®</td>
<td>Zydone®</td>
</tr>
<tr>
<td>Aspirin-Free Anacin®</td>
<td>Excedrin P.M.®</td>
<td>Panadol®</td>
<td>Tylenol®</td>
<td></td>
</tr>
<tr>
<td>Arthritis Pain Formula® Aspirin-Free</td>
<td>Fiorcet®</td>
<td>Percocet®</td>
<td>Tylenol® with Codeine No. 3</td>
<td></td>
</tr>
<tr>
<td>Darvocet-N 100®</td>
<td>Lorcet®</td>
<td>Repan</td>
<td>Vanquish®</td>
<td></td>
</tr>
</tbody>
</table>

**Read the labels on all your medications**

Acetaminophen is safe when used as directed, but there is a limit to how much you can take in 1 day. It’s possible to take too much acetaminophen without knowing because it’s in many different medications.

Make sure to always read and follow the label on the product you are taking. Acetaminophen is a very common ingredient found in over-the-counter and prescription medications. It’s often an ingredient in pain relievers, fever reducers, sleep aids, and cough, cold, and allergy medications.

The full name acetaminophen isn’t always written out, so look for these common abbreviations, especially on prescription pain relievers:

<table>
<thead>
<tr>
<th>APAP</th>
<th>AC</th>
<th>Acetaminophen</th>
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<tbody>
<tr>
<td>Acetamin</td>
<td>Acetam</td>
<td>Acetaminoph</td>
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</table>

Do not take more than 1 medication that contains acetaminophen at a time without talking with a member of your healthcare team.
Herbal Remedies and Cancer Treatment

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

One week before you have surgery or start chemotherapy or radiation therapy, you must stop taking any herbal or botanical home remedies or other dietary supplements. This is because they can:

- Interact with your other medications.
- Increase or lower your blood pressure.
- Thin your blood and increase your risk of bleeding.
- Make radiation therapy less effective.
- Increase the effects of sedation or anesthesia (medications to make you sleepy).

You can continue to use herbs in your food and drinks, such as spices in cooking, but you must stop taking them in supplemental form before your treatment. Herbal supplements are stronger than the herbs you would use in cooking.

Common Herbal Supplements and Their Effects

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

Echinacea

- Can cause an allergic reaction, such as a rash or difficulty breathing.
- Can lower the effects of medications used to weaken the immune system.
Garlic

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

Gingko (also known as *Gingko biloba*)

- Can increase your risk of bleeding.

Ginseng

- Can lower the effects of sedation or anesthesia.
- Can increase your risk of bleeding.
- Can lower your blood glucose (sugar) level.

Turmeric

- Can make chemotherapy less effective.

St. John’s Wort

- Can interact with medications given during surgery.
- Can make your skin more sensitive to radiation or laser treatment.

Valerian

- Can increase the effects of anesthesia or sedation.

Herbal formulas

- Herbal formulas contain different herbs. We don’t know their side effects. You must also stop taking these products 1 week before treatment. Do not start taking herbal formulas again until your doctor tells you it’s safe.

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

For more information about herbs and botanicals, visit the Memorial Sloan Kettering (MSK) Integrative Medicine Service website at [www.aboutherbs.com](http://www.aboutherbs.com).
Information for Family and Friends for the Day of Surgery

This information explains what to expect on the day your friend or family member is having surgery at Memorial Sloan Kettering’s (MSK) main hospital.

Before the Surgery

After arriving at the hospital, the patient will be asked to provide contact information for the person who will be meeting with the surgeon after the surgery. This is the same person who will get updates from the nurse liaison during the surgery. If the patient is having an outpatient procedure, they will also be asked to provide contact information for the person who will be taking them home.

Once the patient is checked in, they will go to the Presurgical Center (PSC) to be examined before surgery. Sometimes, they may need to wait before they are admitted to the PSC.

In the PSC, the nurse will do an exam. One person can come along to the PSC, but other visitors should wait in the waiting area. If the patient wants, other visitors may join them when the nurse has finished the exam.

When the operating room (OR) is ready, a member of the surgical team will come to escort the patient into the OR. They will prepare the patient for surgery, which can take 15 to 90 minutes. Then, the surgery will begin.

Please remember the following:

- **Do not bring food or drinks to the waiting area.** Patients are not allowed to eat or drink before their surgery or procedure.

- Our patients are at high risk for infection. Please do not visit if you have any cold or flu symptoms (fever, sneezing, sniffles, or a cough). We may ask you...
to wear a mask if there are any concerns about your health.

- If the patient brought any valuables, such as a cell phone, iPod, or iPad, please keep them safe for them during surgery.

- Sometimes, surgeries may be delayed. We make every effort to tell you when this happens.

**During the Surgery**

After the patient is taken to the OR, please wait in the main lobby on the 1st floor, where you will be updated by the nurse liaison. While you’re waiting, here are some things you can do:

- Food and drinks are available in the cafeteria and gift shop. You can also bring your own food and eat it in the cafeteria.

- The coat-check room is located at the bottom of the escalator on the ground level. It’s open Monday through Friday from 11:00 am to 4:00 pm.

- Wireless Internet access is available in most areas of the hospital. The wifi network name is MSK_guest. You can also use the computers in the room off the main lobby.

- Please be courteous and mindful of others while using your cell phone. Use the designated area to accept and make calls on your cell phone. It may be useful to bring your phone charger to the hospital.

- The Mary French Rockefeller All Faith Chapel is an interfaith chapel located in room M106 near the main lobby on the 1st floor. It’s open at all times for meditation and prayer.

- The Patient Recreation Pavilion is open daily from 9:00 am to 8:00 pm for patients and their visitors. Children are allowed in the pavilion as long as they are supervised by an adult. The pavilion has arts and crafts, a library, an outdoor terrace, and scheduled entertainment events. To get to the pavilion, take the M elevators to the 15th floor.

**Surgery updates**

A nurse liaison will keep you updated on the progress of surgery. They will:

- Give you information about the patient.
• Prepare you for your meeting with the surgeon.

• Arrange for you to visit the patient in the Post Anesthesia Care Unit (PACU).

To contact the nurse liaison:

• From inside the hospital, use a hospital courtesy phone. Dial 2000 and ask for beeper 9000. Please be patient, as this can take up to 2 minutes.


• Ask the information desk staff to contact the nurse liaison for you.

After the Surgery

Meeting with the surgeon

When the patient’s surgery is completed, we will call you and ask you to return to the concierge desk to tell you where to go to meet with the surgeon.

After you have met with the surgeon, return to the concierge desk and tell them that you have finished your consultation.

Visiting the patient in the PACU

After surgery, the patient will be taken to the PACU. It can take up to 90 minutes before the patient is ready to have visitors. You can use this time to take a walk or just relax in the waiting area until the patient is ready to see you.

When the patient is able to have visitors, a staff member will take you to the PACU for one brief visit. No one is allowed to stay overnight with the patient in the PACU, except for caregivers of pediatric patients.

Please follow these guidelines before your visit:

• Silence your cell phone.

• Apply an alcohol-based hand sanitizer (such as Purell®) before entering. There are hand sanitizer stations located throughout the hospital.

• Do not bring food or flowers into the PACU.

Please remember that only a limited number of visitors can go into the PACU. This is to keep the area quiet and allow the patients to rest and receive care.
While visiting in the PACU

- Speak quietly.
- Respect other patients’ privacy by staying at the bedside of your friend or family member.
- If any PACU patient needs special nursing attention, we may ask you to leave or to delay your visit.

The nurse will update you with the plan of care for the patient, such as whether the patient is staying overnight and when they will be moved to an inpatient room. If the patient is staying overnight, you may visit them again in the PACU. If the patient is going home the same day, a caregiver must take them home.

After your visit, a staff member will escort you back from the PACU.

We will give you a card with the PACU phone number. Please choose one person to call for updates.
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 will learn how to safely recover from your surgery. Write down any questions you have and be sure to ask your doctor or nurse.
What to Expect

When you wake up after your surgery, you will be taken to the Post Anesthesia Recovery Unit (PACU). You will stay there until you are awake and your pain is under control. Most people return to their room after a few hours in the PACU, but some will need to stay in the PACU overnight for observation.

You will receive oxygen through a thin tube called a nasal cannula that rests below your nose. A nurse will be monitoring your body temperature, pulse, blood pressure, and oxygen levels.

You may have one or more of the following:

- Drainage tubes to help drain fluid from your surgical wound.
- A facemask and humidifier to keep your airway moist.

Your visitors can see you briefly in the PACU, usually within 90 minutes after you arrive there. A member of the nursing staff will explain the guidelines to them. After your stay in the PACU, you will be taken to your hospital room in the inpatient unit. There, your nurse will tell you how to recover from your surgery. Below are examples of ways you can help yourself recover safely.

- It is important to walk around after surgery. Walking every 2 hours is a good goal. This will help prevent blood clots in your legs.
- Use your incentive spirometer. This will help your lungs expand, which prevents pneumonia. For more information, please read *How to Use Your Incentive Spirometer* located in this section.

**Facial Changes**

You may have some weakness in your facial muscles. This is because your facial nerve was moved during your surgery. Unfortunately, we cannot prevent this. This weakness is usually minimal and gets better over time. It can take weeks or months for your facial muscles to recover. If you have facial weakness, your nurse will show you how to do facial exercise that may speed up your recovery.

You may have some lower lip weakness, which may affect your smile. This may be permanent on your affected side (the side where your surgery took place).

You may not be able to fully close your eye on your affected side. You will be given ointment and eye drops to protect your eye.

You may have some numbness of the earlobe on your affected side. This may be permanent.
Commonly Asked Questions: During Your Hospital Stay

Will I have pain after my surgery?
People have very little pain after this surgery. Most people will have numbness, but it goes away with time. Your doctor and nurse will ask you about your pain often and give you medication as needed. If your pain is not relieved, tell your doctor or nurse. You will be given a prescription for pain medication before you leave the hospital. Pain medication may cause constipation (having fewer bowel movements than what is normal for you).

How can I prevent constipation?
- Go to the bathroom at the same time every day. Your body will get used to going at that time.
- If you feel the urge to go, do not put it off. Try to use the bathroom 5 to 15 minutes after meals.
- After breakfast is a good time to move your bowels because the reflexes in your colon are strongest then.
- Exercise if you can; walking is an excellent form of exercise.
- Drink 8 (8-ounce) glasses (2 liters) of liquids daily, if you can. Drink water, juices, soups, ice cream shakes, and other drinks that do not have caffeine. Beverages with caffeine, such as coffee and soda, pull fluid out of the 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 doctor or nurse before making any changes in your diet.
- Both over-the-counter and prescription medications are available to treat constipation. Start with 1 of the following over-the-counter medications first:
  - Docusate sodium (Colace®) 100 mg. Take _____ capsules _____ times a day. This is a stool softener that causes few side effects. Do not take it with mineral oil.
  - Polyethylene glycol (MiraLAX®) 17 grams daily. Senna (Senokot®) 2 tablets at bedtime. This is a stimulant laxative, which can cause cramping.
- If you haven’t had a bowel movement in 2 days, call your doctor or nurse.

Will I be able to eat?
Yes, you will be on a mechanical soft diet right after surgery. A mechanical soft diet is made up of foods that require less chewing than in a regular diet. Chopped, ground, and puréed foods are included, as well as foods that break apart easily without a knife. Your diet will advance as you heal.

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 amount of calories and protein in your diet, ask your nurse for the resource Eating Well During and After Your Cancer Treatment. If you have questions about your diet, ask to see a dietitian.
Will I be able to make saliva?
Yes. Salivary gland surgery will not affect your saliva production.

How long will I be in the hospital?
Most people are in the hospital for 1 to 4 days after having salivary gland surgery. The length of your stay will depend on the exact surgery that is done.

Commonly Asked Questions: After You Leave the Hospital

Will I have pain when I am home?
The length of time each person has pain or discomfort varies. You may still have some pain when you go home and will probably be taking pain medication. Follow the guidelines below.

- Take your medications as directed and as needed.
- Call your doctor if the medication prescribed for you doesn't relieve your pain.
- Do not drive or drink alcohol while you are taking prescription pain medication.
- As your incision heals, you will have less pain and need less pain medication. A mild pain reliever such as acetaminophen (Tylenol) or ibuprofen (Advil) will relieve aches and discomfort. However, large quantities of acetaminophen may be harmful to your liver. Do not take more acetaminophen than the amount directed on the bottle or as instructed by your doctor or nurse.
- Pain medication should help you as you resume your normal activities. Take enough medication to do your exercises comfortably. Pain medication is most effective 30 to 45 minutes after taking it.
- Keep track of when you take your pain medication. Taking it when your pain first begins is more effective than waiting for the pain to get worse.

Can I shower?
Yes, taking a warm shower is relaxing and can help decrease muscle aches. Use soap when you shower and gently wash your incision. Pat the areas dry with a towel after showering, and leave your incision uncovered (unless there is drainage). Call your doctor if you see any redness or drainage from your incision.

When will my sutures be removed?
Your sutures will be removed 7 to 10 days after your surgery, or at your first follow-up visit.
**How do I care for my incision?**

The location of your incision will depend on the type of surgery you had. It is normal to have numbness of the skin below the incision because some of the nerves were cut; this sensation will lessen over time.

- By the time you are ready to leave the hospital, your surgical incision will have begun to heal.
- You and your caregiver should look at your incision with your nurse before you leave the hospital so you know what it looks like.
- If any fluid is draining from your incision, you should write down the amount and color. Call your doctor’s office and speak with the nurse about any drainage from your incision.

Change your bandages at least once a day and more often if they become wet with drainage. When there is no longer any drainage coming from your incision, they can be left uncovered.

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

If you go home with glue over your sutures, it will also loosen and peel off, similarly to the Steri-Strips.

**When is it safe for me to drive?**

You may resume driving after your first follow-up visit, unless otherwise directed by your surgeon.

**What exercises can I do?**

Exercise will help you gain strength and feel better. Walking and stair climbing are excellent forms of exercise. Gradually increase the distance you walk. Climb stairs slowly, resting or stopping as needed. Ask your doctor or nurse before starting more strenuous exercises.

**When can I lift heavy objects?**

Check with your doctor before you do any heavy lifting. Normally, you should not lift anything heavier than 10 pounds (4.5 kilograms) for at least 2 weeks. Ask your doctor how long you should avoid heavy lifting.

**When is my first appointment after my surgery?**

Your first appointment after surgery will be in 7 to 10 days after you leave the hospital. Your nurse will give you instructions on how to make this appointment, including the phone number to call.

**When will I get my test results?**

Test results are usually ready in 1 week, but can take longer depending on the tests that will be done. Based on the results, you may need further treatment. Your doctor will discuss the results with you during your first follow-up appointment after your surgery.
**How can I cope with my 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 cannot control some of these feelings. If this happens, it’s a good idea to seek emotional support.

The first step in coping is to talk about how you feel. Family and friends can help. Your nurse, doctor, and social worker can reassure, support, and guide you. It is always a good idea to let these professionals know how you, your family, and your friends are feeling emotionally. Many resources are available to patients and their families. Whether you are in the hospital or at home, the nurses, doctors, and social workers are here to help you and your family and friends handle the emotional aspects of your illness.

**What if I have other questions?**

If you have any questions or concerns, please talk with your doctor or nurse. You can reach them Monday through Friday from 9:00 AM to 5:00 PM at the numbers listed below.

Doctor: ___________________________ Telephone: ___________________________

Nurse: ___________________________ Telephone: ___________________________

After 5:00 PM, during the weekend, and on holidays, call 212-639-2000 and ask for the doctor on call for your doctor.

**Call your surgeon immediately if you have:**

- A temperature of 101°F (38.3°C) or higher
- Increased discomfort, redness, or swelling near your incision
- Skin around your incision that is hot and or hard to the touch
- Discharge from your incision
How to Use Your Incentive Spirometer

This information will help you learn how to use your incentive spirometer.

About Your Incentive Spirometer

An incentive spirometer is a device that will expand your lungs by helping you to breathe more deeply and fully. The parts of your incentive spirometer are labeled in Figure 1.

Use your incentive spirometer after your surgery and do your deep breathing and coughing exercises. This will help keep your lungs active throughout your
recovery and prevent complications such as pneumonia.

How To Use Your Incentive Spirometer

Here is a video demonstrating how to use your incentive spirometer:

Please visit mskcc.org/pe/incentive_spirometer to watch this video.

Setting up your incentive spirometer

The first time you use your incentive spirometer, you will need to take the flexible tubing with the mouthpiece out of the bag. Stretch out the tubing and connect it to the outlet on the right side of the base (see Figure 1). The mouthpiece will be attached to the other end of the tubing.

Using your incentive spirometer

When you are using your incentive spirometer, make sure to breathe through your mouth. If you breathe through your nose the incentive spirometer will not work properly. You can plug your nose if you have trouble.

If you feel dizzy at any time, stop and rest. Try again at a later time.

To use your incentive spirometer, follow the steps below.

1. Sit upright in a chair or in bed. Hold the incentive spirometer at eye level.
   - If you had surgery on your chest or abdomen (belly), hug or hold a pillow to help splint or brace your incision (surgical cut) while you’re using the incentive spirometer. This will help decrease pain at your incision.

2. Put the mouthpiece in your mouth and close your lips tightly around it. Slowly breathe out (exhale) completely.

3. Breathe in (inhale) slowly through your mouth as deeply as you can. As you take the breath, you will see the piston rise inside the large column. While the piston rises, the indicator on the right should move upwards. It should stay in between the 2 arrows (see Figure 1).

4. Try to get the piston as high as you can, while keeping the indicator
between the arrows.

○ If the indicator does not stay between the arrows, you are breathing either too fast or too slow.

5. When you get it as high as you can, hold your breath for 10 seconds, or as long as possible. While you’re holding your breath, the piston will slowly fall to the base of the spirometer.

6. Once the piston reaches the bottom of the spirometer, breathe out slowly through your mouth. Rest for a few seconds.

7. Repeat 10 times. Try to get the piston to the same level with each breath.

8. After each set of 10 breaths, try to cough, holding a pillow over your incision, as needed. Coughing will help loosen or clear any mucus in your lungs.

Repeat these steps every hour that you are awake.

Cover the mouthpiece of the incentive spirometer when you are not using it.
Eating Well During and After Your Cancer Treatment

This information will help you maintain your nutrition during and after your cancer treatment.

Good nutrition is very important for people with cancer. There may be some nutritional changes you can make now that will help you during treatment. Start by eating a healthy diet. This can make you stronger, help you maintain your weight, and help you fight infection. It may even help with the side effects of treatment.

How Treatment Can Affect Your Eating

Surgery
If your weight is below normal, you may need to gain weight before your surgery. In this resource, you will find suggestions for how to eat more calories and protein. This can help you put on weight before surgery and help you heal afterward.

If you’re having mouth, throat, or stomach surgery, it can be hard for you to eat after your surgery. You may need to get nutrition in other ways, such as intravenously (through a vein), through a tube in your nose, or through a tube in your stomach or the upper part of your intestine.

Radiation
Radiation treatment to the head and neck can cause trouble swallowing, taste changes, dry mouth, or soreness in the mouth or throat. Treatment to the chest can cause you to have trouble swallowing. Treatment to the stomach, abdominal (belly) area, or pelvis can cause nausea and vomiting, diarrhea, cramps, and bloating.
Chemotherapy
Many chemotherapy medications can affect your digestive system. They can cause nausea and vomiting, decreased appetite, diarrhea, constipation, weight gain or loss, and changes in the way you taste or smell food.

Immunotherapy
Immunotherapy stimulates your body’s immune system to fight cancer cells. Side effects include:

- Nausea and vomiting
- Diarrhea
- Sore mouth
- Dry mouth
- Weight loss
- Changes in the taste of food
- Muscle aches
- Fatigue (feeling unusually tired)
- Fever

Hormonal therapy
Hormonal therapy uses medications that stop your body from making some hormones or change the way they work. Side effects include changes in appetite, water retention, weight gain, and nausea and vomiting.

General Nutritional Guidelines
Vitamin and mineral supplements
You can get all of your daily recommended nutrients from a well-balanced diet. If your diet is lacking, taking a low-dose multivitamin and mineral supplement can help.

Some people take large amounts of antioxidants, herbs, or extra vitamins and minerals because they think it will help cure their cancer. This hasn’t been shown to help in the fight against cancer. During some kinds of cancer
treatments, this can actually harm you. If you’re thinking about taking any vitamin, mineral or herbal supplements, talk with your doctor first. A dietitian or pharmacist can also answer your questions.

**Alternative and complementary therapies**

You may have read or heard about alternative therapies like following an alternative diet or taking supplements. Sometimes, these are used in place of conventional treatment from an oncologist (a doctor who specializes in cancer). The safety and effectiveness of many of these treatments have not been confirmed. We do know that some aren’t safe. Others can interfere with your chemotherapy or radiation therapy. **Talk with your doctor or nurse before you start any of these treatments.** They could make your treatment less effective and cause harm.

Complementary therapies can help people cope with some of the symptoms of cancer and the side effects of treatment, such as nausea, vomiting, and fatigue. They can also help reduce stress and promote a feeling of well-being. They don’t cause any harm. Complementary therapies include:

- Reflexology
- Meditation
- Massage
- Music therapy
- Yoga
- T’ai Chi
- Acupuncture
- Reiki

MSK’s Integrative Medicine Service offers many types of complementary therapies, including individual therapies and group classes and workshops. Visit [www.mskcc.org/integrativemedicine](http://www.mskcc.org/integrativemedicine) or ask your nurse for more information.
Food safety

During cancer treatment, your body has a hard time fighting off infection. It’s more important than ever to make sure that the foods you’re eating are safe. This will reduce your risk for foodborne illnesses and other infections. Below are 4 simple steps for food safety.

Wash your hands and surfaces often

- Keep an area of your kitchen clean for preparing and eating food.
- Use paper towels or clean cloths instead of sponges to clean kitchen surfaces.
- Use an antibacterial cleaning spray to clean surfaces. Look for products that have bleach or ammonia, such as Lysol® Food Surface Sanitizer or Clorox® Clean-Up Cleaner.
- Before and after preparing food, wash your hands well with soap and warm water for 15 to 20 seconds.
- Wash your cutting boards, dishes, and utensils with soap and hot water before preparing each food item and before moving on to the next food item.
- Wash all fruits and vegetables well before eating, even if you’re going to peel off the skin.

Separate raw foods from other foods

- Separate raw foods (such as raw meat, poultry, and fish) from other foods in your grocery shopping cart, grocery bags, and in your refrigerator.
- Use 1 cutting board for fresh produce and a separate one for raw meat, poultry, and fish.

Cook foods to proper temperatures

- Don’t eat foods that have raw or undercooked eggs, meat, poultry, or fish.
- Use a thermometer to measure the internal temperature of cooked foods. Measure the temperature at the center of the thickest part of the food. Make sure that meat, poultry, fish, egg dishes, and casseroles are cooked to the internal temperature shown in the chart below:
<table>
<thead>
<tr>
<th>Food Item</th>
<th>Internal Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>145°F (62.8°C)</td>
</tr>
<tr>
<td>Beef, pork and lamb steaks, chops and roasts</td>
<td>145°F (62.8°C)</td>
</tr>
<tr>
<td>Egg dishes</td>
<td>160°F (71.1°C)</td>
</tr>
<tr>
<td>Ground beef</td>
<td>160°F (71.1°C)</td>
</tr>
<tr>
<td>Chicken breast</td>
<td>165°F (73.9°C)</td>
</tr>
<tr>
<td>Whole poultry (such as chicken and turkey)</td>
<td>165°F (73.9°C)</td>
</tr>
<tr>
<td>Ground poultry</td>
<td>165°F (73.9°C)</td>
</tr>
<tr>
<td>Leftovers and casseroles</td>
<td>165°F (73.9°C)</td>
</tr>
</tbody>
</table>

*Source: US Department of Agriculture (USDA)*

Refrigerate promptly

- Refrigerate or freeze meat, poultry, eggs and other perishables as soon as you get them home from the store.
- Keep a constant refrigerator temperature of 40°F (4.4°C) or below. The freezer temperature should be 0°F (-17.8°C) or below.
- Thaw foods in the refrigerator. Don’t leave them out to thaw at room temperature.
- After cooking, cool foods in the refrigerator. Don’t cool them at room temperature.

If your immune system gets weaker, your doctor may ask you to follow stricter guidelines than those above. You may need to stop eating most raw or uncooked fruits and vegetables, cold cuts and processed meats, raw honey, and unpasteurized products.

Calories and Protein

The suggestions in this resource may be different from the general nutrition guidelines you may already know. You may be told to add more of a certain food to increase your intake of calories and protein or to decrease your discomfort with eating. Your dietitian can help you find an eating plan that works best for you.
**Tips for getting the most from your meals**

Large meals can seem overwhelming or unappealing. This can happen when you have a decreased appetite or early satiety (feel full shortly after you start eating). The suggestions below can help you get enough calories:

- Eat small meals 6 to 8 times a day instead of 3 main meals.
- Serve smaller food portions on salad plates instead of dinner plates.
- Drink hot chocolate, fruit juices, and nectars that are high in calories.
- Avoid low-calorie drinks, such as water, coffee, tea, and diet drinks. Make Double Milk and milkshakes using the recipes in the “Recipes” section.
- Have your favorite snack foods available at home and at work.
- Eat your favorite foods at any time of the day. For example, eat breakfast foods such as pancakes or omelets for lunch or dinner.
- Include different colors and textures of foods in your meals to make them more appealing.
- Make dining a good experience by eating your meals in a pleasant, relaxing setting with family or friends.
- Smells, such as bread baking or bacon frying, may help boost your appetite.

**Tips for adding more protein to your diet**

Your body needs a balance of calories and protein to function at its best. Your doctor or dietitian may tell you to temporarily increase the amount of protein in your diet. If you recently had surgery or have wounds, eating more protein will help you heal. The suggestions below will help you increase the amount of protein in your diet:

- Eat foods rich in protein, such as chicken, fish, pork, beef, lamb, eggs, milk, cheese, beans, and tofu.
- Drink Double Milk (see the “Recipes” section) and use it in recipes that call for milk or water. You can use it in instant pudding, cocoa, omelets, and pancake mixes.
- Use Double Milk or Ensure®-type supplements in hot or cold cereals.
- Add cheese and diced, cooked meats to your omelets.
• Add powdered milk to creamy soups, mashed potatoes, milkshakes, and casseroles.

• Snack on cheese or nut butters (such as peanut butter, cashew butter, and almond butter) with crackers.

• Spread nut butters on apples, bananas, or celery.

• Try apple slices with cheese wedges and honey drizzled on top.

• Blend a nut butter into your chocolate or vanilla shakes.

• Snack on roasted nuts and sunflower, pumpkin, or chia seeds.

• Try hummus with pita bread.

• Add cooked meats to soups, casseroles, salads, and omelets.

• Add wheat germ or ground flax seeds to cereals, casseroles, yogurt, and meat spreads.

• Eat desserts that are made with eggs. These include angel food cake, puddings, custards, and cheesecakes.

• Add grated cheese to sauces, vegetables, and soups. You can also add it to baked or mashed potatoes, casseroles, and salads.

• Melt cheese on hamburgers and breaded cutlets.

• Add chickpeas, kidney beans, tofu, hard-boiled eggs, nuts, and cooked meats or fish to your salads.

**Tips for adding more calories to your diet**

The suggestions below can help you to eat more calories. They may seem to go against what you read and hear about healthy eating. However, while you’re healing, it’s more important that you get enough calories than eat only healthy foods.

• Don’t eat foods that are fat-free or reduced in fat. Avoid food and drink labels that say “low-fat,” “non-fat,” or “diet.” For example, use whole milk instead of skim.

• Snack on dried fruits, nuts, or dried seeds. Add them to hot cereals, ice cream, or salads.

• Drink fruit nectars or fruit shakes.
• Add butter, margarine, or oils to potatoes, rice, and pasta. Also add them to cooked vegetables, sandwiches, toast, and hot cereals.

• Add cream cheese to toast or bagels or use it as a spread on vegetables.

• Spread cream cheese and jam or peanut butter and jelly on crackers.

• Add jelly or honey to breads and crackers.

• Mix jam with diced fruit and use it as a topping over ice cream or cake.

• Snack on tortilla chips with guacamole. Add avocado slices to your salads.

• Use high-calorie dressings on salads, baked potatoes, and on chilled cooked vegetables, such as green beans or asparagus.

• Add sour cream, half and half, or heavy cream to mashed potatoes and cake and cookie recipes. You can also add it to pancake batter, sauces, gravies, soups, and casseroles.

• Top cakes, waffles, French toast, fruits, puddings, and hot chocolate with whipped cream.

• Make vegetables or pasta with cream sauces.

• Use mayonnaise, creamy salad dressing, or aioli sauce in salads, sandwiches, and vegetable dips.

• Mix granola with yogurt or put it on top of ice cream or fruits.

• Top your ice cream or unfrosted cakes with sweetened condensed milk. Combine the condensed milk with peanut butter to add more calories and flavor.

• Add croutons to your salads or omelets.

• Include bread stuffing as a side dish with your meals.

• Drink homemade shakes. Try the shake recipes in the “Recipes” section. You can also drink high-calorie, high-protein drinks, such as Carnation® Breakfast Essentials or Ensure. See the next section for a list of nutritional supplements you can buy.
**Nutritional Supplements**

If you can’t make your own shakes, there are many nutritional supplements that you can buy. Some are high calorie, ready-prepared drinks that have vitamins and minerals added to them. Others are powders that you can mix into other foods or drinks. Most are also lactose-free, which means that you can have them even if you’re lactose intolerant (have difficulty digesting milk products).

Check your local market or drug store to see if they carry any of the brands below. You can also order them online for home delivery. The contact information is listed below.

<table>
<thead>
<tr>
<th>Nutritional Supplement (Manufacturer)</th>
<th>Description</th>
<th>Nutritional Content</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osmolite® 1 Cal (Abbott)</td>
<td>Bland, unflavored drink. Useful for people who like mild sweetness. Can be used as a base for mildly sweetened milkshakes.</td>
<td>Per 8-ounce serving: 255 calories and 9 grams of protein</td>
<td>Lactose-free, Gluten-free, Kosher, Refrigerate after opening</td>
</tr>
<tr>
<td>Isosource® HN (Nestlé)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glytrol® unflavored (Nestlé)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure (Abbott)</td>
<td>Flavored, sweetened drink available in vanilla, chocolate, strawberry, and other flavors, depending on the brand.</td>
<td>Per 8-ounce serving: 255 calories and 9 grams of protein</td>
<td>Lactose-free, Gluten-free, Kosher, Refrigerate after opening</td>
</tr>
<tr>
<td>Boost® and Boost High Protein (Nestlé) (Note: some brands are also available in “Plus” versions)</td>
<td>Per 8-ounce serving of “Plus” versions: 355 calories and 13 to 20 grams of protein</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure Compact (Abbott)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boost Compact (Nestlé)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Per 4-ounce serving of Ensure Compact: 220 calories and 9 grams of protein

Per 4-ounce serving of Boost Compact: 240 calories and 10 grams of protein
<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Nutritional Information</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Glucerna® Shake</strong>&lt;br&gt;(Abbott)&lt;br&gt;<strong>Boost Glucose Control</strong>&lt;br&gt;(Nestlé)&lt;br&gt;<strong>Glytrol Vanilla</strong>&lt;br&gt;(Nestlé)</td>
<td>Low-sugar, liquid supplement for people with diabetes. Available in vanilla, chocolate, and other flavors, depending on the brand.</td>
<td>Per 8-ounce serving: 190 to 250 calories and 10 grams of protein</td>
<td>• Lactose-free&lt;br&gt;• Gluten-free&lt;br&gt;• Kosher&lt;br&gt;• Refrigerate after opening</td>
</tr>
<tr>
<td><strong>Ensure Clear</strong>&lt;br&gt;(Abbott)&lt;br&gt;<strong>Boost Breeze</strong>&lt;br&gt;(Nestlé)&lt;br&gt;<strong>Resource® Diabetishield</strong>&lt;br&gt;(Nestlé)</td>
<td>A fruity drink available in peach, orange, wild berry, iced tea, apple, blueberry pomegranate, and other flavors, depending on the brand. Resource Diabetishield is for people with diabetes.</td>
<td>Per 8- to 10-ounce serving: 180 to 250 calories and 9 grams of protein&lt;br&gt;Per 8-ounce serving of Resource Diabetishield: 150 calories, 7 grams of protein, and 30 grams of carbohydrates</td>
<td>• Fat-free&lt;br&gt;• Lactose-free&lt;br&gt;• Gluten-free&lt;br&gt;• Kosher&lt;br&gt;• Refrigerate after opening</td>
</tr>
<tr>
<td><strong>Carnation Breakfast Essentials™</strong>&lt;br&gt;(Carnation)&lt;br&gt;<strong>Scandishake®</strong>&lt;br&gt;(Aptalis)</td>
<td>Milk-based, flavored, sweetened powders that can be mixed with milk or water, depending on the brand. Available in vanilla, chocolate, and strawberry.&lt;br&gt;Carnation Breakfast Essentials is also available in premixed cans and some flavors are available in sugar-free versions.&lt;br&gt;Scandishake is available in a lactose-free version.</td>
<td>Per 8-ounce serving of Carnation Breakfast Essentials with whole milk: 280 calories and 12 grams of protein&lt;br&gt;Per 8-ounce serving of sugar-free (artificially sweetened) Carnation Breakfast Essentials with whole milk: 210 calories and 14 grams of protein&lt;br&gt;Per 11-ounce serving of Scandishake with whole milk: 600 calories and 12 grams of protein</td>
<td>• Most of these products contain lactose&lt;br&gt;• The amount of fat per serving depends on the brand and whether mixed with whole milk, lowfat milk, or water&lt;br&gt;• Refrigerate after opening the liquid formula or after mixing the powder</td>
</tr>
<tr>
<td><strong>Scandical®</strong>&lt;br&gt;(powder)&lt;br&gt;<strong>Benecalorie®</strong></td>
<td>Unflavored supplement that can be mixed into drinks</td>
<td>Per tablespoon of powder: 23 to 35 calories</td>
<td>• Not for use as a sole source of nutrition</td>
</tr>
<tr>
<td>Product</td>
<td>Description</td>
<td>Nutritional Information</td>
<td>Additional Information</td>
</tr>
<tr>
<td>---------</td>
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<td>------------------------</td>
</tr>
<tr>
<td>Duocal® (powder) (Nutricia)</td>
<td>(liquid) (Nestlé)</td>
<td>or moist foods (such as pancakes, muffins, and puddings) for added calories, protein, or both. Unjury is a protein powder that's available in unflavored, vanilla, chocolate, strawberry and chicken soup.</td>
<td>Per 1.5 ounces of liquid: 330 calories and 7 grams of protein Per 27 gram scoop of powder: 90 calories and 21 grams of protein</td>
</tr>
<tr>
<td>Unjury Medical Quality Protein™ (powder) (Unjury)</td>
<td></td>
<td></td>
<td>Use under medical supervision Specific to Unjury: Kosher Don't use in beverages hotter than 140° F (60° C) Contains milk &amp; soy Manufactured in a plant that processes nuts, eggs, fish &amp; shellfish</td>
</tr>
<tr>
<td>Nepro® (Abbott)</td>
<td>Nutritional supplement for people who need to limit their intake of potassium, phosphorus, or both. Available in vanilla, butter pecan, and berry.</td>
<td>Per 8-ounce serving: 425 calories and 11 to 19 grams of protein</td>
<td>Lactose-free Gluten-free Kosher Refrigerate after opening</td>
</tr>
<tr>
<td>Suplena® (Abbott)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novasource® Renal (Nestlé)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renalcal® (Nestlé)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boost Nutritional® pudding (Nestlé)</td>
<td>High-calorie, high-protein pudding available in vanilla, chocolate, and butterscotch.</td>
<td>Per 4-ounce serving: 250 calories and 9 grams of protein</td>
<td>Lactose-free Gluten-free Kosher</td>
</tr>
<tr>
<td>Ensure pudding (Abbott)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glucerna Snack Bar (Abbott)</td>
<td>Snack bar for people with diabetes.</td>
<td>Per bar: 150 to 220 calories and 8 to 10 grams of protein</td>
<td>Kosher</td>
</tr>
<tr>
<td>Glucerna Meal Bar (Abbott)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orgain™ (Nutricia)</td>
<td>Organic nutritional shake available in sweet vanilla bean, creamy chocolate fudge, iced café mocha, and strawberries &amp; cream.</td>
<td>Per 11-ounce serving: 255 calories and 16 grams of protein</td>
<td>Gluten-free Soy-free 99.3% Lactose-free Kosher</td>
</tr>
</tbody>
</table>
Contact information for buying nutritional supplements

**Abbott Nutrition**
1-800-258-7677  
www.abbottstore.com

**Aptalis**
1-800-472-2634  
http://store.foundcare.com/aptalis

**Carnation**
1-800-289-7313  
www.carnationbreakfastessentials.com

**Nestlé**
1-800-422-ASK2 (2752)  
www.nestle-nutrition.com

**Nutricia**
1-800-365-7354  
www.Nutricia-NA.com

**Unjury**
1-800-517-5111  
www.unjury.com

Managing Symptoms and Side Effects Through Nutrition

This section describes some tips you can use to help you with:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Tip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constipation</td>
<td>Taste changes</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>Early satiety</td>
</tr>
<tr>
<td>Dry or sore mouth</td>
<td>Nausea</td>
</tr>
</tbody>
</table>

Please tell your doctor or nurse if you’re having any of the symptoms above before following these tips.
Constipation

Constipation is a decrease in your bowel movements. It can include:

- Trouble passing stools (feces)
- Hard stools
- Not being able to empty your bowel

Constipation can be caused by many things, including diet, activity, and lifestyle. Some chemotherapy and pain medications can also cause constipation. Dietary causes include irregular meals, not eating enough fiber, and not drinking enough liquids. Fiber is important because it increases the bulk in your stool. This helps move waste out of your body. Fruits, vegetables, and whole grains have fiber. Below are ways to manage constipation through your diet.

Eat more high-fiber foods

Add fiber to your diet one food at a time. Be sure to drink enough liquids to prevent gas and bloating. Examples of high-fiber foods are:

- Fruits
- Vegetables
- Whole grains (such as whole-grain cereals, pastas, muffins, breads, and brown rice)
- Nuts and seeds

Drink plenty of liquids

Try to drink at least 8 to 10 (8-ounce) glasses of liquids per day. Drink water, fruit and vegetable juices, milk, and other liquids. This will help keep your stool soft.

Eat at consistent times

Try to eat your meals at the same time each day. If you make changes to your diet, do it slowly.
Diarrhea

Diarrhea is frequent, loose, watery bowel movements. It causes food to pass quickly through your intestines. When this happens, water and nutrients aren’t absorbed well by your body. Diarrhea can be caused by:

- Chemotherapy
- Radiation therapy
- Surgery of the stomach or intestines
- Medications
- Difficulty digesting milk and milk products
- Excessive intake of sugar alcohols, such as sorbitol or mannitol found in sugar-free candy
- Other food sensitivities

Check with your doctor before you use the suggestions below to manage your diarrhea.

Drink plenty of liquids

Drink at least 8 to 10 (8-ounce glasses) of liquids daily. This will help replace the water and nutrients you lose when you have diarrhea. Try drinking:

- Water
- Fruit juices and nectars mixed with water
- Sports drinks like Gatorade®
- Clear broth
- Unflavored Pedialyte®
- Caffeine-free soda. Let the soda sit out uncovered for a few minutes before drinking to reduce the fizz

Avoid very hot or cold, high-sugar, high-fat, and spicy foods. These are hard on your digestive system and may make your diarrhea worse.
Follow the dietary guidelines below if you’re having diarrhea.

### Fruits and vegetables

<table>
<thead>
<tr>
<th>Foods to try</th>
<th>Foods to avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Well-cooked, peeled and puréed, or canned fruits and vegetables</td>
<td>• Raw fruits and vegetables, whole nuts, and seeds (except those allowed)</td>
</tr>
<tr>
<td>• Bananas</td>
<td>• Vegetables that can cause gas such as broccoli, cauliflower, cabbage, beans, and onions</td>
</tr>
<tr>
<td>• Peeled apples or applesauce</td>
<td></td>
</tr>
<tr>
<td>• Juices or nectars mixed with water</td>
<td></td>
</tr>
<tr>
<td>• Smooth peanut butter</td>
<td></td>
</tr>
</tbody>
</table>

Most of these items have potassium and liquid to help replace what your body loses from diarrhea. They also have soluble fiber, which may decrease diarrhea.

### Starches and carbohydrates

<table>
<thead>
<tr>
<th>Foods to try</th>
<th>Foods to avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Refined white breads, cereals, rice, pasta, and farina</td>
<td>• Whole-grain breads, pastas, cereals, and brown rice</td>
</tr>
<tr>
<td>• Boiled or mashed potatoes (without the skins)</td>
<td>• Bread products with nuts or seeds</td>
</tr>
<tr>
<td>• Crackers, pretzels, and graham crackers</td>
<td>• Fatty breads and pastries, such as croissants and doughnuts</td>
</tr>
</tbody>
</table>

Some of these foods contain salt to help replace what your body loses from diarrhea.

### Meat and meat alternatives

<table>
<thead>
<tr>
<th>Foods to try</th>
<th>Foods to avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lean meats, such as chicken or turkey breast without skin</td>
<td>• Fatty meats like salami, pepperoni, or sausages</td>
</tr>
<tr>
<td>• Hard-boiled eggs</td>
<td>• Fried meats and tofu</td>
</tr>
<tr>
<td>• Tofu</td>
<td>• Meats with skin</td>
</tr>
</tbody>
</table>

These are bland, low-fat, and low-fiber foods. They’re easier on your digestive system.

These foods are hard on your digestive system. They can cause discomfort and make your diarrhea worse.
### Dairy

<table>
<thead>
<tr>
<th>Foods to try</th>
<th>Foods to avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Low-fat milk or yogurt</td>
<td>• Whole milk</td>
</tr>
<tr>
<td>If you have problems digesting milk and milk products, try lactose-free milk such as Lactaid® milk, soy milk, or rice milk.</td>
<td>• Ice cream</td>
</tr>
<tr>
<td></td>
<td>• High-fat cheeses</td>
</tr>
<tr>
<td></td>
<td>• Sour cream</td>
</tr>
</tbody>
</table>

### Condiments

<table>
<thead>
<tr>
<th>Foods to try</th>
<th>Foods to avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Salt, unless you must avoid it for other reasons</td>
<td>• Large amounts of sugar and spices</td>
</tr>
<tr>
<td>• Fat-free gravies and salad dressings</td>
<td>• Rich gravies and salad dressings</td>
</tr>
<tr>
<td></td>
<td>• Foods or drinks with caffeine (such as chocolate, tea, or soda)</td>
</tr>
</tbody>
</table>

These foods are hard on your digestive system. This can cause discomfort and make your diarrhea worse.

### Dry or sore mouth

When your mouth is dry or sore, eating can be hard or painful. Some foods may be hard to chew and swallow. A dry or sore mouth can be caused by:

- Chemotherapy
- Radiation therapy
- Medications
- Surgery on the head and neck
- Infections
- Other health problems

A dry and sore mouth may also cause cavities. This is because you’re making less saliva, which protects your teeth against decay.

The types of foods you eat can make a difference. Choose foods that have a moist, soft texture and are easy to swallow. Avoid foods that are dry or rough. Below is a list of foods you can try.
### When your mouth is dry

<table>
<thead>
<tr>
<th>Foods to try</th>
<th>Foods to avoid</th>
</tr>
</thead>
</table>
| Soft and puréed foods  
- Casseroles, bean dishes, macaroni and cheese, and scrambled eggs  
- Tender cooked chicken and fish  
- Stews and creamed soups  
- Cooked cereal  
- Baby food  
- Sauces, gravies, juices, clear broths, margarine, and sour cream added to foods  
- Breads, crackers, and other baked goods dipped in milk or tea | Rough or dry foods  
- Dry meats without sauce  
- Dry, coarse breads, crackers, pretzels, and cereals  
- Coarse, raw fruits and vegetables |

**Cold foods**  
- Milkshakes, smoothies, yogurts, gelatin, cottage cheese, and nutritional supplements (see the section “Nutritional Supplements”)  
- Puréed fruits and vegetables

### When your mouth is sore

<table>
<thead>
<tr>
<th>Foods to try</th>
<th>Foods to avoid</th>
</tr>
</thead>
</table>
| Bland, soft, puréed foods  
- Plain casseroles, mashed potatoes, macaroni and cheese, and scrambled eggs  
- Soft-cooked or puréed chicken and fish  
- Creamed soups  
- Cooked cereals  
- Baby food (tapioca and plain flavors)  
- Margarine, sour cream, and mild sauces (as tolerated) added to foods  
- Breads, crackers, and other baked goods dipped in milk or tea | Rough or dry foods  
- Dry meats  
- Dry breads, crackers, and pretzels  
- Coarse, raw fruits and vegetables |

**Cold foods**  
- Milkshakes, smoothies, yogurts, gelatin, custards, cottage cheese, and nutritional supplements

**Spicy, salty, and acidic foods**  
- Foods made with large amounts of spices, such as pepper or chili powder  
- Foods high in salt or made with vinegar  
- Citrus fruit products (such as orange juice and lemonade)  
- Tomato products (such as pasta sauce, tomato juice, or tomato soup)
irritating your mouth:

- Cook your foods until they’re soft and tender. Use a blender to purée foods. Ask for a copy of our resource, *Eating Guide for Puréed and Mechanical Soft Diets*.
- Cut your foods into small pieces that are easy for you to chew.
- Rinse your mouth out with water often.
- Drink liquids with your meals, sipping in between bites.
- Use a straw to drink liquid to prevent it from touching your sore mouth.
- If you have dry mouth, try sugar-free mints or gum to make more saliva.
- Brush your teeth (with the permission of your doctor or dentist) and tongue. Drink more liquids to help to keep your mouth clean.

**Taste changes**

Your sense of taste is made up of 5 main sensations. These are saltiness, sweetness, savoriness, bitterness, and sourness. Your sense of taste can be affected by chemotherapy, radiation therapy, and other medications. Changes in taste vary from person to person. The most common changes are having bitter and metallic tastes in your mouth. Sometimes, food may not taste like anything.

**When your food seems tasteless:**

- Change the texture of your foods. For example, you may prefer mashed potatoes to baked potatoes or vice versa. Some foods may taste better cold or at room temperature.
- Choose and prepare foods that look and smell good to you.
- Use more spices and flavorings as tolerated, for example:
  - Add sauces and condiments, such as soy sauce or ketchup, to your food.
  - Marinate your meats or meat substitutes in salad dressings, fruit juices, or other sauces
  - Use onion or garlic to flavor your vegetables or meats.
  - Add herbs, such as rosemary, basil, oregano, and mint to your food.
Blend fruit into your milkshakes or yogurt. You can also try mint or coffee-flavored milkshakes.

- Try sour and tart foods. These may help stimulate your taste.
- Try alternating bites of different tasting foods within a meal, such as cottage cheese and pineapple, canned fruit and plain yogurt, or grilled cheese and tomato juice.

If there is a bitter or metallic taste in your mouth:

- Rinse your mouth out with water before meals.
- Maintain good oral hygiene by brushing your teeth (if your doctor allows it) and your tongue and drinking more liquids.
- If meats taste bitter, try marinating them in sauces or fruit juices or squeeze lemon juice on them, if your mouth is not sore.
- Include meat substitutes for protein, such as dairy products and beans.
- Use plastic utensils to reduce the metallic taste.
- Try sugar-free mints or gum.

If foods taste overly sweet:

Try adding some salt to the food or dilute it with water. If everything tastes sweet, try more acidic foods.

If foods taste or smell different than usual:

- Avoid foods with strong odors. Since beef and fish have the strongest odors, try eating poultry, eggs, and dairy products.
- Experiment with different seasonings and food combinations, such as:
  - Adding sauces to foods
  - Changing the temperature and texture of foods
- Try adding lemon juice or salt if the food tastes too sweet.
- If your mouth is not sore, try tart foods such as lemon wedges or citrus fruits to stimulate taste.
- Rinse your mouth out before and after you eat.
Drink small sips of liquid throughout your meals to rinse out the taste of the food.

Maintain good oral hygiene by brushing your teeth (if your doctor allows it) and tongue and drinking more liquids. Your doctor may also recommend using an alcohol free mouthwash such as Biotene or baking soda rinses (Mix \(\frac{1}{4}\) teaspoon baking soda in 1 cup warm water). This may help you manage your taste changes.

Check with your doctor or dentist to find out the cause of your taste changes. You should do this before you make any long-term changes to your diet. If you have any questions or concerns about your dietary needs, contact a dietitian.

**Early satiety**

Early satiety is when you feel full more quickly than usual when you eat. For example, you may feel like you can’t eat any more when you’re only halfway through your meal. This can happen after surgery on your stomach, when you’re constipated, due to medication side effects, or for other reasons. If you feel full quickly, try to:

- Eat small, frequent meals
- Drink most of your liquids before or after meals
- Fortify meals with foods that are rich in calories and protein (for example, nonfat dry milk, wheat germ, nut butter, avocado)
- Engage in light physical activity to encourage food to move through your digestive system

**Nausea**

Nausea is a feeling of stomach upset or queasiness. If you have nausea, you may also have vomiting. Nausea can be caused by radiation therapy, chemotherapy, and surgery. It can also be caused by pain, medication, and infection. Below are suggestions for managing your nausea through nutrition. Check with your doctor or nurse before you try any of the tips below. Also, ask your doctor or nurse if you need an antiemetic. This is a medication to prevent or treat nausea and vomiting.
<table>
<thead>
<tr>
<th>Foods to Try</th>
<th>Foods to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starchy, low-fat, bland foods</td>
<td>• High-fat, overly spicy, or overly sweet foods</td>
</tr>
<tr>
<td>• Dry toast, crackers, and bagels</td>
<td>• Fatty meats</td>
</tr>
<tr>
<td>• Angel food cake and vanilla wafers</td>
<td>• Fried foods, such as eggs and French fries</td>
</tr>
<tr>
<td>• Sherbet, low-fat ice cream, or frozen yogurt</td>
<td>• Soups with heavy cream</td>
</tr>
<tr>
<td>• Gelatin</td>
<td>• Creamed vegetables</td>
</tr>
<tr>
<td>• Canned, unsweetened fruit</td>
<td>• High-fat, high-sugar pastries, doughnuts, and cookies</td>
</tr>
<tr>
<td>Cold foods</td>
<td>• Foods made with heavy spices, such as pepper or chili pepper, onion, hot sauce, or salad dressing</td>
</tr>
<tr>
<td>• Cold proteins such as skinless chicken, cheeses, and yogurts</td>
<td>High-fat foods may stay in your stomach longer and are harder to digest. Many of these foods have strong odors or flavors that can cause nausea or make it worse.</td>
</tr>
<tr>
<td>• Light pasta salads</td>
<td></td>
</tr>
<tr>
<td>• Popsicles</td>
<td></td>
</tr>
<tr>
<td>• Chilled clear liquids, such as broth, nutritional supplements (such as Ensure or Ensure Clear) and juices diluted with water</td>
<td></td>
</tr>
</tbody>
</table>

**General tips**

- Pay attention to the amount of food you eat.
- Try convenience foods, such as take-out foods or frozen dinners, to prevent nausea while you cook or prepare foods. If you need to, ask others to cook for you.
- If food odors make you nauseated, try cold foods such as a sandwich or salad. These foods don’t smell as strong as hot foods. For hot foods, leave the area while it’s cooking, if possible. You can also have someone else plate your food for you and try letting your food cool down for a few minutes before eating.
- Eat small, frequent meals. This can stop you from getting too full and allow you to take in more food throughout the day.
- Drink most liquids in between your meals to prevent feeling full too fast or bloated.
- Eat slowly and chew your foods well to help with digestion. Avoid activity right after meals.
- Eat your meals in a pleasant setting. Choose a relaxing place that has a comfortable temperature.
• Avoid places with strong odors. Eating with friends or family may also help distract you from your nausea. Wear loose-fitting clothing to stay comfortable.

• If you experience nausea in the morning, keep crackers or dry toast at your bedside. Eat these before getting out of bed.

• Avoid eating your favorite foods right before or after treatments. You may begin to dislike these foods.

If nausea is an ongoing problem for you, it may be useful to keep a food diary. This is a record of the foods you eat, the time you ate them, and the setting in which you ate them. Record any situations when you became nauseated. Discuss this with your doctor, nurse, or dietitian.

**Fatigue**

Fatigue is the most common side effect of cancer and cancer treatments. It may prevent you from doing your daily activities. It may also impact your quality of life and decrease your tolerance to treatment.

Fatigue can be caused by many symptoms, such as:

• Poor appetite
• Depression
• Nausea and vomiting
• Diarrhea or constipation

Relief of these symptoms can give you more energy. It can also increase your feeling of well-being.

Another option is to save your energy. You can do this by:

• Asking family and friends for help with shopping and preparing your meals.
• Buying already prepared or takeout foods when your energy is low.
• Keeping ingredients and utensils that you use often close at hand.
• Sitting instead of standing when cooking.
• Eating small, frequent, high-calorie meals or snacks so that your body may
not need as much energy to digest your food.

If you live alone and aren’t able to shop for food or prepare meals, you may be eligible for food programs, such as God’s Love We Deliver or Meals on Wheels. There may be age or income requirements for some programs. Your social worker can give you more information.

Engaging in physical activity may actually increase your energy levels. Talk with your doctor about doing light-to-moderate intensity activities like walking or gardening. Research shows that some physical activity can improve your daily functioning, boost your energy level, stimulate your appetite, and enhance your mood.

**Medication**

While diet changes can help, medication may be needed to manage your side effects. Medication can help with nausea, diarrhea, and constipation. Tell your doctor or nurse about any side effects you have during your treatment.

**After Your Cancer Treatment Ends**

When your cancer treatment is finished, it’s a good time to think about making good food choices. You will want to make choices that promote health and well-being. Choose foods low in fat and rich in vitamins, minerals, fiber, and phytochemicals. Phytochemicals, also known as phytonutrients, are plant substances that may protect against cancer. Examples of phytochemicals include lycopene in tomatoes, curcumin in turmeric, and resveratrol in grape skins.

Diet is linked to health. There isn’t any evidence that the foods you eat will prevent your cancer from coming back. However, eating the right foods will help you regain your strength, rebuild tissue, and feel your best. The following tips may help:

- Include many kinds of fruits and vegetables in your diet to make sure you get many different nutrients. You can eat fruits and vegetables cooked or raw at any time of the day. Be sure to eat more of the non-starchy vegetables. Read the table below for examples of starchy and non-starchy vegetables.
<table>
<thead>
<tr>
<th><strong>Non-starchy vegetables</strong></th>
<th></th>
<th><strong>Starchy vegetables</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Artichokes</td>
<td>Artichoke hearts</td>
<td>Cauliflower</td>
</tr>
<tr>
<td>Artichoke hearts</td>
<td>Asparagus</td>
<td>Celery</td>
</tr>
<tr>
<td>Beans:</td>
<td></td>
<td>Cucumber</td>
</tr>
<tr>
<td>Green beans</td>
<td>Wax beans</td>
<td>Eggplant</td>
</tr>
<tr>
<td>Italian beans</td>
<td></td>
<td>Green onions (scallions)</td>
</tr>
<tr>
<td>Bean sprouts</td>
<td>Beets</td>
<td>Kohlrabi</td>
</tr>
<tr>
<td></td>
<td>Broccoli</td>
<td>Leeks</td>
</tr>
<tr>
<td>Brussels sprouts</td>
<td>Cabbage</td>
<td>Mushrooms</td>
</tr>
<tr>
<td>Cabbage</td>
<td>Carrots</td>
<td>Okra</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peppers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Radishes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Summer squash</td>
</tr>
<tr>
<td></td>
<td>Salad greens:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Endive</td>
<td>Escarole</td>
</tr>
<tr>
<td></td>
<td>Iceberg lettuce</td>
<td>Romaine lettuce</td>
</tr>
<tr>
<td></td>
<td>Green leaf lettuce</td>
<td>Red leaf spinach</td>
</tr>
<tr>
<td></td>
<td>Spinach</td>
<td>Tomatoes</td>
</tr>
<tr>
<td></td>
<td>Water chestnuts</td>
<td>Turnips</td>
</tr>
<tr>
<td></td>
<td>Watercress</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zucchini</td>
<td></td>
</tr>
</tbody>
</table>

- Eat whole-grain breads and cereals. Select high-fiber foods, such as:
  - Bran and shredded wheat cereals
  - Brown rice
  - Multigrain, whole wheat, and oat breads

Try different grains, such as barley, buckwheat, and bulgur.

- Legumes are also an excellent source of fiber and nutrients. They include:
  - Beans and peas (chickpeas, pinto beans, kidney beans, white beans, split peas, black-eyed peas, and lima beans)
  - Lentils
  - Miso (thick soy paste)

- Limit your intake of:
  - Fat
  - Salt
- Sugar
- Alcohol
- Smoked, cured, or pickled foods.

- Choose low-fat milk products, lean meats, poultry without skin, and baked fish.

- Prepare meals using lower-fat cooking methods such as broiling, steaming, and poaching.

The New American Plate

The New American Plate is a picture of a place setting that shows what a healthy meal should look like (see Figure 1). It focuses on healthy portion sizes and types of food. The New American Plate recommends eating meals made of 2/3 (or more) vegetables, fruits, whole grains, or beans, and 1/3 (or less) animal protein. For protein, you can also substitute a plant protein, such as beans. Foods that are high in fat and sugar should be limited or avoided. For more information about the New American Plate guidelines, go to: www.aicr.org/new-american-plate.
Recipes

Before you make these recipes, please be aware that raw eggs can cause food poisoning. **Do not add raw eggs to your shakes.**

If you have diabetes or high blood sugar, these recipes may not be appropriate for you. Talk with your dietitian.

<table>
<thead>
<tr>
<th>Double Milk</th>
</tr>
</thead>
</table>
| • 1 quart of whole milk  
• 1 envelope of non-fat dry milk powder (to make 1 quart of product) |
| Per 8-ounce serving:  
• 230 calories  
• 16 grams of protein |
| Mix in the blender and refrigerate. |

<table>
<thead>
<tr>
<th>Standard Milkshake</th>
</tr>
</thead>
</table>
| • 1 cup of Double Milk  
• 2 cups of super premium ice cream (any flavor)  
• 2 tablespoons of sugar or syrup |
| Per 8-ounce serving:  
• 470 calories  
• 11 grams of protein |
| Mix in the blender and refrigerate. |

<table>
<thead>
<tr>
<th>Standard Yogurt Milkshake</th>
</tr>
</thead>
</table>
| This shake is less sweet than the Standard Milkshake and may be good for people who prefer mild sweetness.  
• 8 ounces of plain yogurt (use low-fat yogurt if you can’t find regular yogurt)  
• 2 cups of super premium ice cream (any flavor)  
• 4 ounces of Double Milk |
| Per 8-ounce serving:  
• 380 calories  
• 10 grams of protein |
| Mix in the blender and refrigerate. |
### Standard Milkshake for People with Diabetes

- 8 ounces of Double Milk
- 2 cups of sugar-free ice cream (any flavor)
- 4 teaspoons of canola or olive oil
- 2 teaspoons of NutraSweet® or other calorie-free sugar substitute (optional)

Mix in the blender and refrigerate.

<table>
<thead>
<tr>
<th>Per 8-ounce serving:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 260 calories</td>
</tr>
<tr>
<td>• 10 grams of protein</td>
</tr>
</tbody>
</table>

### Standard Dairy-Free Shake

- 8 ounces of oat milk, soy milk, or almond milk
- 2 cups of soy ice cream (any flavor)
- 4 tablespoons of canola or olive oil
- 2 tablespoons of maple syrup or sugar (omit this ingredient if you’re using sweetened, non-dairy milk)
- For vanilla shakes only, add ½ teaspoon of vanilla extract

Mix in the blender and refrigerate.

<table>
<thead>
<tr>
<th>Per 8-ounce serving:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 285 calories</td>
</tr>
<tr>
<td>• 6 grams of protein</td>
</tr>
</tbody>
</table>

### Vanilla or Chocolate Almond Shake

Use vanilla ice cream in the Standard Milkshake recipe and add the following:

- ½ cup of ground blanched (skinless) almonds
- ½ teaspoon of vanilla extract (add more sweetener, if desired)

For the Chocolate Almond Shake:

- Substitute ½ cup of chocolate syrup for the other sweeteners in the Standard Milkshake recipe and add ½ cup of ground blanched almonds

Mix in the blender and refrigerate.

<table>
<thead>
<tr>
<th>Per 8-ounce serving of Vanilla Almond Shake:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 480 calories</td>
</tr>
<tr>
<td>• 15 grams of protein</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Per 8-ounce serving of Chocolate Almond Shake:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 500 calories</td>
</tr>
<tr>
<td>• 13 grams of protein</td>
</tr>
</tbody>
</table>
### Maple Walnut or Pecan Shake
- 1 cup of Double Milk
- 2 cups of super premium vanilla ice cream
- ¼ cup of maple syrup
- ½ cup of ground walnuts or pecans

Mix in the blender and refrigerate.

**Per 8-ounce serving:**
- **480 calories**
- **12 grams of protein**

### Peanut Butter Shake
- Add ½ cup of peanut butter to any standard shake recipe.
- Substitute ½ cup of sweetened condensed milk or chocolate syrup for the other sweeteners in the standard shake recipe.

Mix in the blender and refrigerate.

**Per 8-ounce serving with sweetened condensed milk:**
- **660 calories**
- **19 grams of protein**

**Per 8-ounce serving with chocolate syrup:**
- **640 calories**
- **16 grams of protein**

### Fruity Shake
- Add the following to any standard shake recipe:
  - 1 cup of frozen, fresh, or canned fruit such as strawberries, raspberries, blueberries, bananas, mangoes, or peaches
  - You can add more sweetener, depending on how tart the fruit tastes.

Mix in the blender and refrigerate.

**Per 8-ounce serving:**
- **380 calories**
- **8 grams of protein**

### Cherry Vanilla or Chocolate Cherry Shake
- Add the following to any standard shake recipe:
  - 1 cup of pitted cherries
  - ½ teaspoon of vanilla extract or substitute ½ cup of chocolate syrup for the sweeteners in the standard shake recipe

Mix in the blender and refrigerate.

**Per 8-ounce serving of Cherry Vanilla:**
- **380 calories**
- **8 grams of protein**

**Per 8-ounce serving of Chocolate Cherry:**
- **430 calories**
- **7 grams of protein**
Other shake variations

Experiment with other ingredients after you have tried the shake recipes in this resource. You can use any of the following ingredients to change the flavor of and increase the number of calories in your shakes:

- Peanut butter and bananas
- Bananas and walnuts
- Pineapple and coconut cream*
- Oreo® cookies*
- M&M’s®*
- Peanut butter cups*
- Flavored liqueurs,* with your doctor’s approval and for occasional use only

*If you have diabetes or high blood sugar, these ingredients may not be appropriate for you. Talk with your dietitian before trying them.

Sample Menus

Use these sample menus to spark your imagination. They can give you ideas for making your own high-calorie, high-protein meals at home. You may find it easier to divide a meal into 2 portions so that you have a small, ready-made meal to eat later in the day.

If it’s hard for you to make your meals, ask family or friends for help. Try making meals in batches on days when you have the energy and freeze them to eat later. You can also eat ready-made foods such as frozen dinners, whole cooked chickens, or take-out foods, as long as you’re not following a low-microbial diet.

Key points

- If you have diabetes or high blood sugar, use products that are unsweetened or are made with sugar substitutes. Limit the amount of fruit juice that you drink.
- The amount of liquid in the meal plans is small so you don’t feel full soon after you start eating. Try to drink most of your liquids between your meals.
Most adults need 8 to 10 (8-ounce) glasses of liquids per day. This includes juices, water, milkshakes, and soups. It also includes solids that become liquid at room temperature, such as Italian ices.

- If you’re lactose-intolerant, you should not drink regular cow’s milk. Instead, you should drink Lactaid® milk, rice milk, almond milk, or soy milk. If you have or had breast cancer, ask your doctor if it’s okay for you to eat foods with soy. Try the sweetened versions of these milks for extra calories. Take Lactaid tablets or drops with other dairy foods, such as ice cream or soft cheeses. People with mild to moderate lactose intolerance are usually able to eat hard aged cheeses and yogurt.

- Vegetarian and vegan menus are included. Both vegetarians and vegans should eat more nuts, seeds, and oils to increase their calories. Vegans should take special care to eat foods rich in vitamin B12, calcium, iron, and zinc. Speak with a dietitian if you follow a vegetarian or vegan diet.

- These sample menus contain fewer than the 5 to 9 recommended daily servings of fruits and vegetables combined. This is because fruits and vegetables are low in calories but are filling. It’s recommended that you focus on higher calorie and protein foods to prevent weight loss. If you find that you aren’t meeting the minimum daily recommended servings, speak with your doctor about whether you can take a multivitamin to make up for any nutrients you may be missing.

- See the “Recipes” section for recipes for Double Milk and the shakes listed in the sample menus.

**Sample menus for a regular diet**

<table>
<thead>
<tr>
<th>Meal</th>
<th>Regular Diet</th>
<th>Regular Diet</th>
<th>Regular Diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>• 1-egg omelette with 1 ounce of grated cheese</td>
<td>• 2 small pancakes made with Double Milk or Half n’ Half with butter and syrup</td>
<td>• 4 ounces of pear nectar</td>
</tr>
<tr>
<td></td>
<td>• small croissant with butter and jelly</td>
<td>• 4 ounces of pineapple juice</td>
<td>• 1 slice of French toast with ¼ cup chopped nuts, butter, and syrup</td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of orange juice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-morning snack</td>
<td>• 2 tablespoons of peanut butter and 1 tablespoon of jelly on</td>
<td>• 4 graham crackers with</td>
<td>• 8 ounces of peach</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ¼ cup of cottage</td>
<td>Fruity Shake</td>
</tr>
<tr>
<td>Lunch</td>
<td>1/2 sandwich of grilled turkey and Swiss cheese on rye bread</td>
<td>1/2 cheeseburger with mayonnaise and ketchup</td>
<td>1/2 cup of macaroni and cheese with extra cheese grated on top</td>
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<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>4 ounces of hot chocolate made with Double Milk and topped with whipped cream</td>
<td>15 French fries</td>
<td>1/2 cup of cauliflower with bread crumbs sautéed in butter</td>
</tr>
<tr>
<td></td>
<td>4 ounces of Double Milk</td>
<td>4 ounces of chocolate milk made with Double Milk</td>
<td>4 ounces of apricot nectar</td>
</tr>
<tr>
<td>Afternoon snack</td>
<td>1/2 cup of trail mix (mixed dried fruits and nuts)</td>
<td>1 slice of bread with 1 ounce of melted mozzarella cheese</td>
<td>8 ounces of fruit yogurt</td>
</tr>
<tr>
<td></td>
<td>4 ounces of cranberry juice</td>
<td>4 ounces of pear nectar</td>
<td></td>
</tr>
<tr>
<td>Dinner</td>
<td>1 (2-inch) slice of quiche</td>
<td>1 (2-inch square) portion of meat lasagna</td>
<td>2 ounces of steak</td>
</tr>
<tr>
<td></td>
<td>1/2 cup of broccoli with cream or cheese sauce</td>
<td>1/2 cup of peas with onions and butter or cream sauce</td>
<td>1/2 cup of sautéed green beans with slivered almonds</td>
</tr>
<tr>
<td></td>
<td>4 ounces of peach nectar</td>
<td>4 ounces of regular soda</td>
<td>4 ounces of grape juice</td>
</tr>
<tr>
<td>Evening snack</td>
<td>1/2 cup of super premium* vanilla ice cream topped with chopped pecans, maple syrup, and whipped cream</td>
<td>1/2 cup of custard topped with whipped cream</td>
<td>1 (2-inch) slice of apple pie with 1 ounce of cheddar cheese</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 ounces of Double Milk</td>
</tr>
</tbody>
</table>

*Super premium ice cream has about 100 more calories per serving than regular ice cream. It also has about 20 grams of fat per 1/2-cup serving.

Sample menus for a regular diet

<table>
<thead>
<tr>
<th>Meal</th>
<th>Regular Diet</th>
<th>Regular Diet</th>
<th>Regular Diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>1 egg and cheese omelet with croutons sautéed in butter</td>
<td>3/4 cup of Frosted Flakes® cereal</td>
<td>1 blueberry pancake made with Double Milk or Half n’ Half with</td>
</tr>
<tr>
<td></td>
<td>4 ounces of Double Milk</td>
<td>4 ounces of Double Milk</td>
<td>4 ounces of apricot nectar</td>
</tr>
<tr>
<td>Time</td>
<td>Snack/Meal Description</td>
<td>Snack/Meal Items</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Mid-morning</td>
<td>• 4 ounces of orange juice</td>
<td>Milk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ½ cup of sugar-coated roasted peanuts</td>
<td>• 1 slice of ham</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of grape juice</td>
<td>• 4 ounces of hot chocolate made with Double Milk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lunch</td>
<td>• 2 deviled egg halves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ½ of a tuna fish sandwich made with mayonnaise</td>
<td>• 4 ounces of pear nectar</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of peach nectar</td>
<td>• ¼ cup of pistachios</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Afternoon snack</td>
<td>• 1 slice of whole-grain bread topped with peanut butter and honey</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 10 tortilla chips with nacho cheese dip or guacamole</td>
<td>• 4 ounces of Double Milk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of regular soda</td>
<td>Dinner</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Chicken pot pie</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 2 ounces of fried chicken</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• ½ cup of creamed corn</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ½ cup of cheesy mashed potatoes made with butter and American cheese</td>
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<tr>
<td></td>
<td></td>
<td>• 1 cup of baked ziti made with whole-milk ricotta cheese and mozzarella</td>
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<tr>
<td></td>
<td></td>
<td>• ½ cup of broccoli with garlic and oil</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• 4 ounces of regular soda</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evening snack</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ½ cup of rice pudding topped with whipped cream</td>
<td>Graham cracker “sandwich” with 1 tablespoon of peanut butter and mini marshmallows</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of Double Milk</td>
<td>• ¼ cup of super premium ice cream topped with chocolate syrup, nuts, and whipped cream</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 4 ounces of chocolate Standard Milkshake</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 4 ounces of Double Milk</td>
<td></td>
</tr>
</tbody>
</table>
### Sample menus for regular and vegetarian diets

<table>
<thead>
<tr>
<th>Meal</th>
<th>Regular Diet</th>
<th>Vegetarian</th>
<th>Vegetarian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>• ⅓ cup of granola</td>
<td>• ¾ cup of cooked oatmeal made with Double Milk, raisins, walnuts, brown</td>
<td>• 1 slice of whole-grain bread</td>
</tr>
<tr>
<td></td>
<td>• ¾ cup of fruit yogurt</td>
<td>sugar, and butter</td>
<td>• 1 ounce of Muenster cheese</td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of apricot nectar</td>
<td>• 4 ounces of instant cocoa made with Double Milk</td>
<td>• 4 ounces of orange juice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-morning</td>
<td>• A small muffin with butter or cream cheese and jelly</td>
<td>• ½ bagel with vegetable cream cheese</td>
<td>• 1 cup of Peanut Butter Shake</td>
</tr>
<tr>
<td>snack</td>
<td>• 4 ounces of Double Milk</td>
<td>• 4 ounces of strawberry Fruity Shake</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>• 1 (3-inch) wedge of chicken and cheese quesadilla topped with sour cream</td>
<td>• ½ of a peanut butter and jelly sandwich on whole-grain bread</td>
<td>• ½ of a veggie burger with cheese on a bun with ranch dressing, pickles,</td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of apple juice</td>
<td>• 4 ounces of Double Milk</td>
<td>and onion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 15 French fries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 4 ounces of regular soda</td>
</tr>
<tr>
<td>Afternoon</td>
<td>• ½ cup of roasted cashews</td>
<td>• ½ cup of fruit cocktail with ? cup of sour cream and sugar to taste</td>
<td>• 4 tablespoons of guacamole</td>
</tr>
<tr>
<td>snack</td>
<td>• 4 ounces of banana</td>
<td>• 4 ounces of apple juice</td>
<td>• 8 tortilla chips</td>
</tr>
<tr>
<td></td>
<td>• Fruity Shake</td>
<td></td>
<td>• 4 ounces of peach nectar</td>
</tr>
<tr>
<td>Dinner</td>
<td>• 2 ounces of fish baked in a red onion vinaigrette</td>
<td>• 1 (2-inch) slice of broccoli and cheese quiche</td>
<td>• 1 cup of fettuccine Alfredo</td>
</tr>
<tr>
<td></td>
<td>• 1 small baked potato topped with sour cream and chives</td>
<td>• 1 small salad with feta cheese, olives, olive oil, and vinegar</td>
<td>• ½ cup of spinach sautéed in garlic and oil</td>
</tr>
<tr>
<td></td>
<td>• ½ cup of green beans and carrots with butter</td>
<td>• 4 ounces of Chocolate Almond Shake</td>
<td>• 4 ounces of grape juice</td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of cranberry juice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evening</td>
<td>• ½ cup of strawberries</td>
<td>• 4 tablespoons of</td>
<td>• 1 small banana dipped</td>
</tr>
<tr>
<td>Meal</td>
<td>Vegetarian</td>
<td>Vegan</td>
<td>Vegan</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Breakfast</strong></td>
<td>• 1 fried egg</td>
<td>• ½ cup of muesli with slices of fresh peach</td>
<td>• 1 soy sausage link</td>
</tr>
<tr>
<td></td>
<td>• 1 slice of whole-grain bread with butter and raspberry jam</td>
<td>• 4 ounces of soy, rice, or almond milk</td>
<td>• 2 small pancakes made with soy milk, margarine, and maple syrup</td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of apricot nectar</td>
<td></td>
<td>• 4 ounces of pineapple juice</td>
</tr>
<tr>
<td><strong>Mid-morning snack</strong></td>
<td>• 4 dried apricots</td>
<td>• 1 cup of dairy-free Maple Walnut Shake</td>
<td>• 4 ounces of dairy-free Chocolate Cherry Shake</td>
</tr>
<tr>
<td></td>
<td>• ¼ cup of almonds</td>
<td>• ½ cup of roasted pistachios</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of vanilla Standard Yogurt Shake</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td>• ½ of a falafel sandwich with extra tahini</td>
<td>• ½ cup of linguini with garlic and oil</td>
<td>• ½ soy burger with soy cheese on a bun with soy mayonnaise, ketchup, pickle, and onion</td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of regular soda</td>
<td>• 1 soy meatball</td>
<td>• 15 French fries</td>
</tr>
<tr>
<td><strong>Afternoon snack</strong></td>
<td>• 4 graham crackers with 2 tablespoons of peanut butter</td>
<td>• 4 whole-grain crackers with 2 tablespoons of almond butter</td>
<td>• 4 ounces of dairy-free Vanilla Almond Shake</td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of Double Milk</td>
<td>• 4 ounces of apricot nectar</td>
<td></td>
</tr>
<tr>
<td><strong>Dinner</strong></td>
<td>• 1 cup of macaroni and cheese</td>
<td>• ½ cup of tofu and white bean casserole</td>
<td>• 1 cup of bean chili topped with soy cheese</td>
</tr>
<tr>
<td></td>
<td>• ½ cup of chilled asparagus tips with blue cheese dressing</td>
<td>• ½ cup of brown rice</td>
<td>• 1 slice of dairy- and egg-free corn bread</td>
</tr>
<tr>
<td></td>
<td>• 4 ounces of grape</td>
<td>• ½ cup of sautéed spinach with roasted pine nuts</td>
<td>• 4 ounces of sparkling cider</td>
</tr>
<tr>
<td>Evening snack</td>
<td>4 ounces of peach nectar</td>
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<td></td>
</tr>
<tr>
<td>1 baked apple with cinnamon sugar, butter, and walnuts</td>
<td>1 (2-inch) slice of silken tofu “cheese” cake</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 ounces of vanilla soy milk</td>
<td>4 ounces of vanilla Dairy-free Milkshake</td>
<td></td>
<td></td>
</tr>
<tr>
<td>½ cup of blueberries topped with sugar and non-dairy whipped topping</td>
<td>4 ounces of cranberry juice</td>
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</tr>
</tbody>
</table>

**Resources**

Clinical trials are research studies. They’re done to test new:

- Therapies
- Drugs or drug combinations
- Methods of delivery
- Dosages and timing

Some trials test vitamins or supplements to see if they have an effect on a type of cancer. One trial is looking at the effects of high-dose vitamin D on metastatic colorectal cancer (colorectal cancer that has spread to other areas of the body).

To find out more about this or other clinical trials:

- Visit the clinical trials section of the National Cancer Institute (NCI) website at: [www.cancer.gov/clinicaltrials](http://www.cancer.gov/clinicaltrials)
- Call the NCI Cancer Information Service at 800-4-CANCER (800-422-6237).

**Academy of Nutrition and Dietetics (AND)**

[www.eatright.org/public](http://www.eatright.org/public)

AND is a professional organization for registered dietitians. The website has information about the latest nutrition guidelines and research and can help you find a dietician in your area. The academy also publishes *The Complete Food and Nutrition Guide*, which has over 600 pages of food, nutrition, and health information.
American Institute for Cancer Research
www.aicr.org
800-843-8114
Has information on diet and cancer prevention research and education.

FDA Center for Food Safety and Applied Nutrition
www.fda.gov/AboutFDA/CentersOffices/OfficeofFoods/CFSAN/default.htm
Has helpful information on food safety.

MSK Integrative Medicine Service
800-525-2225
www.mskcc.org/integrative-medicine
Our Integrative Medicine Service offers patients many services to complement traditional medical care, including music therapy, mind/body therapies, dance and movement therapy, yoga, and touch therapy. They also provide counseling on nutrition and dietary supplements.

National Institutes of Health Office of Dietary Supplements
http://ods.od.nih.gov
301-435-2920
Has up-to-date information on dietary supplements.

Contact Information for Nutrition Services at MSK
Department of Food and Nutrition in New York, NY
212-639-7071

Radiation Oncology Outpatient Nutrition in New York, NY
212-639-7622

Outpatient Nutrition in Commack, NY
631-623-4000

Outpatient Nutrition in Rockville Centre, NY
516-256-3651

Outpatient Nutrition in Monmouth, NJ
848-225-6000

Outpatient Nutrition in Basking Ridge, NJ
If you have any questions or concerns, talk with a member of your healthcare team. You can reach them Monday through Friday from 9:00 AM to 5:00 PM at ____________________. After 5:00 PM, during the weekend, and on holidays, please call____________________. If there's no number listed, or you're not sure, call 212-639-2000.
This section contains a list of MSK support services, as well as the resources that were referred to throughout this guide. These resources will help you prepare for your surgery and recover safely. Write down any questions you have and be sure to ask your doctor or nurse.
Admitting Office
212-639-5014
Call to discuss private room or luxury suite options. If you want to change your room choice after your PST visit, call 212-639-7873 or 212-639-7874.

Anesthesia
212-639-6840
Call with any questions about anesthesia.

Blood Donor Room
212-639-7643
Call for more information if you are interested in donating blood or platelets.

Bobst International Center
888-675-7722
MSK welcomes patients from around the world. If you are an international patient, call for help coordinating 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 counseling helpful. We provide counseling for individuals, couples, families, and groups, as well as medications to help if you feel anxious or depressed.

Integrative Medicine Service
646-888-0800
Offers patients many services to complement traditional medical care, including music therapy, mind/body therapies, dance and movement therapy, yoga, and touch therapy.

Look Good Feel Better Program
800-227-2345
Learn techniques to help you feel better about your appearance by taking a workshop or visiting the program online at www.lookgoodfeelbetter.org.

Patient-to-Patient Support Program
212-639-5007
You may find it comforting to speak with a cancer survivor or caregiver who has been through a similar treatment. Through our Patient-to-Patient Support Program, we are able to offer you a chance to speak with former patients and caregivers.
Patient Billing
646-227-3378
Call Patient Billing with any questions regarding preauthorization with your insurance company. This is also called preapproval.

Patient Representative Office
212-639-7202
Call if you have any questions about the Health Care Proxy form or if you have any concerns about your care.

Perioperative Nurse Liaison
212-639-5935
Call if you have any questions about MSK releasing any information while you are having surgery.

Private Duty Nursing Office
212-639-6892
Patients 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 referring 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.

For additional online information, visit LIBGUIDES on MSK’s library website at http://library.mskcc.org. You can also contact the library reference staff at 212-639-7439 for help.
External Resources

**Access-A-Ride**
web.mta.info/nyct/paratran/guide.htm
877-337-2017
In New York City, the MTA offers a shared ride, door-to-door service for people with disabilities who are unable to take the public bus or subway.

**Air Charity Network**
www.aircharitynetwork.org
877-621-7177
Provides travel to treatment centers.

**American Cancer Society (ACS)**
www.cancer.org
800-227-2345
Offers a variety of information and services, including Hope Lodge, a free place for patients and caregivers to stay during cancer treatment.

**Cancer and Careers**
www.cancerandcareers.org
A comprehensive resource for education, tools, and events for employees with cancer.

**CancerCare**
www.cancercare.org
800-813-4673
275 Seventh Avenue (between West 25th & West 26th Streets) New York, NY 10001
Provides counseling, support groups, educational workshops, publications, and financial assistance.

**Cancer Support Community**
www.cancersupportcommunity.org
Provides support and education to people affected by cancer.

**Caregiver Action Network**
www.caregiveraction.org
800-896-3650
Provides education and support for those who care for loved ones with a chronic illness or disability.

**Corporate Angel Network**
www.corpangelnetwork.org
866-328-1313
Free travel to treatment across the country using empty seats on corporate jets.

**fertileHOPE**
www.fertilehope.org
855-220-7777
Provides reproductive information and support to cancer patients and survivors whose medical treatments have risks associated with infertility.
**Gilda’s Club**  
www.gildasclubnyc.org  
212-647-9700  
A place where men, women, and children living with cancer find social and emotional support through networking, workshops, lectures, and social activities.

**Good Days**  
www.gooddaysfromcdf.org  
877-968-7233  
Offers financial assistance to pay for copayments during treatment. Patients must have medical insurance, meet the income criteria, and be prescribed medication that is part of the Good Days formulary.

**Healthwell Foundation**  
www.healthwellfoundation.org  
800-675-8416  
Provides financial assistance to cover copayments, health care premiums, and deductibles for certain medications and therapies.

**Joe’s House**  
www.joeshouse.org  
877-563-7468  
Provides a list of places to stay near treatment centers for people with cancer and their families.

**LGBT Cancer Project**  
http://lgbtcancer.com  
Provides support and advocacy for the LGBT community, including a online support groups and a database of LGBT friendly clinical trials.

**National Cancer Institute**  
www.cancer.gov

**National Cancer Legal Services Network**  
www.nclsn.org  
Free cancer legal advocacy program.

**National LGBT Cancer Network**  
www.cancer-network.org  
Provides education, training, and advocacy for LGBT cancer survivors and those at risk.

**Needy Meds**  
www.needymeds.com  
Lists Patient Assistance Programs for brand and generic name medications.

**NYRx**  
www.nyrxplan.com  
Provides prescription benefits to eligible employees and retirees of public sector employers in New York State.
**Partnership for Prescription Assistance**
www.pparx.org
888-477-2669
Helps qualifying patients without prescription drug coverage get free or low-cost medications.

**Patient Access Network Foundation**
www.panfoundation.org
866-316-7263
Provides assistance with copayments for patients with insurance.

**Patient Advocate Foundation**
www.patientadvocate.org
800-532-5274
Provides access to care, financial assistance, insurance assistance, job retention assistance, and access to the national underinsured resource directory.

**RxHope**
www.rxhope.com
877-267-0517
Provides assistance to help people obtain medications that they have trouble affording.