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This guide will help you prepare for your surgery for cancer of the nasal cavity and paranasal sinuses 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.

The Nasal Cavity

The nasal cavity is a large, air-filled space above and behind your nose in the middle of your face. It has 2 openings called the nostrils, which warm and moisturize the air you breathe in. Your nose and sinuses are covered with a layer of cells that produce mucus and warm the air you breathe. They also affect how your voice sounds when you speak.

Inside the nasal cavity, you have 4 different types of **paranasal sinuses** (see Figure 1). The paranasal sinuses are a group of hollow, air-filled spaces that surround your nasal cavity. These include:

1. **Frontal sinuses**, which are located above your eyes.
2. **Ethmoid sinuses**, which are located between your eyes.
3. **Sphenoid sinuses**, which are located deep in your nasal cavity, behind your ethmoid sinuses.
4. **Maxillary sinuses**, which are located on the sides of your nose.

![Figure 1. Your paranasal sinuses](image)
Types of Surgery

Tumors of the nasal cavity and paranasal sinuses are treated with surgery. The goal of the surgery is to remove the entire tumor and a small amount of normal tissue around it. These tumors grow in areas that have many muscles, nerves, and blood vessels and other important structures. If any of these other structures need to be removed, it can impact how you look and perform basic functions. Therefore, another goal of the surgery is to allow you to maintain your appearance and the ability to breathe, chew, talk, and swallow.

Depending on your surgery, your treatment team may include:

- Head and neck surgeon, plastic reconstructive surgeon, and neurosurgeon
- Radiation oncologist
- Oncologist
- Dentist
- Nurses
- Speech and swallowing therapist
- Dietitians
- Case managers
- Social workers

The different types of surgery are described below. Your doctor will tell you which surgery you are having.

Nasal cavity surgery

Some nasal cavity tumors can be removed with a surgery called wide local excision. This surgery removes the tumor and a small amount of normal tissue around it. A pathologist will examine the tumor to see if it is cancerous.

Tumors that are located on nasal turbinates (long, thin bones located on the inside walls of your nose) can be removed by a surgery called medial maxillectomy.

Tumors that involve the tissue on the outside of your nose may be removed by removing part of your nose or your entire nose.

Surgery for paranasal sinus tumors

The type of surgery for paranasal sinus tumors depends on the where the tumors are located, how big they are, and what other structures are involved.

Tumors that are small, noncancerous, and involve only the ethmoid sinuses are removed with a surgery called external ethmoidectomy.
Tumors that have grown into the maxillary sinus can be removed by a surgery called maxillectomy. The extent of the surgery depends on where the tumor is located and whether it involves nearby tissue and structures. The surgery may require partial or complete removal of:

- Bone around your maxillary sinus
- Bone of the hard palate (roof of your mouth)
- Upper teeth on one side of your mouth
- Part of or your entire orbit (eye socket)
- Part of your cheekbone
- Part of the boney part of your upper nose

If part of your hard palate is removed, there may be an open connection between your nasal cavity and your oral cavity. Your dental surgeon will take impressions before and at the time of your surgery. He or she will place a surgical plate or obturator to close the opening in your palate. This will help with your speech and eating. While in the hospital, your nurse will teach you how to remove the obturator and clean the opening in your palate.

Tumors in the ethmoid, frontal, or sphenoid sinuses are removed by a surgery called craniofacial resection. This surgery involves removing the tumor through incisions on the face and skull to gain access to the tumor. By coming at the tumor from above and below, your surgeons have a better chance of removing the entire tumor while decreasing possible damage to the brain, nerves and other major structures. This surgery is very complex and requires a surgical team consisting of a head and neck surgeon, plastic surgeon, and neurosurgeon.

**Endoscopic surgery**

This surgery uses endoscopes, which are thin, flexible, lighted tubes that are inserted in your nose to reach your nasal cavity and sinuses. This surgery is used for tumors that are small and less involved. It is also used to treat sinus disease.

**Removal of lymph nodes**

Cancers of the nasal cavity and the paranasal sinuses sometimes spread to lymph nodes in the neck. Lymph nodes are removed through a surgery called neck dissection. Your surgeon will determine if you need a neck dissection based on a medical exam and a computed tomography (CT) or magnetic resonance imaging (MRI) scan. If you have lymph nodes removed, you will have a drainage tube in place for several days. The drainage will be measured, and once the drainage is low enough, the drain will be removed.
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.

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 want to quit, call our Tobacco Treatment Program at 212-610-0507. You can also ask your nurse about the program.
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 may 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 PST appointment, you will meet with a nurse practitioner who works closely with anesthesiology staff (doctors and specialized nurses who give you medication to sleep during 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. It is very helpful if you bring the following with you to your PST appointment:

☐ 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 or to learn more, 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.

Do Breathing and Coughing Exercises

Practice taking deep breaths and coughing before your surgery. You will be given an incentive spirometer to help expand your lungs. For more information, please read How to Use Your Incentive Spirometer, located in the “After Your Surgery” section of the guide. If you have any questions, ask your nurse.
Exercise

Do some form of exercise every day. 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 of the guide.

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
2 Days Before Your Surgery

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 of the guide.

1 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 Monday, you will be called on the Friday before. The admitting clerk will tell you where to go on the day of your surgery. This will be either the Surgical Day Hospital (SDH) or the Presurgical Center (PSC). 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

Shower

Wash yourself with soap and water the night before your surgery.

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

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

- Do not put on any lotion, cream, deodorant, makeup, powder, or perfume.
- 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

- A button-down or loose-fitting top.
- Only the money you may need for a newspaper, bus, taxi, or parking.
- A CD player and CDs or an iPod, if you choose. However, someone will need to hold these items for you when you go into surgery.
- A case for your personal items, such as eyeglasses, hearing aid(s), dentures, prosthetic device(s), wig, and religious articles such as a rosary.
- 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, enter 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 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 name 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. Your nurse will insert 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.

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 of the guide.

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 may also put an epidural catheter (thin, flexible tube) in your spine (back). This will be used to give you pain medication. The medication is delivered into your epidural space, which is the area just outside your spinal cord. It will give you pain relief with fewer side effects, such as nausea, vomiting, and sleepiness. This is similar to what is given to women when they have babies.

The length of your surgery depends on which type of surgery and incisions you have. Your doctor will discuss this with you before your surgery. Once your surgery is finished, your incisions will be closed with staples or stitches.
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>Generic Name</th>
<th>Formulation Details</th>
<th>Prescription Details</th>
<th>Over-the-Counter Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggrenox®</td>
<td>Bayer®</td>
<td>(most formulations)</td>
<td>Isollyl®</td>
<td>Panasal®</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equagesic Tablets</td>
<td></td>
<td>Synalgos®-DC Capsules</td>
</tr>
<tr>
<td>Alka Seltzer®</td>
<td>BC® Powder and Cold Formulations</td>
<td>Equazine®</td>
<td>Lanorinal®</td>
<td>Percodan® Tablets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tenol-Plus®</td>
</tr>
<tr>
<td>Anacin®</td>
<td>Bufferin®</td>
<td>Excedrin® Extra-Strength Analgesic Tablets and Caplets</td>
<td>Lortab® ASA Tablets</td>
<td>Persistin®</td>
</tr>
<tr>
<td></td>
<td>(most formulations)</td>
<td></td>
<td></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>
</tr>
<tr>
<td>Allocation</td>
<td></td>
<td></td>
<td></td>
<td>Talwin® Compound</td>
</tr>
<tr>
<td>Arthritis Foundation Pain Reliever®</td>
<td>Buffex®</td>
<td>Fiorgen®</td>
<td>Marnal®</td>
<td>Roxiprin®</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></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>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Wesprin® Buffered</td>
</tr>
<tr>
<td>ASA Suppositories®</td>
<td>COPE®</td>
<td>Fiortal®</td>
<td>Momentum®</td>
<td>Salocol®</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Zeeseltzer®</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>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ZORprin®</td>
</tr>
<tr>
<td>Aspergum®</td>
<td>Easprin®</td>
<td>Genprin®</td>
<td>Norwich® Aspirin</td>
<td>Soma® Compound Tablets</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>
</tr>
<tr>
<td>Axotal®</td>
<td>Empirin® Aspirin (most formulations)</td>
<td>Heartline®</td>
<td>Orphengesic®</td>
<td>St. Joseph® Adult</td>
</tr>
</tbody>
</table>
### Common medications that are NSAIDs that don’t contain aspirin

<table>
<thead>
<tr>
<th>Brand</th>
<th>(Tylenol®)</th>
<th>(Tylenol®)</th>
<th>(Tylenol®)</th>
<th>(Tylenol®)</th>
<th>(Tylenol®)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advil®</td>
<td>Celecoxib</td>
<td>Flurbiprofen</td>
<td>Meclofenamate</td>
<td>Nalfon®</td>
<td>Ponstel®</td>
</tr>
<tr>
<td>Advil Migraine®</td>
<td>Children’s</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>Menadrol®</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>
<td></td>
</tr>
</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>Brand</th>
<th>(Tylenol®)</th>
<th>(Tylenol®)</th>
<th>(Tylenol®)</th>
<th>(Tylenol®)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amino-Opt-E</td>
<td>Aquavit</td>
<td>E-400 IU</td>
<td>E complex-600</td>
<td></td>
</tr>
<tr>
<td>Aquasol E</td>
<td>D’alpha E</td>
<td>E-1000 IU Softgels</td>
<td>Vita-Plus E</td>
<td></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>Acetophen®</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>Acetaminop</th>
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<td>Acetamin</td>
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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.
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

After your surgery, you will be taken to the Post Anesthesia Recovery Unit (PACU). Your family and friends can visit you in the PACU after your surgery.

While you are in the PACU, a nurse will be monitoring your pulse, blood pressure, and breathing. You will also be wearing boots that squeeze and release your legs to help your circulation after surgery.

You may have one or more of the following:

- A patient-controlled analgesia (PCA) device. PCA uses a computerized pump to deliver pain medication into your IV or epidural space (in your spine). For more information, please read Patient-Controlled Analgesia (PCA), located in this section of the guide.
- A temporary nasogastric (NG) feeding tube to give you nutrition, if necessary.
- Drainage tubes to help drain fluid from your surgical wound.
- A urinary catheter (small, flexible tube) to drain urine from your bladder.
- A facemask and humidifier to keep your airways moist.

While you are in the PACU, you will begin to do the coughing and deep breathing exercises your nurse taught you. These help to prevent pneumonia. You will stay in the PACU for 6 to 12 hours or overnight. You will then be taken to your room on the inpatient unit. You will continue doing the coughing and deep breathing exercises. You will also be helped out of bed to a chair the first day after your surgery.

You will begin to get pain medication by mouth on or about the second day after your surgery. At this time, your PCA will be taken out, if you had one. You will begin to walk around the unit. If you have an NG feeding tube, it will be removed 3 to 5 days after your surgery. You will then begin to eat soft foods.

Your nurse will teach you how to do oral irrigations. These help keep your mouth clean, moist, and comfortable. He or she will also begin to spray your mouth with salt water daily. Your nurse will teach you how to care for your surgical incision(s). If you had a skin graft or reconstruction, you will also learn how to care for your donor site.

Discharge and Self-Care

Your healthcare team will prepare you for your discharge. Your doctor will give you a prescription for pain medication. Your nurse will teach you the self-care you will need to continue at home. This will involve irrigating your mouth and nose, if necessary. You will also learn exercises to prevent trismus. This is the inability to open your jaw that can develop from scarring or changes in the muscles around the jaw. For more information, please read the resource Preventing Trismus, located in this section of the guide.
Common Questions

**How long will I be in the hospital?**
Your doctor or nurse will give you an estimate of how long you will be in the hospital.

**Will I have pain?**
You will have some pain after your surgery. Your doctor and nurse will ask you about your pain often and give you medication as needed. If your pain is not relieved, please tell your doctor or nurse.

You will be given a prescription for pain medication before you leave the hospital.

**Will I have pain when I am home?**
The length of time each person has pain or discomfort varies. Follow the guidelines below to manage your pain.

- Call your doctor if the pain medication prescribed for you doesn’t relieve your pain.
- Do not drive or drink alcohol while you are taking prescription pain medication.
- Pain medication should help you as you resume your normal activities. Take enough medication to make sure you can gradually increase your activities. Pain medication is most effective 30 to 45 minutes after taking it.
- Keep track of when you take your pain medication. It will not be as effective if you allow your pain to increase. Taking it when your pain first begins is more effective than waiting for it to get worse.

As your incisions heal, 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.

**How can I prevent constipation?**
Pain medication may cause constipation, but there are steps you can take to prevent it, including exercising if you can. Walking is an excellent form of exercise. Drink plenty of water.

If these methods do not help, talk with your doctor or nurse. He or she may recommend over-the-counter or prescription medication.

**When can I eat?**
For the first meal after your surgery, you will be given clear liquids. You will slowly go from a puréed diet to a mechanical soft diet, which you will continue to follow after you are discharged. For more information, read the resource *Eating Guide for Puréed and Mechanical Soft Diets*, located in this section of the guide.
**When will my staples or stitches be removed?**

If you stay in the hospital for longer than 1 week, some or all of your staples or stitches will be removed before you leave.

If you stay in the hospital for less than 1 week, your staples or stitches will be removed during your first follow-up appointment with your doctor after your surgery.

If you had radiation therapy to the neck before your surgery, your staples or stitches will stay in place for 2 to 3 weeks.

**How do I care for my incisions?**

Your doctor or nurse will give you and your caregiver instructions on how to care for your incisions before you leave the hospital.

Call your doctor or nurse immediately if you develop any of the following signs of infection:

- A temperature of 100.4°F (38°C) or higher
- Increased discomfort, redness, or both around your incision line
- Skin around your incision line that is hot to the touch
- Drainage or accumulation of fluid from your incision site

**When can I shower?**

You can shower 24 hours after your drain is removed from your neck. When showering, do not apply direct water pressure to your incision. Rather, allow the soap and water to run over your incision. Gently pat your incision dry with a clean towel.

**When can I resume my normal activities?**

Your doctor and nurse will tell you when you can resume your normal activities during your first follow-up appointment after your surgery.

**When can I resume sexual activity?**

Ask your doctor or nurse when you can resume sexual activity.

**What type of follow-up care will I receive after I leave the hospital?**

Your doctor will discuss your long-term follow-up care with you. Your first appointment after your surgery will be in about 1 week.

Your dental and prosthetic team will follow you after your surgery. If you have an obturator, they will adjust it as needed to help restore your ability to chew, swallow, and speak. If needed, a facial prosthesis will be made to restore your appearance.
If necessary, a speech pathologist from the Speech and Hearing Center will work with you. He or she treats:

- Voice loss
- Swallowing disorders
- Impaired speech

Your speech pathologist will help you regain as much of your speech and swallowing as possible.

If you have any questions or concerns, you can contact your doctor’s office at any time after you have been discharged from the hospital.

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

The tumor (and lymph nodes, if they were removed) will be examined. The 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?**

The diagnosis and treatment of cancer can be a very stressful event. For many, it can be overwhelming at times. Each person who receives a diagnosis of cancer copes in his or her own way. You and your family will almost certainly have ups and downs. Many say it helps to concentrate on the small improvements you will see as the days and weeks go by.

Your treatment may change your appearance. This can be especially upsetting. There are many resources to help you and your family during your recovery. Some are here at MSK and others are in your community. Ask your doctor, nurse, or social worker about options. You may also want to speak with a head and neck cancer survivor. This can be arranged through our Patient-to-Patient Support Program. Most people find it very reassuring to see someone who has been through what they are facing.

The Resources for Life After Cancer (RLAC) Program provides support and education for people who are finished with treatment. To learn more about the programs they offer, call 646-888-8106 or go to: www.mskcc.org/experience/living-beyond-cancer/services-survivors.

Depression can occur at any time when you have a serious illness. It is important to recognize the symptoms. Help is available to treat and manage it. Signs of depression are:

- Prolonged feelings of helplessness and sadness
- Inability or difficulty to concentrate and/or carry out normal activities
- Change in mood
- Change in sleep pattern
- Change in appetite

If you have any of these symptoms and they last more than 2 weeks, tell your doctor or nurse.
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, please call 212-639-2000 and ask for the doctor on call for your doctor.

Call your doctor or nurse immediately if you have:

- A temperature of 100.4° F (38° C) or higher
- Increased discomfort, redness, or both around your incision line
- Skin around your incision line that is hot to the touch
- Drainage or accumulation of fluid from your incision site
- Shortness of breath
- New or increased swelling around 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 slowly.

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.
Patient-Controlled Analgesia (PCA)

This information will help you understand what patient-controlled analgesia (PCA) is and how to use your PCA pump.

PCA helps you control your pain by letting you give yourself pain medication. It uses a computerized pump to deliver pain medication into your vein (intravenous, or IV PCA) or into your epidural space, which is in your spine (see Figure 1). Whether you have an IV PCA or an epidural PCA depends on what you and your doctor decide is right for you.

PCA is not right for everyone. Some people may not be able to use PCA. Tell your doctor if you have weakness in your hands and think you may have trouble pushing the PCA button. Also, before you get PCA, tell your doctor if you have sleep apnea. This may affect the way we prescribe your medication. People who are confused or cannot follow these instructions should not use PCA.

Using the PCA

To give yourself pain medication, press the button attached to the pump when you have pain. The pump will deliver a safe dose that your doctor has prescribed.

Only you should push the PCA button. Family and friends should never push the button.
The pump can be programmed to deliver your medication in 2 ways:

- **As needed.** You get your pain medication only when you press the button. It will not allow you to get more medication than prescribed. The pump is set to allow only a certain number of doses per hour.

- **Continuous.** You get your pain medication at a constant rate all the time. This can be combined with the as needed mode. That allows you to take extra doses safely if you’re having pain.

Tell your doctor if your PCA is not helping with your pain. Also, tell your doctor if your pain changes, such as if it gets worse, feels different than before, or you feel pain in a new place. Your doctor may be able to change the medication to one that may work better for you.

**Side Effects**

Pain medication delivered by the PCA can have side effects. Tell your doctor or nurse if you have any of these problems:

- Constipation
- Nausea or vomiting
- Dry mouth
- Itching
- Changes in your vision, such as seeing things that aren’t there
- Drowsiness, dizziness, or confusion
- Weakness, numbness, or tingling in your arms or legs
- Difficulty urinating
- Any other side effects or problems

Your doctor may be able to give you a different medication that has fewer side effects.
Preventing Trismus

This information will help you prevent trismus during and after your surgery or radiation therapy.

The Structure of Your Jaw

Your jaw is made up of a pair of bones that form the framework of your mouth and teeth (see Figure 1). Your upper jaw is called the maxilla and your lower jaw is called the mandible. Your mandible connects to your skull at the temporomandibular joint (TMJ).

Figure 1. The bones and muscles of the jaw

Many muscles and nerves around the jaw work together to open and close your mouth. Most people are able to open their mouth 35 to 55 millimeters, which is about the width of 3 fingers (see Figure 2).
Trismus

Trismus is a condition in which someone has difficulty opening their mouth. Trismus can occur anytime during, right after, or even years after your treatment. It can develop:

- If you have a tumor that involves the bones, muscles, and nerves that open the mouth.
- After surgery to the head and neck.
- After radiation therapy to the head and neck.

You may develop fibrosis (scarring) as the tissues begin to heal from surgery. Fibrosis can also build up years after radiation therapy.

When you can’t open your mouth well, it is hard for your doctor to examine this area. You may also have problems:

- Cleaning your mouth and teeth. This may lead to bad breath, cavities, and infections.
- Chewing and swallowing. This can make it difficult for you to eat and drink.
- Talking
- Kissing
- Having a breathing tube placed, if you ever need general anesthesia (medication to make you sleep during a surgery or procedure).
Once trismus develops, it is very hard to treat. That is why it is important to prevent trismus and to treat it as early as possible.

## How to Prevent Trismus

There are 4 ways to help prevent trismus. Even if you don’t have any symptoms, you should do the following to prevent problems:

- Massage your jaw muscles.
- Exercise your jaw muscles.
- Maintain good posture.
- Maintain good oral hygiene.

There are a number of exercises described below. During the exercises, breathe normally and do not hold your breath. If any of these exercises cause pain, numbness, or tingling, stop them right away and call your doctor or nurse. If you have had surgery, check with your doctor or nurse before you begin these exercises.

### Massage Your Jaw Muscles (Masseter Muscle)

Place your index and middle finger on your cheek bone. Run your fingers down over your masseter muscle, which ends at your bottom jaw (see Figure 3). As you move your fingers, find points that feel tender or tight. Massage these areas with your fingers in a circular direction for 30 seconds. Do this 2 to 3 times a day.

To keep your jaw muscles relaxed all the time, avoid clenching your jaw when you are stressed or out of habit.

### Exercise Your Jaw Muscles

Use a mirror for these exercises to help you do them correctly. These movements should give you a good stretch, but not cause pain. Do these exercises 2 to 3 times a day.
Active range of motion and stretching exercises

Sit or stand. Hold your head still while doing these exercises.

1. Open your mouth as wide as you can, until you can feel a good stretch but no pain (see Figure 4). Hold this stretch for _____ seconds.

   Figure 4. Mouth open wide

2. Move your jaw to the left (see Figure 5). Hold this stretch for 3 seconds.

   Figure 5. Jaw moved to the left

3. Move your jaw to the right (see Figure 6). Hold this stretch for 3 seconds.

   Figure 6. Jaw moved to the right
4. Move your lower jaw in a circle. Make 5 circles in each direction.

**Passive stretching exercise**

1. Place 1 thumb on your top teeth in the middle of your jaw.

2. Place the pointer (index) finger of your other hand on your bottom teeth, in the middle of your jaw.

3. Open your mouth with your fingers, but do not bite down or resist (see Figure 7). Let your fingers do all of the work. Hold this stretch for ____ seconds.

![Figure 7. Mouth opened with index finer and thumb](image)

**Maintain Good Posture**

Good posture means sitting and standing with your ears, shoulders, hips, knees, and ankles aligned. To maintain good posture, you need to keep your neck and shoulders strong and flexible (see Figure 8). The exercises listed below will help you do this. **Do these exercises twice a day.**
Neck stretch

Sit or stand with your arms at your side. Hold each stretch for 30 seconds.

1. Bend your head forward (see Figure 9).

2. Bend your head backwards (see Figure 10).
3. Rotate your head to the right (see Figure 11).

4. Rotate your head to the left (see Figure 12).

5. Bring your left ear to your left shoulder (see Figure 13).
6. Bring your right ear to your right shoulder (see Figure 14).
**Chin tuck**

1. Sit or stand with your arms at your side.
2. While looking forward, tuck your chin.
3. Pull your head back to line up your ears with your shoulders (see Figure 15). Hold this position for 3 seconds.
4. Do this exercise 10 times slowly.

**Shoulder blade pinch**

1. Sit or stand with your arms at your side. Tuck your chin, as described in the chin tuck exercise above.
2. Pinch your shoulder blades together as tightly as possible (see Figure 16).
3. Hold this position for 3 seconds.
4. Do this exercise 10 times slowly.

**Maintain Good Oral Hygiene**
- Brush your teeth and tongue when you wake up, after each meal, and at bedtime.

- If you have removable dentures or a dental prosthesis, take it out and clean it each time you clean your mouth. Do not sleep with these devices in your mouth.

- Floss your teeth once daily at bedtime.

**If You Develop Tightness When Opening Your Mouth**

The earlier you start treatment for trismus, the easier it will be to restore your jaw function. If you notice any tightening in your jaw, call your doctor or nurse right away. They can refer you to:

- Speech and swallowing specialists and physical therapists. They can help you maintain and restore your ability to open your mouth. They use many techniques, such as exercise, stretching, and massage. They may also recommend special devices to help you open your mouth.

- Rehabilitation doctors. They will evaluate how well you can open your mouth. They may give you medication for pain or spasms (sudden intense cramping in your muscle) or suggest other treatments to help you.
Eating Guide for Puréed and Mechanical Soft Diets

This information explains what you can eat while you are on a puréed or mechanical soft diet. It includes steps you can take to make sure you eat well, even if you have problems chewing or swallowing. Eating well as part of a healthy lifestyle can help strengthen your body and increase your overall well-being. Sample menus and recipes are included.

Foods in puréed and mechanical soft diets have a smoother consistency than regular foods. They require very little or no chewing at all to swallow. You may need to be on a puréed or mechanical soft diet if you:

- Have trouble chewing or swallowing
- Had mouth surgery
- Have trouble moving or have lost feeling in parts of your mouth, such as your lips or tongue

A **puréed diet** is made up of foods that require no chewing, such as mashed potatoes and pudding. Other foods may be blended or strained to make them the right consistency. Liquids, such as broth, milk, juice, or water may be added to foods to make them the right consistency.

A **mechanical soft diet** is made up of foods that require less chewing than in a regular diet. People on this diet can tolerate a variety of consistencies. Chopped, ground, and puréed foods are included, as well as foods that break apart easily without a knife.

If you experience any of the following signs or symptoms during or after swallowing, you should contact your doctor and speech or swallowing therapist:

- Coughing
- Food particles lodging in your mouth or throat
- Breathing problems
- Wet voice or excessive phlegm
- Lung infection (pneumonia)

If you don’t know which diet is right for you, or have any questions, speak with your doctor or speech or swallowing specialist. You can also speak with a dietitian in the Department of Food and Nutrition by calling 212-639-7071.

**Maintaining or Regaining Weight**

Your caloric need is the number of calories you need every day to maintain your weight. Eating the number of calories your body needs can help prevent you from losing weight. Also, you can increase the number of calories if you need to gain weight.

Each person has a different caloric need. This need is based on:

- Age
- Sex
• Height and weight
• Level of physical activity

Generally, people who are older or less active have a lower caloric need. Your doctor and dietitian can help you find out your caloric need. However, the easiest way to check if you are eating enough is to watch your weight. Try to weigh yourself twice a week. If you are losing weight, write a list of all the foods that you eat. Do this for a few days. Have your dietitian look it over to see where you can add more calories. If you are eating less than usual or losing weight, please call your dietitian.

**Guide for Good Nutrition**

Eat foods that have all the nutrients your body needs to keep you healthy. This includes:

• Proteins
• Carbohydrates
• Fats
• Fiber
• Vitamins and minerals

Also, make sure that you drink plenty of liquids. Your goal should be to drink 8 glasses of water a day. However, speak to your doctor or dietitian to find out if more or less liquid would be best for you.

**Protein**

Protein helps your body build tissue and heal after surgery. Foods rich in protein include:

• Meats
• Fish
• Poultry (chicken, turkey)
• Milk, soy milk, non-fat dried milk powder
• Cheese
• Yogurt (especially Greek yogurt)
• Eggs or egg whites
• Beans or bean purée
• Nuts and nut butters
• Soy products such as tofu and edamame (soy beans)
• Liquid nutritional supplements such as Ensure®, Ensure Plus®, Boost®, or Boost Plus®

**Carbohydrates**

Carbohydrates are starches and sugars. They should make up at least half of your caloric intake. Most of the carbohydrates in your diet should be complex carbohydrates (unprocessed starches that are rich in fiber), such as:

• Starchy vegetables (potatoes, green peas, squash)
• Whole grains (oatmeal, brown rice)
• Cereals
• Breads
• Pasta

These foods are considered “protein-sparing.” This means they can prevent your body from breaking down protein for energy. Your body can then use this protein to build tissue.

**Fat**

Fat is the most concentrated source of calories. For example, 1 teaspoon of oil has 45 calories while 1 teaspoon of sugar has 20 calories. Fats are in:

- Meats
- Dairy
  - Coconut and canned coconut milk or cream
  - Nuts and nut butters
  - Seeds
  - Vegetable oils
  - Avocados
  - Olives
  - Fried and sautéed foods
  - Baked goods

Some fats are healthier for you than others. Unsaturated fats are healthier for you than saturated fats.

Unsaturated fats are found in:

- Olive oil
- Canola oil
- Peanut oil
- Fish oil
- Avocado

Saturated fats are found in:

- Meat
- Full-fat dairy products (whole milk, cheeses, heavy cream, cream cheese)
- Butter
- Coconut
- Palm oil
Eating too much fat can make you gain weight. If your goal is to gain weight, try to eat healthier (unsaturated) fats. If you are trying to lose weight, or are already at a healthy weight, choose low-fat foods when planning your meals.

**Fiber**

There are 2 kinds of fiber: soluble and insoluble. Soluble fiber is found in barley, oats, and the flesh of skinless fresh fruits. Soluble fiber can help soften your stools and slow your digestion.

Insoluble fiber is found in the skins of fruits and vegetables, legumes (beans, lentils), seeds, and whole grains. It is not broken down in your intestines and adds bulk to your stool. This can help you have more regular bowel movements. Even if fruits and vegetables are blended or juiced, the fiber is still there if the pulp has not been removed. Getting enough of both kinds of fiber is important.

**Vitamins and minerals**

Vitamins and minerals are found in all foods in different amounts. A person who eats a well-balanced diet will most likely not need a supplement. Your diet should include some of the following:

- Breads, grains, and cereals
- Fruits
- Vegetables
- Dairy products (milk, yogurt)
- Poultry, fish, and eggs
- Beans
- Seeds
- Nuts

Please speak with your doctor if you are thinking about taking a supplement.

**Lactose**

Lactose is a sugar found in milk and milk products, such as yogurt, cheese, and ice cream. Many people can’t tolerate lactose. It may cause them to have gas, cramping, or diarrhea. If this is a problem for you, it may keep you from having dairy items. Look in your supermarket dairy case for low-lactose or lactose-free milk and cheese products. Lactaid® is a brand that has several of these products. Many people are able to get nutrients from dairy products by eating cheese or yogurt. These foods have less amounts of lactose than milk or ice cream. You may also try the following non-dairy, lactose-free foods and beverages:

- Rice milk or cheese
- Soy products such as soy milk, cheese, and yogurt
- Almond products such as almond milk, cheese, or yogurt
- Tofu
Adding More Calories and Protein to Your Diet

**Boosting your calorie count**

If you need to eat more calories, here are some easy tips to boost the calorie count of your foods:

- Eat small, frequent meals or snacks. For example, if you are eating half as much as usual at each meal, you should be eating twice as often.

- Add 2 to 4 tablespoons of canned coconut milk or cream to smoothies, shakes, cereals, or yogurts for extra calories. You can also add it to rice or diced chicken for extra calories and flavor.

- Choose creamy soups rather than soups with clear broths.

- Have puddings and custards rather than gelatin desserts.

- Add sauces, gravies, or extra vegetable oil to your meals.

- Drink apricot or peach fruit nectars. They are less acidic than others.

- Drink fruit shakes or fruit smoothies made with yogurt or ice cream.

- Make ice cubes from milk or fruit nectar. Use these high-calorie ice cubes in smoothies or to keep your shakes cold. As they melt, they will add calories to your beverages.

- Drink high-calorie drinks, such as milkshakes, soy milkshakes, or pasteurized eggnog.

- Drink a liquid nutritional supplement such as Ensure instead of milk to make a nutritious, high-calorie milkshake.

- Add honey to smoothies, tea, yogurt, hot cereals, shakes, or ice cream.

- If you are **not** on a low-fat diet, add sour cream, half and half, heavy cream, or whole milk to your foods. You can add it to mashed potatoes, sauces, gravies, cereals, soups, and casseroles. Consider adding mayonnaise to your eggs, chicken, tuna, pasta, or potatoes to make a smooth, moist salad.

- Add avocado to dishes or smoothies.

- Add nut butters such as peanut butter to shakes and smoothies.

**Boosting your protein intake**

If you need to increase the amount of protein in your diet, here are some easy tips:

- Add tofu to cooked vegetables, soups, smoothies, or in place of chicken or meat if you are having difficulty eating animal proteins.

- Add cooked eggs to your soups, broths, and cooked vegetables. Purée the cooked eggs if needed.

- Use plain Greek yogurt in smoothies, cream sauces, or wherever you would use sour cream for added protein.

- Add cheese (shredded or grated) to your soups, cooked eggs, vegetables, and starches. For example, adding full-fat ricotta cheese can moisten a dish, as well as add calories and protein. Add cottage cheese to smoothies, purées, or canned fruits.
• Use fortified milk (see recipe in the “Recipes” section) rather than regular milk to double the amount of protein in it. Use this milk in shakes, hot cereals, mashed potatoes, hot chocolate, or with instant puddings to create a high-protein, high-calorie dessert. Also, you can add non-fat dried milk powder alone to purées and smoothies to add more calories and protein.

• Grind some nuts with a coffee grinder and add to them to your smoothies, hot cereals, puddings, or yogurts.

**Liquid nutritional supplements**

If your doctor or dietitian suggests that you drink high-caloric or high-protein liquid nutritional supplements, drink them between your meals. Try some of the products listed below. You can buy most of them at any supermarket or pharmacy. If you don’t see them in the store, ask a pharmacist or store manager to order these products for you. You can also order them online.

<table>
<thead>
<tr>
<th>Liquid Nutritional Supplement</th>
<th>Calories</th>
<th>Protein (g)</th>
<th>Water (mL)</th>
<th>Lactose Free</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure (8 ounces)</td>
<td>220</td>
<td>9</td>
<td>196</td>
<td>Yes</td>
</tr>
<tr>
<td>Ensure Active Clear™ (10 ounces)</td>
<td>180</td>
<td>9</td>
<td>274</td>
<td>Yes</td>
</tr>
<tr>
<td>Ensure Plus or Ensure Complete™ (8 ounces)</td>
<td>350</td>
<td>13</td>
<td>180</td>
<td>Yes</td>
</tr>
<tr>
<td>Glucerna® (8 ounces)</td>
<td>200</td>
<td>10</td>
<td>200</td>
<td>Yes</td>
</tr>
<tr>
<td>Boost (8 ounces)</td>
<td>240</td>
<td>10</td>
<td>200</td>
<td>Yes</td>
</tr>
<tr>
<td>Boost Plus (8 ounces)</td>
<td>360</td>
<td>14</td>
<td>185</td>
<td>Yes</td>
</tr>
<tr>
<td>Boost Glucose Control® (8 ounces)</td>
<td>190</td>
<td>16</td>
<td>200</td>
<td>Yes</td>
</tr>
<tr>
<td>Boost Nutritional Pudding (5 ounces)</td>
<td>240</td>
<td>7</td>
<td>140</td>
<td>Yes</td>
</tr>
<tr>
<td>Carnation Breakfast Essentials® Powder (1 packet)</td>
<td>130</td>
<td>5</td>
<td>NA</td>
<td>No</td>
</tr>
<tr>
<td>Carnation Breakfast Essentials Ready-to-Drink (11 ounces)</td>
<td>250</td>
<td>14</td>
<td>285</td>
<td>No</td>
</tr>
<tr>
<td>Boost VHC (8 ounces)</td>
<td>530</td>
<td>22.5</td>
<td>168</td>
<td>Yes</td>
</tr>
<tr>
<td>Scandishake® (1 packet)</td>
<td>440</td>
<td>5</td>
<td>NA</td>
<td>No</td>
</tr>
<tr>
<td>Scandishake Lactose Free (1 packet)</td>
<td>430</td>
<td>8</td>
<td>NA</td>
<td>Yes</td>
</tr>
<tr>
<td>Resource® Boost Breeze (8 ounces)</td>
<td>250</td>
<td>9</td>
<td>196</td>
<td>Yes</td>
</tr>
<tr>
<td>Enlive® (6.7 ounces)</td>
<td>200</td>
<td>7</td>
<td>166</td>
<td>Yes</td>
</tr>
<tr>
<td>Resource Benecalorie® (1.5 ounces)</td>
<td>330</td>
<td>7</td>
<td>NA</td>
<td>Yes</td>
</tr>
<tr>
<td>Resource BeneProtein® Instant Protein Powder (7 grams)</td>
<td>25</td>
<td>6</td>
<td>NA</td>
<td>Yes</td>
</tr>
</tbody>
</table>

NA=not applicable.
**Recommended foods**

Below, you will find a list of recommended foods, as well as foods to avoid, while you are on a puréed or mechanical soft diet.

### Puréed Diet

<table>
<thead>
<tr>
<th>Type of Food</th>
<th>Recommended</th>
<th>Excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Milk and Dairy Products</strong></td>
<td>• Milk, plain or well-blended yogurt without fruit pieces, buttermilk, evaporated or condensed milk, milkshakes, malts&lt;br&gt;• Puréed cottage cheese, thin ricotta cheese, mild or processed cheeses melted into a sauce&lt;br&gt;• Ice cream, frozen yogurt&lt;br&gt;• Liquid nutritional supplements such as Ensure or Carnation Breakfast Essentials</td>
<td>• Solid cheeses, regular cottage cheese, farmer cheese, pot cheese</td>
</tr>
<tr>
<td><strong>Vegetables</strong></td>
<td>• Vegetable juices, puréed cooked vegetables, baby food vegetables</td>
<td>• All others, even well-cooked vegetables that don’t require a lot of chewing</td>
</tr>
<tr>
<td><strong>Fruits</strong></td>
<td>• Fruit juices and nectars&lt;br&gt;• Smooth applesauce, puréed fruits, baby food fruit</td>
<td>• All others, including mashed banana and canned fruits</td>
</tr>
<tr>
<td><strong>Starches</strong></td>
<td>• Cooked cereals, Cream of Wheat®, Farina®, Cream of Rice®, oatmeal, hominy grits&lt;br&gt;• Whipped or smooth mashed potatoes&lt;br&gt;• Puréed pasta, puréed rice</td>
<td>• All others</td>
</tr>
<tr>
<td><strong>Meat or Meat Substitutes</strong></td>
<td>• Strained or puréed meat, fish, and poultry&lt;br&gt;• Smooth egg salad, soufflés, hummus, or puréed beans</td>
<td>• All others, including scrambled, fried, poached, hard-boiled, or soft-boiled eggs</td>
</tr>
<tr>
<td><strong>Fats</strong></td>
<td>• Butter, margarine, sour cream, cooking fats and oils, gravies&lt;br&gt;• Whipped toppings, heavy cream</td>
<td>• All others</td>
</tr>
<tr>
<td><strong>Soups</strong></td>
<td>• Broth, bouillon&lt;br&gt;• Soups with puréed or strained vegetables&lt;br&gt;• Strained or puréed cream soups&lt;br&gt;• Puréed chicken noodle or chicken and rice soup</td>
<td>• All others</td>
</tr>
<tr>
<td>Type of Food</td>
<td>Recommended</td>
<td>Excluded</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| Sweets and Desserts | • Plain custards or puddings  
• Sherbet, ice cream, frozen yogurt  
• Jell-O®  
• Flavored fruit ices, popsicles, fruit whips, flavored gelatins  
• Clear jelly, honey, sugar, sugar substitutes  
• Chocolate syrup, maple syrup | • All others, including anything made with coconuts, nuts, or whole fruits (e.g., yogurt with fruit in it) |
| Beverages | • All beverages | • Any containing raw eggs |
| Miscellaneous | • Salt, pepper, ketchup, mustard, mayonnaise,  
• Herbs, spices  
• Syrups  
*Avoid spicy or acidic items if you have mouth soreness.| • Nuts, coconuts, olives, pickles, seeds |

### Mechanical Soft Diet

<table>
<thead>
<tr>
<th>Type of Food</th>
<th>Recommended</th>
<th>Excluded</th>
</tr>
</thead>
</table>
| Milk and Dairy Products | • Milk, buttermilk, eggnog, yogurt (plain and with fruit), milkshakes, evaporated and condensed milk, malts  
• Cottage cheese, soft cheeses like ricotta or farmer and pot cheese sauces, grated and shredded cheeses  
• Ice cream and frozen yogurt  
• Liquid nutritional supplements such as Ensure or Carnation Breakfast Essentials | • Hard cheeses |
| Vegetables | • Any well-cooked, diced vegetables, such as carrots, peas, green beans, beets, butternut or acorn squash, wax beans  
• Chopped or creamed spinach  
• Puréed vegetables, baby food vegetables  
• Vegetable juices | • Raw vegetables, stir-fried vegetables, fried vegetables, lettuce |
<table>
<thead>
<tr>
<th>Type of Food</th>
<th>Recommended</th>
<th>Excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>• Ripe bananas</td>
<td>• Fresh fruits, fruit skins, fruits with pits, dried fruits</td>
</tr>
<tr>
<td></td>
<td>• Any canned fruits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Any cooked fruits without the skin (All must be mashed or diced into small pieces.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Smooth applesauce, puréed fruits, baby food fruits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Nectars, fruit juices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Fresh fruits, fruit skins, fruits with pits, dried fruits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Any canned fruits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Any cooked fruits without the skin (All must be mashed or diced into small pieces.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Smooth applesauce, puréed fruits, baby food fruits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Nectars, fruit juices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rye-crisps, dry crackers, popcorn, taco shells, Melba toasts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Breads and muffins with seeds or nuts, pita bread, rye and pumpernickel breads, bagels, French or sourdough breads, toast</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rye-crisps, dry crackers, popcorn, taco shells, Melba toasts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Any cakes or breads made with nuts, seeds, raisins, or dates</td>
<td></td>
</tr>
<tr>
<td>Starches</td>
<td>• Any diced soft breads, such as soft rolls, muffins, soft French toast, pancakes</td>
<td>• Chow mein noodles</td>
</tr>
<tr>
<td></td>
<td>• Cakes, pies without crusts, pastries without nuts or dried fruits, soft cookies</td>
<td>• Any cakes or breads made with nuts, seeds, raisins, or dates</td>
</tr>
<tr>
<td></td>
<td>• Dry cereals soaked in a small amount of milk</td>
<td>• Kasha (buckwheat), wild rice, shredded wheat, granola</td>
</tr>
<tr>
<td></td>
<td>• White or brown rice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Casseroles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cooked cereals, Cream of Wheat, Farina, Cream of Rice, oatmeal, hominy grits, couscous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Diced soft pastas or noodles, pasta salad, pastina, orecchiette</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Soft whole grains (i.e., barley, farro)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rye-crisps, dry crackers, popcorn, taco shells, Melba toasts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Breads and muffins with seeds or nuts, pita bread, rye and pumpernickel breads, bagels, French or sourdough breads, toast</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rye-crisps, dry crackers, popcorn, taco shells, Melba toasts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Any cakes or breads made with nuts, seeds, raisins, or dates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Kasha (buckwheat), wild rice, shredded wheat, granola</td>
<td></td>
</tr>
<tr>
<td>Potato or Potato Substitutes</td>
<td>• Mashed, baked, or creamed potatoes, sweet potatoes</td>
<td>• Hash browns, fried potatoes, potato skins, French fries</td>
</tr>
<tr>
<td></td>
<td>• Ground, finely chopped tender meat or poultry with gravy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Soft chicken salad, creamed tuna salad without celery, egg salad without celery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Diced meat loaf, meatballs, salmon loaf, or croquettes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Casseroles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Diced baked or broiled fish (fillet of sole, roughy, flounder, salmon)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Well-cooked beans, tofu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Scrambled eggs or diced hard-cooked eggs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Plain cheese quiche</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Whole cuts or diced meat or poultry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Hot dogs, sausage, knockwurst, bratwurst, pork chops, steak, bacon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Fried fish, haddock, halibut, tuna</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Crunchy peanut butter</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Chili with beans</td>
<td></td>
</tr>
</tbody>
</table>

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### Difficulties With Eating

During and after chemotherapy and radiation therapy, some people develop side effects that make it difficult to eat. Below, you will find recommendations to help with these side effects.

### Taste changes

You may find that the foods you once liked taste different during and after chemotherapy or radiation therapy. In the weeks after finishing chemotherapy, your taste should slowly return to normal. Your taste may take a little longer to return after radiation therapy. Try some of these tips to deal with taste changes:

- Experiment with different foods. You might find a new food that you like.
- Retry foods every week or 2 to see if the taste has returned.
- Substitute fish, eggs, cheese, or milk for meat. You may tolerate these foods better.
- Try different seasonings, including herbs and spices. Use salt if you are not on a low-salt diet.
- Adjust the sugar levels in the food to your taste.
- If the food you are eating tastes metallic, use plastic utensils or glassware for cooking.

<table>
<thead>
<tr>
<th>Type of Food</th>
<th>Recommended</th>
<th>Excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fats</td>
<td>• Butter, margarine, cooking fats and oils</td>
<td>• Nuts, almonds, cashews, peanuts, pecans, seeds, coconuts, whole olives</td>
</tr>
<tr>
<td></td>
<td>• Gravy, whipped toppings, salad dressings, mayonnaise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Finely chopped olives</td>
<td></td>
</tr>
<tr>
<td>Soups</td>
<td>• Broth, bouillon</td>
<td>• Any soups with chunks of meat or crunchy vegetables</td>
</tr>
<tr>
<td></td>
<td>• Soups with puréed or strained vegetables, strained or puréed cream soups</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Diced chicken noodle soup</td>
<td></td>
</tr>
<tr>
<td>Sweets and Desserts</td>
<td>• Seedless jellies only, honey, sugar, sugar substitutes, syrup</td>
<td>• Any sweets and desserts with coconut, nuts, or dried fruits</td>
</tr>
<tr>
<td></td>
<td>• Ice cream, frozen yogurt, puddings, custards</td>
<td>• Granola bars</td>
</tr>
<tr>
<td></td>
<td>• Pies without crust, pastries and cakes without seeds or nuts, soft cookies</td>
<td>• Pies</td>
</tr>
<tr>
<td></td>
<td>(all diced)</td>
<td>• Chewy, crunchy, or hard candy</td>
</tr>
<tr>
<td></td>
<td>• Pies without crust, pastries and cakes without seeds or nuts, soft cookies</td>
<td>• Jelly or jam with seeds, preserves</td>
</tr>
<tr>
<td></td>
<td>• Any sweets and desserts with coconut, nuts, or dried fruits</td>
<td>• Crunchy cookies</td>
</tr>
<tr>
<td></td>
<td>• Pies</td>
<td>• Licorice, taffy, caramel</td>
</tr>
<tr>
<td>Beverages</td>
<td>• Water, coffee, tea, carbonated beverages, hot cocoa, fruit punch, coconut water</td>
<td>• Any beverage containing raw eggs</td>
</tr>
<tr>
<td></td>
<td>• Gatorade®, Pedialyte®, Isopure® lemonade without pulp</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>• Salt, pepper, ketchup, mustard, herbs, spices, jelly</td>
<td>• Avoid spicy/acidic items if you have mouth soreness</td>
</tr>
</tbody>
</table>

*Type of Food Recommended Excluded*
• Try cold foods or foods at room temperature.
• Marinate your foods in fruit nectars, duck sauce, or citrus juice.
• Maintain good oral hygiene.

**Sore mouth**

People who have had chemotherapy or radiation may have a sore mouth. If this is a problem for you, try these recommendations:

• Eat mild foods, such as milks, custards, or puddings.
• Your doctor can give you a mouth spray to control pain while you eat. Avoid foods that are acidic, such as orange juice and tomato sauce. Avoid foods that are spicy or salty. Also try to stay away from foods that are too hot or too cold.
• Liquid or soft foods such as soufflés or casseroles may be easier to swallow than solid foods. Experiment with consistencies to see what feels best.

**Dry mouth**

Eating can be difficult if your mouth is dry and doesn’t make enough saliva. Try these tips:

• Choose soft, moist foods.
• Add gravies, sauces, applesauce, or other liquids to your foods.
• Have a spoonful of warm soup or other liquid between mouthfuls of food.
• Try foods prepared with gelatin, such as mousses. They tend to slide down the throat more easily.
• Always carry a bottle of water with you. You can also try carrying a small, clean spray bottle filled with water. Spray water in your mouth throughout the day to keep it moist.
• Try eating sugar-free mints or sugar-free gum to make more saliva.
• If you are having trouble maintaining your weight, drink beverages that have calories instead of water. Examples are fruit juices, fruit nectars, and liquid nutritional supplements such as Ensure.
Sample Menus

Everyone has his or her own way of eating. If you are used to eating 3 nutritious meals a day and can keep or regain your weight, you are doing fine. Many people find that it is easier to eat 6 or 7 small meals throughout the day. Below is a sample menu for both puréed and mechanical soft diets.

<table>
<thead>
<tr>
<th>Meal or Snack</th>
<th>Puréed Diet</th>
<th>Mechanical Soft Diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>• Puréed banana</td>
<td>• Soft, diced fruit without skin or peel</td>
</tr>
<tr>
<td></td>
<td>• Cooked cereal with milk</td>
<td>• Cereal softened in milk or diced soft pancake with syrup and butter</td>
</tr>
<tr>
<td></td>
<td>• Puréed cooked egg</td>
<td>• Scrambled eggs</td>
</tr>
<tr>
<td></td>
<td>Mid-morning snack: • Vanilla or flavored yogurt</td>
<td>• Rice pudding</td>
</tr>
<tr>
<td>Lunch</td>
<td>• Any puréed or strained soup</td>
<td>• Vegetable barley soup</td>
</tr>
<tr>
<td></td>
<td>• Puréed chicken salad</td>
<td>• Chicken salad or egg salad</td>
</tr>
<tr>
<td></td>
<td>• Puréed beans</td>
<td>• Diced, well-cooked vegetables</td>
</tr>
<tr>
<td></td>
<td>• Puréed fruit</td>
<td>• Canned peaches</td>
</tr>
<tr>
<td></td>
<td>Mid-afternoon Snack: • Ensure Plus</td>
<td>• Boost Plus</td>
</tr>
<tr>
<td>Dinner</td>
<td>• Puréed or strained soup</td>
<td>• Soup</td>
</tr>
<tr>
<td></td>
<td>• Puréed meat or fish</td>
<td>• Baked fish filet (boneless) with sauce</td>
</tr>
<tr>
<td></td>
<td>• Mashed potatoes</td>
<td>• Diced, soft potatoes</td>
</tr>
<tr>
<td></td>
<td>• Puréed vegetables with olive oil or butter</td>
<td>• Diced, well-cooked vegetables with olive oil or butter</td>
</tr>
<tr>
<td></td>
<td>• Applesauce</td>
<td>• Canned, diced pears</td>
</tr>
<tr>
<td></td>
<td>Evening Snack: • Pudding</td>
<td>• Ice cream with diced, soft cookie</td>
</tr>
</tbody>
</table>

These menus are suggestions. Feel free to substitute other foods for any of those listed. You may divide the foods throughout the day as you like. If you need help planning your meals, please call the Department of Food and Nutrition to speak with a dietitian.

What to Look for When Shopping for Food

There are many products you can buy at the grocery store that need little or no preparation. Below is a list of recommended foods and where they can be found in the grocery store. If you are following a low-fat diet, use low-fat or reduced-fat versions of some of these foods.

If it is hard for you to shop, find a market that will deliver in your area. Also look into online grocers that deliver, such as Fresh Direct®. Ask your dietitian or social worker if you are eligible for a home meal delivery service such as Meals on Wheels or God’s Love We Deliver. Many restaurants also offer delivery service.

Dairy case

- All types of milk (whole, low-fat, or skim). Use lactose-free brands, if lactose is a problem for you.
- Buttermilk
- Pasteurized eggnog
- Non-dairy creamer (the powdered form in a jar does not need to be refrigerated)
• Cheeses, including cottage, farmers, ricotta, and Parmesan. Make sure the consistency is right for you.
• Sour cream
• Eggs or egg substitutes
• Butter and margarine
• Pudding
• Gelatin desserts
• Yogurt

**On the shelves**

Canned foods are very convenient. They can be stored without refrigeration until they are opened. Some products are high in salt. If your doctor has told you to restrict your salt intake, always check the label on the can. Your dietitian can explain how to read food labels. Some foods can be eaten “as is,” but others must be ground or puréed. Make sure that the consistency of the food is right for you before you eat it.

The following packaged and canned foods don’t require much preparation and may be convenient for you:

• Baby foods come in many varieties, such as meats, fruits, and vegetables. Most are already puréed and ready to eat. While these foods are good and easy, **do not rely on the chicken and meat types for your protein needs.** They do not have enough protein for adults.

• Instant mashed potatoes
• Canned chicken or vegetable broths
• Dry milk powder
• Cocoa or hot chocolate mix
• Regular or instant hot cereals
• Pasta or rice meals in a bag

**Main dishes**

• Roast beef hash or corned beef hash
• Stews
• Vegetable or bean soups
• Smooth peanut butter or other smooth nut butters
• Pasta with meat or cheese (ravioli or spaghetti)
• Canned or jarred fish, such as tuna, salmon, and gefilte fish
• Soft or silken tofu

**Side dishes**

• Canned vegetables
• Canned or jarred fruits, such as applesauce, canned peaches, or crushed pineapple
**Fruit and vegetable juices**

- Nectars
- 100% vegetable or fruit juices, as tolerated

**Seasonings**

- Ketchup
- Mayonnaise
- Jellies
- Honey
- Maple and chocolate syrups
- Sauces (cream, tomato, soy, Worcestershire, BBQ)
- Gravies
- Spices and herbs, as tolerated

**Freezer case**

These items must be stored in a freezer. Make sure you have room in your freezer at home. Some of these products may have to be blended or ground to change the consistency. This will depend on what you can tolerate. Check the list or talk to your doctor, dietitian, or speech or swallowing therapist.

**Meat and main dishes**

- Lasagna
- Macaroni and cheese
- Frozen fish fillets
- Blintzes
- Meat loaf and meatballs
- Quiche

**Breakfast items**

- French toast
- Pancakes
- Egg substitutes
- Potato pancakes

**Soups**

- Creamy or strained vegetable soups
- Broths
- Chicken noodle or chicken and rice soups
• Chowders
• Bean soups
• Stews

Side dishes

• Vegetables (Frozen vegetables are the next best thing to fresh. Choose these over canned ones whenever possible.)
• Chopped spinach
• Mashed squash
• Rice or rice dishes
• Potatoes
• Stuffed baked potatoes
• Soft potato puffs or croquettes

Fruit

• Thawed, frozen fruit
• Fruit ices
• Popsicles

Desserts

• Ice cream
• Frozen yogurt
• Mousse
• Whipped toppings
• Sherbet

Bakery items

For some people on a mechanical soft diet, bread can be soaked in liquid until soft. You may want to soak it in soup, coffee, broth, or milk.

Deli counter

Look for items that are the right consistency for you, such as tuna or egg salads. Some deli counters might also have puddings and gelatins.

Produce section

Eat different colored (orange, green, red, purple, and yellow) fruits and vegetables. This can help you meet your daily needs of vitamins and minerals.
Fruit can help add variety to your meals. Some can be mashed or puréed raw. It is helpful to add some extra fruit juice when blending. This will help you get the right consistency and prevent it from getting brown. You can also add fruits to milkshakes to give them extra flavor and nutrients.

It is best to eat fresh vegetables because some nutrients can be lost from freezing and canning. Most vegetables need to be cooked in a small amount of water to keep the nutrients. After cooking, they can be ground, chopped, or blended to the consistency that is right for you.

For baking, try white potatoes, sweet potatoes, yams, beets, or squash. For steaming, boiling, microwaving, or adding to soups, try all the above items plus onions, celery, peas, carrots, green beans, cabbage, parsnips, spinach, eggplant, rutabagas, turnips, broccoli, cauliflower, tomatoes (without the seeds), asparagus, mushrooms, and zucchini.

**Fresh herbs**

Fresh herbs provide flavor and variety and may help flavor foods if you are experiencing taste changes. Buy them by the bunch. Wash and dry them. You can then place them in a Zip-loc® bag, freeze them, and use them as needed. Dill, parsley, garlic, and basil go with most foods. You can add them to meats, fish, and vegetables. Dill adds flavor when steamed with potatoes and carrots. Basil is delicious in tomato sauces and soups. Garlic can be used with almost anything.

**Tofu**

Tofu is also known as soybean curd. It is bland, soft, high in protein and has no lactose or cholesterol. You can add it to shakes or soups or use it in place of ground meat products such as meatballs. Tofu is found in sealed packages in the produce section and in health food stores. Some places might sell tofu out of large open containers soaked in water. For your safety, only buy tofu in sealed packages.

**Meat counter**

Ground meats are the most versatile kind of meat. You can use them in sauces, casseroles, soups, meat loaf, and meatballs. There are several types of ground meats that you can find, such as beef, turkey, chicken, veal, and lamb. Ground turkey breast is low in fat. Make sure it is ground turkey breast and not just ground turkey. Ground turkey contains the skin, so it is higher in fat. You can use ground turkey breast to replace all or some of the red meat in your recipes. You can also ask your butcher to grind any meat that you want.

**Seafood counter**

When buying fresh fish, avoid bony fishes because they do not blend or process well. Fresh flat fish such as flounder and sole are best. They are flaky, soft, and easy to blend or process. Shellfish such as shrimp or lobster may be thoroughly steamed, removed from the shell and blended. Frozen fish fillets are very convenient and often cheaper than fresh fish. They are best cooked when partially thawed in the refrigerator for a few hours.

**Planning Your Meals**

Changing your eating habits can be difficult. It is best to plan ahead for meals. This can help make sure you have enough of the right foods to eat at mealtimes. Here are some questions to consider when planning your meals:

- Where will you be eating (at home, a restaurant, work, someone else's house)?
- If you are eating at a restaurant, can you call ahead and request special meals?
- Do you have refrigeration and cooking facilities available? Can you boil water? Can you microwave? Can you use a blender or food processor?
- Can you carry a thermos with food already prepared and ready to eat?
**Eating at Home With Family and Friends**

Most foods can be adapted to meet your needs. For example, one portion of soup can be put aside, then strained or blended.

Many main dishes, such as noodles, stews, and casseroles can be put into a blender with some liquid. For the liquid, you can use milk, gravy, tomato sauce, broth, juice, or just water. Add liquid until the food is the right consistency. Many people find it more appetizing to prepare each item separately. For instance, blend the noodles and then add the sauce on top.

Here is some equipment that you may find very helpful to prepare your foods at home:

**Blender:** This item can be used for all types of foods but requires liquid to make the right consistency. Blenders are excellent for soups and shakes. However, they are not always the best to use for making 1 portion. The Magic Bullet® is a convenient blender that does not take up a lot of space. The Vitamix® is another powerful blender that can purée a variety of foods.

**Food processor:** This is the most expensive item of all the equipment, but it is good for shredding, slicing, chopping or blending foods. It can be purchased in different sizes. If you often prepare just 1 portion of food, buy a small processor.

**Hand-held blender:** This is a convenient device because you can use it purée your favorite soups right in the pot. It can also be used to soften well-cooked foods in a small bowl for 1 or 2 portions.

**Household mesh strainer or sieve:** This is an excellent tool for straining fruits and vegetables but not meats. They are inexpensive, good to make 1 portion, and do not need electricity. However, this method can be slow.

**Food mill:** This is an excellent tool to strain fruits, vegetables, and soups, but do not use it with meats. It is faster than a strainer and does not require electricity to work.

**Meat grinder:** This item can be hand-operated or electric. It can be used to grind meats and vegetables. The foods do not come out as fine as they would from a strainer or sieve. Therefore, the grinder may not be useful for some people.

**Baby-food grinder:** This item can often be found in stores that sell baby clothes or furniture. They are good for all foods and require no liquid. The small ones are ideal for grinding 1 portion of food. They can be hand- or battery-operated. Food may not come out as smooth as necessary for some people. Ask your dietitian, doctor, or speech or swallowing therapist if it is right for you.

**Eating Out**

Eat at restaurants that offer a variety of foods and that will cater to people on special diets. Many places will purée or prepare foods for your needs. Call ahead and speak to a manager or chef. You may be surprised at how accommodating they will be. It can be helpful to order sides of broth, gravy, or milk to moisten your foods.

Here are some ideas of things you can order. Some of these may need to be mashed or blended for the puréed diet:

**Breakfast**

- Fruit and vegetable juices
- Fruits as tolerated
- Hot cereal
- Cold cereal softened in milk (for mechanical soft diets)
• Scrambled eggs or chopped, hard-boiled eggs for mechanical soft diets
• Soft breads, such as muffins and pancakes, soaked in liquid to soften them for mechanical soft diets
• Coffee, tea, or hot chocolate

Lunch and dinner
• Fruit and vegetable juices
• Soups, which can be easily blended or strained in the restaurant. Egg drop soup is a good source of protein

Main dishes
• Ground meat products, such as hamburger patties, meatloaf, and meatballs
• Soft, flaky fish (such as fillet of sole, flounder, or tilapia) steamed, baked, or broiled
• Noodles and macaroni dishes blenderized for puréed diets
• Soufflés
• Cottage cheese and soft fruit platters
• Sandwiches such as tuna or egg salad on soft bread

Vegetables
• Baked or mashed potatoes
• Any soft cooked vegetables such as cooked carrots
• Creamed spinach
• Vegetable soufflé
• Guacamole (be aware of your tolerance to spicy foods)
• Hummus

Desserts
• Ice cream or frozen yogurt
• Gelatin desserts
• Milkshakes
• Mousse
• Puddings and custards
• Applesauce or other soft fruits
• Fruit sorbets

It is also possible to eat away from home, such as at work or at a friend’s house. Here are some tips for taking food with you while you are away from home:
• Bring a food grinder or small food processor. If electricity is needed, make sure it is available where you are going.

• Buy a thermos. Make soup or hot cereal and carry it with you.

• Ask if there is a microwave where you are going. You can make food at home and freeze it in portion-sized, microwave-safe containers or Zip-Loc® bags. Bring the food with you in an insulated pack and heat it when you want to eat.

• Freeze soups or puréed foods in ice cube trays. Cover the tray with foil or plastic wrap to prevent freezer burn. When you are hungry, use 2 or 3 cubes for a small meal or snack, or more cubes if you are really hungry.

Recipes

Many of the following recipes and ideas came from people just like you. We hope they are helpful. For additional recipes, tips, and ideas, please check out the book *Eat Well Stay Nourished*. It was written by Support for People with Oral and Head and Neck Cancer (SPOHNC). You can purchase it online at www.spohnc.org or by phone at 1-800-377-0928.

Beverages

Many of these beverages are good to drink if you want to boost your calories. Try various fruits and juices.

Fortified milk

Use this recipe to boost the calorie and protein content of a glass of milk. Also, use it as a substitute for milk in your favorite recipes for soups or custards.

1 cup of non-fat dried milk powder
1 quart of skim or 1% milk (use whole milk if you need extra calories)

Combine and stir well.

Milkshake

1 cup of skim, 1%, whole or fortified milk
1 cup of ice cream or frozen yogurt

Blend well and drink.

Variation: add malted milk powder, syrups, nut butters, or fruits. Try other flavors and consistencies you may enjoy.

Choco-Banana Swirl

2/3 cup of vanilla yogurt
2/3 cup of vanilla ice cream or frozen yogurt
1/4 cup of chilled and sliced ripe banana (about half of a medium banana)
2 teaspoons of chocolate-flavored syrup

Combine everything except the chocolate syrup in a blender. Blend until smooth. Pour 1/2 cup into 2 glasses; set them aside. Add the chocolate syrup to the remaining mixture in the blender and blend it until it is all 1 color. Pour the remaining mixture into the 2 glasses and mix it gently with a spoon.
**Fruit Smoothie**

⅔ cup of vanilla yogurt  
½ cup of fruit nectar  
⅔ cup of chilled or frozen fruit of your choice  
1 tablespoon of honey  
4 ice cubes

Put all the ingredients into a blender. Blend until smooth. Makes about 2 servings.

**Blender Breakfast**

This drink is easy to make and is full of calcium, vitamins, and fiber.

1 banana, peach, or nectarine, peeled and cut into chunks  
½ cup of skim, 1%, whole, or fortified milk (you can also use ½ cup of low-fat yogurt)  
1 teaspoon of sugar or honey  
1 tablespoon of natural bran

Combine all the ingredients into a blender and process until smooth. Pour into a tall glass. Makes about 1 (8-ounce) serving.

**Sauces**

Use these sauces to moisten your foods and make them more tasty and attractive. Some are used in other recipes in this resource.

**Basic White Sauce**

1 cup of skim, 1%, whole, or fortified milk  
2 tablespoons of any kind of oil or butter  
2 to 3 tablespoons of flour

Mix the flour and oil or butter in a saucepan. Cook over low heat, stirring constantly until the mixture is smooth and bubbly. Remove from heat. Stir in the milk. Boil for 1 minute, stirring constantly. After a few minutes, it will begin to thicken. The more flour you add, the thicker the sauce will be.

Variation: to make a basic brown sauce, substitute ⅔ cup of low-sodium beef or chicken broth for the milk.

**Soups**

Eating soup is a good way to get more liquid and vegetables in your diet. People on a mechanical soft diet can tolerate some of these soups without any processing. The soups must be put through a blender or strainer for people on a puréed diet. Try some of these recipes or substitute ingredients to make it right for you.

**Creamy Soup**

This is a recipe for a basic creamy soup. Add whichever vegetables and spices you like.

1 cup of cooked Basic White Sauce (see recipe above)  
½ cup of puréed vegetables or baby food vegetables  
Salt and pepper to taste

Follow the recipe for Basic White Sauce. Mix in the puréed vegetables. Add salt and butter to taste.
Variations:
- Try adding green beans, carrots, broccoli, squash, peas, mushrooms, or asparagus.
- Try adding dill, garlic, thyme, onion, or celery.

**Vegetarian Creamy Tofu Soup**

2 ounces of tofu
8 ounces of creamy soup (see recipe above)

Place in blender and process until smooth. Heat and enjoy.

**Avocado Soup**

1 ripe, medium avocado (flesh only)
1 small onion, cut up
½ teaspoon of salt
3 cups of chicken or vegetable broth
1 cup of yogurt
3 tablespoons of lemon juice (strained, if fresh)

Purée the avocado and onion with 1 cup of broth. Add the salt, remaining broth, and lemon juice, and mix for a few seconds. Then add the yogurt and sour cream and blend until smooth. Serve cold.

**Spa Vegetable Soup**

This is an easy way to make vegetable soup. You can change the vegetables as much as you like.

3 cups of chicken or vegetable broth
1 carrot, sliced
1 cup of broccoli florets
1 cup of cauliflower florets
½ cup of red cabbage, thinly sliced (or try spinach)
1 green onion, thinly sliced
Salt and pepper to taste

In a saucepan, bring the broth to a boil. Add the carrot and simmer for 20 minutes. Add the remaining vegetables and simmer until completely cooked through. Place in a blender and purée. Season with salt and pepper to taste.

Variations:
- Add other herbs and spices, as you want.
- Try adding tofu chunks to increase the amount of protein.
- Drizzle some olive oil into the soup as you purée it for extra calories.

**Egg Custard**

2 slices of white bread
2 slices of whole-wheat bread
1 ¾ cups of eggs
½ quart of milk or fortified milk

Preheat the oven to 350° F. Remove the crusts from the bread. Lay the bread into a baking dish, forming a checkerboard with the white and the whole-wheat breads. Combine the eggs and milk and pour the mixture over the bread. Let the mixture sit for 20 minutes. Cover with foil. Cook until internal temperature reaches 165° F. Remove the foil and cut into squares.
Cereals

Try these recipes for a healthy start to your day.

Cooked Cereals

- When making instant hot cereals, use milk instead of water to provide more nutrients and calories. You can use skim, 1%, whole, soy, almond, rice, or fortified milk. Some people also add heavy cream or half and half for extra calories.

- Add applesauce, pureéd banana, cinnamon, honey, yogurt, nut butters, or brown sugar and blend.

High-protein Oatmeal

1 cup of cooked oatmeal, prepared as instructed on the package
1/2 cup of fortified milk
2 teaspoons of sugar, honey, or brown sugar
1 small jar of baby food bananas
Cinnamon to taste (optional)

Mix all the ingredients together and serve while hot.

Eggs

Try these recipes for breakfast, lunch, or dinner.

Soufflé

1/4 cup of butter
1/4 cup of flour
1 1/2 cup of milk or fortified milk
1/4 teaspoon of salt
1/2 teaspoon of Worcestershire sauce (optional)
4 eggs, separated (yolks and whites in different bowls)
1/2 pound of low-fat cheddar cheese

Preheat the oven to 350° F. Melt the butter in a saucepan. Stir in the flour until it is well blended. Remove from heat. Add the milk and cook until thickened.

Turn off the heat, add the cheese, and stir until melted. Let the mixture cool. Beat in the egg yolks one at a time. In a separate bowl, whip the egg whites until they are stiff. Fold (mix gently, in small amounts at a time) the whipped egg whites into the sauce. Pour the mixture into a 2-quart size casserole dish and bake for 30 to 45 minutes.

Cottage Cheese Pie

This recipe is only for those on a mechanical soft diet.

3 medium eggs or egg substitute
2 springs of parsley, chopped
1 pound of cottage cheese
1 small onion, diced
1/2 cup of Parmesan cheese
1/2 cup of mozzarella cheese, diced or grated
Salt and pepper to taste
Cornmeal
Preheat oven to 350° F. Mix eggs, cottage cheese, onion, Parmesan cheese, mozzarella cheese, and parsley together in a bowl. Grease a 9-inch glass pie pan with oil. Sprinkle cornmeal lightly to cover the entire pan. Pour the mixture into the pie pan. Bake for 45 minutes. Insert a toothpick into the center of the pie; if it comes out dry, then it is done.

**Quiche Custard**

This version is appropriate for those on a puréed diet.

1/4 of an onion, chopped finely  
1 tablespoon of butter  
1 tablespoon of Parmesan cheese  
1/4 cup of milk, fortified milk, or soy milk  
1/4 cup of heavy cream  
1 egg or egg substitute  
1/4 cup of cheese (swiss, cheddar, or mozzarella)  
Pinch of salt  
Pinch of nutmeg

Preheat the oven to 350° F. Sauté the onion in the butter until transparent. Place onion, milk, cream, and egg in blender. Blend until onions are puréed. Place the cheeses into a small, greased casserole dish. Pour egg mixture and seasonings over the cheese.

Place the casserole dish in a large pan containing hot water. Bake until the mixture sets, about 25 to 30 minutes.

**Main dishes**

**Sweet Potato Pie**

This dish can be eaten as is by people on a mechanical soft diet. It must be mashed or puréed for those who are on a puréed diet.

1 1/2 cups of cooked mashed sweet potatoes (or one 15-ounce can of pumpkin purée)  
1 can of evaporated skim milk  
1/2 teaspoon of nutmeg  
1 teaspoon of cinnamon  
1/2 cup of sugar (increase to 1 cup if you prefer a sweeter pie or want to add more calories)  
Cornmeal

Preheat the oven to 350° F. Mix the sweet potatoes (or pumpkin) with the evaporated milk and spices. Add the sugar and mix. Grease a 9-inch pie pan with oil. Sprinkle the pan with cornmeal to cover it. Shake off the excess. Bake for 45 minutes. Insert a toothpick into the center of the pie; if it comes out dry, then it is done.

**Lentil and Carrot Stew**

6 ounces of dry lentils  
3 cups of water  
4 medium carrots, peeled, quartered lengthwise, and cut into 1-inch pieces (2 1/2 cups)  
1 onion, diced  
1 small stalk of washed, trimmed, and chopped celery (1/4 cup)  
3 bay leaves  
1 teaspoon of salt (optional)  
1 bunch of fresh cilantro or parsley, washed  
2 teaspoons of olive oil
Sort the lentils and discard any stones or damaged lentils. Wash them in a sieve under cold water. Drain. Place the lentils in a large pot. Add the water, carrots, onions, celery, bay leaves, and salt. Remove the cilantro or parsley leaves and set them aside as a garnish. Chop the stems and roots; add them to the pot. Bring the mixture to a boil over high heat. Reduce the heat to low, cover, and cook at a very gentle boil for 55 minutes. Let the mixture cool. Place it in a blender and process until smooth. Garnish with the cilantro or parsley leaves when serving.

**Chicken Tamale Pie**

½ cup of cornmeal (or polenta)
2 cups of chicken broth
1 to 2 cups of cooked chicken, cut up
1 cup (8-ounce can) of tomato sauce
Dash of garlic powder
Dash of oregano
Dash of thyme
Grated Parmesan or Cheddar cheese

Preheat the oven to 350° F. Cook the cornmeal in the chicken broth until it is thick. Cool it slightly and spread it into a greased casserole dish. Grind or purée the chicken according to your needs. Spread it on top of the cornmeal mixture. Season the tomato sauce with garlic, oregano, and thyme. Spread it on top of the chicken. Sprinkle cheese over the layer of tomato sauce. Cook for 30 minutes or until the cheese melts.

**Meatloaf**

1 ½ pounds of lean ground beef or turkey
2 cloves of garlic, minced
1 cup of dry bread crumbs
1 egg, beaten
¼ cup of minced onion
1 tablespoon of Worcestershire sauce
2 tablespoons of tomato sauce
1 teaspoon of salt (optional)

Preheat the oven to 350° F. Mix all the ingredients thoroughly. Spread the mixture in an ungreased 9 x 5 x 3-inch loaf pan. Bake for 1½ hours. For those on a puréed diet, you may place the cooked meat loaf in a blender with some liquid and blend it to the consistency you need.

**Salads**

**Tuna Salad**

3 ½ ounces of canned tuna in water or oil
2 tablespoons of regular or low-fat mayonnaise
1 tablespoon of sweet-mixed pickle relish (optional)

Mash the tuna with a fork until fine. Place the mayonnaise in a blender. For extra flavor, add 1 tablespoon of sweet-mixed pickle relish. If relish is added, blend until smooth. Add tuna and blend to desired consistency.

Variations:

- Replace the tuna with 1 or 2 hard-boiled eggs to make egg salad.
- Replace the tuna with 3 ounces of cooked chicken or turkey to make chicken or turkey salad.
Cottage Cheese and Fruit Salad

1 package (to make 2 cups) of gelatin (any flavor)
1 cup of boiling water
½ cup of peaches, sliced
1 cup of cottage cheese

Place the gelatin in a blender. Add the boiling water and blend for 1 second. Add the peaches and the cottage cheese. Blend until smooth. Pour into a container and chill until firm.

Side dishes

Winter Squash and Carrot Purée

1 butternut squash (2 ¾ pounds, cut in half, lengthwise with the seeds removed)
4 carrots, thinly sliced
1 clove of garlic, thinly sliced
¼ teaspoon of thyme
1 tablespoon of unsalted butter, cut into small pieces
2 cups of water
Salt and pepper to taste

Preheat the oven to 350° F. Set the squash, cut side down, on a lightly oiled baking sheet. Bake it for 45 minutes or until soft. Combine the carrots, garlic, thyme, and water in a saucepan. Cover and bring to a boil, then simmer over low heat for 20 minutes or until the carrots are tender. Transfer the contents from the pan to a food processor; purée. Scoop the squash out of its skin and purée it with the carrots. Season with salt and pepper to taste.

Spread the purée on a buttered, shallow baking dish; dot with the butter. Bake for 20 minutes or until hot and serve.

Lima Bean Purée

8 ounces of large, dry lima beans
3 cups of water or vegetable broth
½ teaspoon of salt
1 teaspoon (or more) of olive oil

Sort the beans, discarding any stones or damaged beans. Wash the beans in a sieve under cold water and drain. Place them in a saucepan or pot. Add the water and salt. Bring the mixture to a boil. Cover, reduce the heat to low, and boil gently for 45 minutes, until the beans are very tender. Transfer the mixture (there should be about 3 cups, including the liquid) to a food processor. Add the oil and process for 20 to 30 seconds until very smooth.

Variation: use your favorite beans or chickpeas in place of the lima beans.

Butternut Squash Purée

1 large butternut squash
1 tablespoon of maple syrup
1 teaspoon of butter or margarine

Peel the squash and cut it into small pieces. Boil until tender. Mash the squash with a fork and mix it with the maple syrup and butter or margarine.
Purée of Broccoli With Garlic

1 bunch of broccoli (1 ¾ pounds)
1 cup of water
1 medium potato, peeled and cut into 1-inch pieces
2 cloves of garlic, peeled
1 teaspoon of salt
1 teaspoon of unsalted butter
1 teaspoon of olive oil

Separate the broccoli into stalks. Peel the stems with a vegetable peeler, removing the outer layer. Cut the stalks (including the florets) into 2-inch pieces. Place the broccoli in a large saucepan with the water, potatoes, garlic, and salt. Bring to a boil, cover, and reduce the heat to low. Boil gently for 15 minutes, or until the vegetables are tender. About ½ cup of liquid should remain. Place the contents of the saucepan in the food processor and add butter and oil. Process the mixture for 45 seconds, until it is very smooth. Serve immediately.

Desserts

Peach Sauce

Drain the syrup from any size can of peaches. Blend the peaches until they are smooth. Store in the refrigerator. This sauce is delicious over ice cream or frozen yogurt, or you can eat it as is. Those on a mechanical soft diet can also use it to soften cakes, etc.

Puréed Fresh Fruits

You can purée any fruit that is in season in a baby food grinder, blender or food processor. Sprinkle apples with lemon juice to avoid browning. You can add cinnamon or mix a few different kinds of fruit together for a fruit punch flavor.

Ricotta Cherry Mousse

1 pound (2 cups) of ricotta cheese
3 tablespoons of sifted powdered sugar
¼ teaspoon of almond extract
1 teaspoon of vanilla extract
2 cups of dark cherries, pitted and sliced (or use frozen unsweetened cherries if fresh ones are not available)
½ cup of semisweet chocolate chips, ground to a coarse meal in a blender

Put the ricotta in a medium-size mixing bowl and beat it with an electric mixer at high speed for about 3 minutes. Slowly add the sugar. Stir in the extracts, cover, and chill. Fifteen minutes before you serve the mousse, fold in the cherries. Serve it topped with the ground chocolate.

Peaches and Cream

1 banana
1 peach
½ cup of ice cubes
2 tablespoons of plain yogurt
Peach nectar

Place the banana, peach, ice cubes, and yogurt into a blender. Blend until smooth. Add enough peach nectar to reach the 16-ounce mark on the blender. Blend until smooth.
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 Sleepy Hollow, NY
914-366-0702

Outpatient Nutrition in Basking Ridge, NJ
908-542-3002
This section includes 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.
**MSK Resources**

**Admitting**  
212-639-5014  
Call to discuss private room or luxury suite options. If you want to change your room choice after your presurgical testing visit, call 212-639-7873 or 212-639-7874.

**Anesthesia**  
212-639-6840  
Call with 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 about preauthorization from 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 refer you to community agencies and programs, as well as financial resources if you’re eligible.

**Tobacco Treatment Program**
212-610-0507
If you want to quit smoking, MSK has specialists who can help. Call for more information.

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

The following are resources outside of MSK that you may find helpful:

**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 25\(^{\text{th}}\) & West 26\(^{\text{th}}\) 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 an 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.

**Support for People with Oral and Head and Neck Cancer (SPOHNC)**  
www.spohnc.org  
800-377-0928  
Provides information and support for people with oral and head and neck cancer.