

Managing the Side Effects of Chemotherapy



PMH


This booklet has information about some of the most common side effects of chemotherapy. It is meant to help you know what to expect and to help you manage your side effects. The side effects you may experience depend on many factors, including the type of chemotherapy you are taking and your overall health.

This booklet includes a section about each of the common side effects of chemotherapy. Each section includes:

- A description of the side effect
- How to manage the side effect when it happens
- When to call your doctor or nurse

Important:

Some side effects of chemotherapy can be harmful to you if they are not treated early. Tell your doctor or nurse about all of the side effects that you experience.

You will see this symbol  beside important information that requires medical attention by your healthcare team.

For more information about the side effects for your specific chemotherapy, speak to your doctor, nurse or pharmacist.

This information is to be used for informational purposes only and is not intended as a substitute for professional medical advice, diagnosis or treatment. Please consult your health care provider for advice about a specific medical condition. A single copy of these materials may be reprinted for non-commercial personal use only.

© 2011 University Health Network. All rights reserved.

Author: Diana Incekol and Cindy Murray

Created: 11/2011

Form: D-5805



University Health Network
Toronto General Hospital Toronto Western Hospital Princess Margaret Hospital

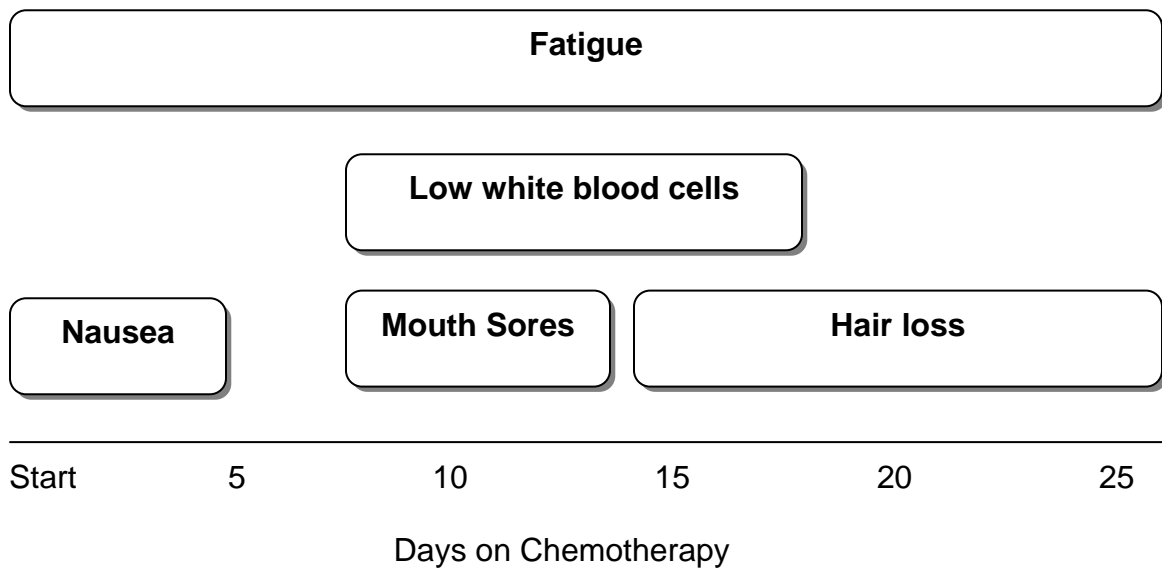
Table of contents

- When to expect side effects3
- Blood counts
 - Low white blood cell count4
 - Low platelet count.....6
 - Low red blood cell count8
- Fatigue9
- Nausea and vomiting 11
- Constipation..... 13
- Diarrhea 15
- Mouth care 16
- Taste changes..... 18
- Hair loss 19
- Skin and nail changes 20
- Intimacy and Sexuality 21
- Fertility 23
- Important contact information 24

When can I expect certain side effects?

An important part of taking care of yourself while you are receiving chemotherapy includes knowing when to expect certain side effects. This diagram below shows you when you can expect some of the most common side effects of chemotherapy. See each section for suggestions on how to manage these side effects.

Remember that the side effects you may experience depend on many factors, including the type of chemotherapy you are receiving and your overall health.



Blood Counts: Low White Blood Cell Count (Leukopenia)

What are white blood cells?

White blood cells help your body fight infections. When there are not enough white blood cells in your blood, you may get an infection more easily. Take special care to avoid infections when your white blood cell count is low.

Your white blood cell count is usually lowest 7 to 10 days after your last chemotherapy treatment. It takes about 1 to 2 weeks for the white blood cells to recover. It is important to have a blood test done before starting your chemotherapy to make sure your white blood cells have fully recovered. Your healthcare team will tell you the best time to have your blood test.

For more information about blood counts, pick up a copy of the “Understanding Blood Counts” pamphlet from the Patient & Family Library on the main floor.

How will I know if my white blood cell counts are low?

The only true way to know if your white blood cell count is low is to have a blood test.

How will I know if I might have an infection?

There are some signs of infection that may mean your white blood cells are low, such as:

- Fever (temperature over 100°F or 38°C).
 - Do not take any medication that has acetaminophen (Tylenol) until you have been seen by a doctor.
- Chills, shaking, sweating or feeling unwell
- Difficulty breathing or you are breathing rapidly
- A feeling of dizziness
- Weakness that develops suddenly or gets worse quickly, or extreme tiredness
- A very fast heart rate
- Confusion
- Redness, heat, swelling and drainage of a wound or catheter or IV tubing
- Burning feeling or pain when passing urine, or urinating more often
- Cough with yellow or green coloured sputum
- Sore throat (along with fever)
- Diarrhea (along with fever)



When to get help right away

You can get sick very quickly if you have an infection when your white blood cells are low, even if you feel reasonably well.

If you experience any of the symptoms listed above, call your doctor or nurse right away (see page 24 for Princess Margaret Hospital contact information), or go to the nearest hospital emergency department if you are not able to reach anyone.

What can I do if I know my white blood cell count is low?

Your nurse or doctor will tell you when to expect your white blood cell count to be low. During this time, you can watch for signs and symptoms of infection, and take proper precautions. The following are some of the precautions you can take to help prevent infection:



DO:

- Check your temperature using an oral thermometer every day while on treatment, especially when you have chills, sweating, or when you are feeling unwell.
 - Remember that some medications like steroids and acetaminophen (Tylenol) can ‘hide’ your fever.
 - Wait until the chills have stopped before taking your temperature.
- Stay away from adults and children who have a cold, flu or other diseases you can catch.
- Ask your doctor for the yearly flu shot.
- Avoid crowds of people in public places, such as shopping malls and public transit
- Wash your hands or use hand sanitizer often (before eating and after using the toilet)
- Remind your healthcare team to wash their hands before starting a procedure
- Clean any scrape or cut right away with soap and warm water

Eat well

- Eat a well balanced diet, and drink at least 8 glasses of fluid a day. This is to keep you well hydrated because your body can lose a lot of fluid when you have a fever.
- Wash all fruits and vegetables well.
- For more information pick up these pamphlets from the Patient & Family Library on the main floor:
 - For eating well: “Eating Well When You Have Cancer” booklet
 - For food safety for patients who have low white blood cell counts: “Food Safety for Patients with Weakened Immune Systems” pamphlet

Take care of yourself

- Maintain good mouth care. See “Mouth Care” on page 17 for more information
- Shower or bathe every day
- Get enough sleep
- Exercise regularly
- Prevent constipation. Hard stool can tear the skin around your perianal area and this can lead to an infection. If you need a laxative, ask your doctor, nurse, or pharmacist and see page 14 for information how to prevent and manage constipation.



Do NOT:

- Do not touch animal droppings, litter boxes, or birdcages, unless you are wearing rubber gloves
- Do not work in the garden, unless you are wearing gloves
- Do not share drinking glasses or eating utensils with anyone
- Do not use rectal suppositories or enemas for constipation without asking your doctor first

Blood Counts: Low Platelet Count

What are platelets?

Platelets are a type of blood cell that helps blood to clot. Platelets help to prevent heavy bleeding when you cut or hurt yourself. When there are not enough platelets in your blood you may bruise or bleed easily. It is very important that you know the signs for low platelet count as these could mean that you need medical attention right away.

For more information about blood counts, pick up a copy of the “Understanding Blood Counts” pamphlet from the Patient & Family Library on the main floor.

What are signs that I may have a low platelet count?

The only way to know if your platelets are low is to have a blood test. If your platelet counts are too low, chemotherapy may be harmful to you and your doctor may delay your chemotherapy treatment.

Your nurse or doctor will let you know when to expect low platelet count. This will help you watch for any bleeding during these times. The following are signs of bleeding that may happen both inside and outside your body when your platelets are low:

- Easy bruising
- Tiny red or purple dots on your skin (petechiae)
- Unusual or heavy nosebleeds
- Red or pink coloured urine
- Black, tar-like stools (bowel movements), or blood in the stools
- Red or brown coloured sputum (mucus that comes up from your lungs) or vomit
- Bleeding from your gums, especially when brushing your teeth
- Heavy vaginal bleeding
- Dizziness, constant headache or blurred vision



When to get help right away

If you have a very low platelet count, you may need a platelet transfusion even if you feel reasonably well. You should go to your nearest hospital emergency department if you experience any of the following conditions:

- Dizziness, with or without blurred vision
- Confusion, feeling less alert, loss of consciousness
- Looking pale, feeling clammy (cold sweats) and weak
- Blood in the stool, urine, or sputum
- Sudden severe headache (often described as “the worst headache ever”)
- Excessive bleeding that cannot be stopped (cuts, nose bleed, vaginal bleeding)

Remember to tell any doctors, nurses or other healthcare professionals, that you are on chemotherapy so that you get the proper care.

What can I do if I know my platelet count is low?



DO

- Tell your pharmacist that you are on chemotherapy and your blood count may be low before buying any prescription or over-the-counter medications. Certain medications can affect your platelet count
- Check with your doctor before taking any non-traditional medication or herbal supplements. Many of these medicines can reduce your platelet count.
- Check with your doctor before you have any dental check-ups or dental procedures
- Use a soft (baby) toothbrush to clean your teeth
- Be careful when using sharp knives, scissors, and other sharp items
- Use a water-based lubricant during sexual intercourse, to reduce the chance of bleeding.



Do NOT:

- Do not use rectal suppositories or enemas for constipation
- Do not take your temperature with a rectal thermometer
- Do not shave with razor blades. Use an electric razor instead.
- Do not participate in contact sports or exercises which could cause bruising or bleeding (hockey, kick-boxing)
- Do not blow your nose with too much force (you could have a nosebleed)
- Do not use tampons
- Do not take acetylsalicylic (ASA or Aspirin) products during treatment as these products can increase your risk of bleeding. You can take acetaminophen products (like Tylenol) instead if needed. If you are not sure, always check with your doctor or pharmacist.



Common ASA-containing products: Aspirin®, Bufferin®, Advil®, Anacin®, Novasen®, Aspergum®, some Alka-Seltzer® products, and some cold preparations



Common Acetaminophen-containing products: Tylenol®, Atasol®, Excedrin®, Abenol®, suppositories, and some cold medicine

What should I do if...

- If I cut myself:
Put a clean cloth or tissue over the cut and apply pressure for a few minutes. If the bleeding does not stop, call your nurse or doctor right away or go to the nearest hospital Emergency Room. Be sure to tell the nurse or doctor that you are on chemotherapy.
- If I have a nosebleed:
Apply pressure and ice over the bridge of your nose for several minutes. If the bleeding does not stop, call your nurse or doctor.

Blood Counts: Low Red Blood Cell Count (Anemia)

What are red blood cells?

Red blood cells carry oxygen to the tissues in your body. When there are not enough red blood cells in your blood, your body tissues do not get enough oxygen to do their work.

How will I know if my red blood cell counts are low?

The only true way to know if your red blood cells are low is to have a blood test. Low red blood cell count can also be called anemia.

For more information about blood counts, pick up a copy of the “Understanding Blood Counts” pamphlet from the Patient & Family Library on the main floor.

Symptoms of anemia can include:

- Feeling tired or weak
- Feeling faint or dizzy
- Feeling short of breath
- Having pounding in your head or ringing in your ears
- Having a pale appearance (“loss of colour”) in your skin and/or lips



When to get help right away

Call your doctor or nurse right away if you experience any of the symptoms listed above. Although anemia can improve on its own, your doctor may want to give you medicine or a blood transfusion.

What can I do if I know my red blood cell count is low?

- Get plenty of sleep
- Save your energy by resting often between activities
- Move slowly to avoid getting dizzy
- When getting up from a lying position, sit up for a few minutes before standing
- Add foods high in iron to your diet, such as leafy green vegetables and enriched grains and cereals. Foods high in vitamin C, such as citrus fruits and juices, can help your body absorb the iron

Fatigue

What is Fatigue?

Fatigue is a common side effect of many cancer treatments. It is a feeling of being very tired or a lack of energy that does not go away with rest or sleep. Fatigue may be caused by many factors, such as:

- Chemotherapy, radiation, or surgery
- Nausea or vomiting
- Anemia (low red blood cell count)
- Pain
- Infection
- Medications
- Lack of sleep, or sleeping too much
- Lack of physical activity
- Changes in daily routine
- Emotional stress, worrying
- Sadness, grieving, or depression
- Poor appetite, poor nutrition

What are the signs and symptoms of fatigue?

- Feeling tired or weak
- Lack of appetite
- Difficulty doing everyday activities, such as cooking, showering, or walking short distances
- Trouble speaking, thinking, concentrating or making decisions
- Feeling depressed, sleepy, bored, or not motivated
- Little or no interest in sex
- Avoiding keeping in touch with friends and family



When to get help

Call your doctor or nurse if your fatigue becomes:

- Unusually severe or not normal for the type of activity you are doing
- Unrelieved by rest or sleep
- Constant or frequent
- You feel confused and cannot think clearly
- You get dizzy or feel a loss of balance when walking, or getting out of a bed or chair
- You fall or hurt yourself
- You have shortness of breath
- You have trouble waking up or staying awake

What can I do about fatigue?

If you have some of the above symptoms, tell your doctor or nurse at your next visit. They can help you decide what is right for you to help you cope with the fatigue. It is important to listen to your body and rest when your body is telling you to rest.

You can also try some of these tips:

- Do less of the activities that make you most tired, and keep doing the ones that make you feel good
- Tell your friends and family how you feel; they may be able to help you once they understand your fatigue. Ask family and friends for help with activities that make you most tired, such as housework, shopping, and child care.
- Learn to pace yourself – don't overdo it. Give yourself short periods of rest
- Use energy-saving equipment like elevators, escalators and motorized shopping carts
- Do light exercise like walking, golf, swimming, or stretching. Light exercise can help you relax, boost your appetite, and reduce risk for complications like pneumonia or blood clotting. Talk to your doctor before starting any exercise program to make sure it is right for you.
- Take short naps during the day, and save your longest sleep for the night.
- Keep a regular sleep routine, and take steps to reduce distractions (bright light, live television, reading an interesting book)
- Keep your mind busy. Think about things other than your illness, treatment, or tiredness. Spending time with friends, reading, listening to music, or taking a car ride may help you.
- Eat well and drink plenty of fluids
 - Eat lots of protein (meat, fish, beans, cheese, yogurt, milkshakes)
 - Eat grains and carbohydrates (breads, cereals, noodles)
 - Eat green vegetables
 - Eat foods high in iron (kale and spinach)
 - Drink supplements such as Carnation Instant Breakfast, Ensure, or Boost
 - Eat smaller, more frequent meals if you can.
 - Eat when you feel least tired
 - For more information, pick up a copy of the "Eating Well When You Have Cancer" booklet from the Patient & Family Library on the main floor

Nausea and Vomiting

What is nausea and vomiting?

Nausea is a feeling of sickness in the stomach that may lead to vomiting.

Vomiting is the emptying of the stomach contents through the mouth. Vomiting can be:

- Mild: vomiting 1 to 2 times a day
- Moderate: vomiting 3 to 9 times a day
- Severe: vomiting more than 10 times a day

Nausea and vomiting may be caused by many factors, like:

- Chemotherapy (depending on the type and the dose of chemotherapy).
- Radiation to the stomach area
- The cancer itself
- Medications (pain medication)
- Infection
- Severe constipation
- Anxiety, worrying



When to get help right away

Call your doctor or nurse, or go to the nearest hospital emergency department if you:

- Experience severe nausea that lasts longer than 48 hours, despite taking the anti-nausea medication as prescribed
- Vomit several times a day and it has lasted more than 24 hours
- Cannot keep fluids down for 12 hours
- Have blood in the vomit (this can look like “coffee grounds”)
- Can’t take your anti-nausea medication as prescribed or it is not working
- Feel dizzy or lightheaded, especially when moving from sitting to standing
- Have not urinated for 12 hours or your urine is dark yellow in colour
- Feel confused or are having trouble staying awake

Remember to tell any doctors, nurses or other healthcare professionals, that you are on chemotherapy so that you get the proper care.

How can I prevent or reduce nausea and vomiting?

Nausea and vomiting can stop you from doing things that you enjoy, like spending time with your family and friends. Early control of nausea and vomiting can help you feel better and do the things that you want to do.

If you are on chemotherapy, your doctor will prescribe anti-nausea medications (medication used to prevent or manage nausea and vomiting) for you. Some anti-nausea medication must be taken at a scheduled time, while others should only be taken when you feel sick in your stomach or when you vomit. Check with your pharmacist to make sure you take the anti-nausea medication correctly.



Tip

Write down in a journal each time you feel nauseated or vomit, and whether the anti-nausea medication you take is working. This information can help you figure out the pattern of your nausea and vomiting during your treatment.

The following is a list of tips that you can try to stop or reduce nausea and vomiting

- Take your prescribed anti-nausea medication. If you usually experience nausea and/or vomiting at a certain time (before meals or bedtime), take your prescribed medication at least 30 minutes before that time.
- Eat small frequent meals especially 2-3 days after your chemotherapy treatment, and eat slowly.
- Try to eat a small meal before your chemotherapy, and rest quietly during treatment.
- Try changing your position or your eating location. Avoid lying down flat right after eating
- Limit food that is spicy, fried, overly sweet or creamy, or has a strong smell. If you are nauseated, try eating bland food (crackers, toast) and/or food or drink with moderate temperature (not too hot or too cold). Avoid your favourite food at this time.
- If you tend to be anxious and nauseated before your chemotherapy treatment, try to focus your attention on television, music, reading, relaxation exercise, or chat with someone before and during your treatment. Your doctor can also prescribe a medication to make you relax and help reduce your nausea.

Important: Tell your doctor or nurse on your next visit about all the times you experience nausea and vomiting, and if your anti-nausea medication is not working. You may need a different type of anti-nausea medication.

What should I do if I vomit?

- Take your anti-nausea medication as soon as you can. If you vomit within 1 hour of taking your anti-nausea pill, you may take another pill.
- Try the above suggested tips on how to prevent or reduce nausea and vomiting
- Drink small amount of clear fluids often (like Gatorade, clear soups)
- Slowly begin eating when you feel able to keep food down.
- Call your doctor or nurse if you cannot take the anti-nausea pill. Your doctor may order an anti-nausea suppository (medication taken anally) if you can't keep your pills down. Do not take a suppository without talking to your doctor first.

Constipation

What are the signs of constipation?

You may be experiencing constipation if you experience the following:

- Not having regular bowel movements for 2 or more days when compared to your normal bowel routine. “Normal” bowel function is what was normal for you before starting treatment
- Small, hard stools (bowel movements)
- Leakage of stools
- Stomach ache or cramps, bloated abdomen (belly), a feeling of fullness or discomfort
- Passing excess gas or belching
- Nausea or vomiting

What causes constipation?

There are many reasons why you experience constipation, such as:

- Chemotherapy
- Anti-nausea medications
- Loss of appetite and not eating well
- Pain medication
- Being less active
- Not drinking enough fluids

Some chemotherapy medication can cause severe constipation that may progress into a medical emergency.



When to get help right away

- If you have not had a bowel movement for 2 days from your normal bowel routine, call your doctor or nurse for the right type of laxative to take.
- Call your doctor or nurse or go to the nearest hospital emergency department if you experience constipation with the following signs:
 - General abdominal discomfort, accompanied with nausea and vomiting
 - Leakage or passage of small amounts of watery stool
 - Bloating and abdominal distention (a swollen stomach area)
 - Blood in the stool
 - Feeling generally unwell

Remember to tell any doctors, nurses or other healthcare professionals, that you are on chemotherapy so that you get the proper care.

What can I do to prevent constipation?



DO:

- Drink at least 8 glasses of fluid per day. You can drink milk, juice, water or any caffeine-free drink
- Eat food high in fibre, like: raw vegetables, fruits with skin, whole grain products, popcorn, dried fruits and prunes. If you have trouble eating these foods or feel you need more fibre, ask your doctor first before using a fibre supplement (like Metamucil® or Benefiber®). Remember to drink more when taking this type of fibre supplement
- It may be helpful in the morning to drink prune juice, apple juice, coffee, hot tea, or hot water with lemon juice
- Try to keep physically active (like walking)

General guidelines for taking over the counter laxatives or stool softeners

If you are taking pain medication and/or chemotherapy, your doctor will recommend a stool softener and laxative for you. The text below is only a guideline to help you, speak to your healthcare team about how to take these medications.

Stool softener: docusate sodium (Colace)

You should take this medication if you have problem with hard dry stool. Colace makes bowel movements softer and easier to pass.

- Start with taking 2 tablets in the morning and 2 tablets at night
- It may take 2 to 3 days for the medication to take effect
- You may take up to 6 tablets per day

Laxative: Senokot (Senna)

You should take this medication if you cannot have a bowel movement

- If you do not have a bowel movement for 24 hours, take 2 tablets at night
- If you do not have a bowel movement by 2:00 p.m. the next day, take 2 tablets at 2:00 p.m. and 2 tablets at night
- You may take up to 8 tablets per day

Diarrhea

What is diarrhea?

Diarrhea is loose, watery or soft bowel movements that happen more than 3 or 4 times a day. It may happen with stomach cramping and bloating. Diarrhea can be caused by many things including chemotherapy, radiation to the abdominal area, infection, not eating well, and medication(s).



When to get help right away

Call your doctor or nurse, or go to the nearest hospital emergency department if you experience the following signs:

- Diarrhea for more than 2 days
- Severe abdominal or rectal pain
- Blood in the stool
- Dehydration (not having enough water in your body) that could make you feel confused, weak, thirsty, drowsy or result in dry mouth or less urine
- Rapid weight loss (more than 5 lbs or 2 kgs at a time)
- Being unable to drink fluid for more than 2 days
- Fever (temperature over 100°F or 38°C).

Remember to tell any doctors, nurses or other healthcare professionals, that you are on chemotherapy so that you get the proper care.

What can I do to manage the diarrhea?

- Ask your doctor if you can take over the counter anti-diarrhea medication (like Imodium). In some cases, your doctor may want to collect a stool sample first before starting you on a medication to rule out infection.
- While you have diarrhea, you can try the BRAT diet (Banana, Rice, Apple, and Tea) until the diarrhea has slowed down or stopped.
- Limit greasy, fried, spicy, or very sweet foods.
- Avoid sugarless gum and candies made with sorbitol which acts like a laxative (it makes your diarrhea worse).
- Avoid foods that can act like natural laxatives such as prunes, papaya and rhubarb.
- Eat low fibre food such as: white bread, pasta, refined cereals, cooked fruit and vegetables, meat, fish.
- Drink more fluids, such as Gatorade
- Wash your hands often, and use the same toilet until you have been cleared from an infection. Use diluted bleach solution to clean the toilet and sink in between use.

Mouth Care

Why is mouth care important?

Mouth care means keeping your teeth, gums and mouth clean and free from infection. Mouth problems can be caused by medication you are taking, and also by the chemotherapy or radiation treatments that you are receiving. These problems are not pleasant, but they are common. Mouth problems usually begin 5 to 7 days after the first treatment and will disappear after treatments stop.



When to get help right away

Tell your doctor or nurse at your next clinic appointment if you have any mouth problems, such as cold sores, dry mouth and tongue, bleeding and/or tender gums.

If you experience any of the symptoms below, call your doctor or nurse right away (see page 24 for Princess Margaret Hospital contact information), or go to the nearest hospital emergency department if you are not able to reach anyone.

- Difficulty swallowing, and/or are unable to eat or drink for more than 48 hours
- Temperature over 38°C (or 100°F) with or without chills
- Excessive bleeding of the mouth or gums that lasts for a few hours
- Infected gums (fever, bleeding, swelling, bad odour, tender gums)

What can I do to take care of my mouth?

These are some steps you can do to keep your teeth, gums, and mouth healthy:

1. If possible, see your dentist before the start of chemotherapy to take care of any dental problems you may have. There are certain times during your chemotherapy treatment that dental work is not recommended. Speak to your doctor or nurse if you have any concerns.
2. Brush your teeth, gums, and tongue, and rinse your mouth after eating, at bedtime, and first thing in the morning
 - Use a soft toothbrush to prevent sore gums and bleeding
 - Use toothpaste for sensitive teeth or baking soda to brush your teeth
 - Do not use mouthwashes containing alcohol (Listerine™) because alcohol can make mouth sores and dryness worse.
 - Ask your doctor or nurse about flossing. You can continue to floss regularly, but floss gently when your blood count is low or when your mouth is sore.
 - Tell your dentist that you are on chemotherapy, and report frequent gum bleeding, tenderness, swelling, and/or loose teeth. Your dentist or doctor may order an antibiotic for you to take to prevent an infection.
3. Rinse your mouth with baking soda and water often (see recipe on page 17). You can use warm salt water or just plain water instead if you don't like the baking soda taste. The important thing is to always keep your mouth clean and moist.

Baking Soda Mouth Rinse Recipe:

Add 1 teaspoon of baking soda to a glass of water (about 250 mL or 8 ounce glass)

4. If you have dentures:
 - Brush and rinse your dentures after eating
 - Have loose dentures adjusted
 - Remove your dentures often and while sleeping to give your gums a rest
5. Avoid having alcoholic drinks and smoking because it makes dry mouth worse
6. Avoid exposure to the sun
 - The sun can make cold sores and dry lips worse.
 - Use sun block lip balm (15 SPF or higher and free of PABA).

How can I manage mouth problems?

If you do experience mouth problems, remember that these problems are temporary and you can do things to reduce them. Here are tips to help manage common mouth problems:

Sores on the gums, throat, and other mouth sores

- A baby's toothbrush may be gentler than a regular, soft toothbrush
- Limit hot, spicy, rough, acidic food, such as orange juice, dry toast, or crackers
- Drink plenty of liquid, such as water, juices, soup, popsicles, yogurt, ice cream.
- Choose smooth texture food and thicken fluid (gelatine, mash potato or vegetable, milk or protein shake)
- Rinse your mouth with a baking soda mouthwash first thing in the morning and frequently during the day

Cold sores

- Your doctor may order a special ointment for you

Dry mouth

- Rinse your mouth with baking soda mouthwash every 2 hours
- Add gravy and sauces to food
- Ask your doctor about artificial saliva
- Suck on sugarless hard candy or chew on sugarless gum
- Avoid drinking alcohol and smoking

Dry lips

- Use Lanolin lip balm or lipstick
- Avoid licking your lips as the saliva will dry up your lips more
- Clean your lips gently with lightly salted water and apply lanolin cream

Bad breath

- Brush your teeth and tongue often
- Have your doctor or nurse check your mouth for signs of infection. If accompanied by a sore throat, call your doctor or nurse.

Taste Changes

Some chemotherapy and other medications can cause temporary changes in taste and smell that may affect your desire to eat. Many patients mention a “metallic taste”, lack of appetite, and feeling full. This can lead to weight loss and your body’s ability to recover and fight infection.

What can I do when food tastes different?

- Try using plastic cutlery and glass cooking pots to reduce the metallic taste
- Eat room temperature food and drink to reduce strong tastes and odours
- Suck on sugarless lemon candies, mints or gum to get rid of unpleasant tastes after eating
- Try to add lemon or other herbs on your food and drink to enhance the taste
- Rinse your mouth and brush your tongue before each meal
- Try different things to find what works for you

What can I do when I don’t have an appetite to eat?

- Eat smaller amounts of food often.
- Eat a healthy snack if you don’t feel like eating a complete meal. Examples of healthy snacks may include fruits, yogurt, cheese, and vegetable sticks. Avoid snacks that are high in salts and sugars.
- Make every meal count. Try eating or drinking small amounts of food or fluid that are higher in calories instead of focusing on how much food or fluid you take in.
- Go for a walk or do light exercise before meal time to boost your appetite
- Eat in a place that is pleasant to you (have meals with your friend or family, play quiet music, eat in a backyard)
- Ask your doctor if you can have a glass of wine or beer with your meal. This might help to boost your appetite.

Hair Loss (Alopecia)

Not all types of chemotherapy cause hair loss. If you do experience hair loss, it is temporary. It will start about 2-3 weeks after your first treatment. Your hair will start to grow back when your chemotherapy is done. The texture or color of your new hair may be slightly different.

How can I care for my hair and scalp?

- Keep your scalp and hair clean by using mild shampoo and conditioner. If you are not able to wash your hair, a dry shampoo or baby powder will keep it cleaner looking
- Avoid treatments that are more likely to cause your hair to break, like heated rollers, curling irons and frequent blow-drying
- Ask your nurse before using perms or colour treatments
- Try a short haircut. It can hide the effect of thinning hair and may help you adjust to hair loss.
- Use a gel or mousse that has no alcohol. It may give your hair more fullness
- Your hair helps prevent heat loss from your body, so you may need to wear a soft cap to help keep your head warm
- Your scalp is more prone to sunburn when it is uncovered, so try to keep it covered or use sunscreen with at least SPF 15
- **For Wigs and Head Coverings**
 - Try to order a wig before the hair loss so that your hair stylist can better match your hair. Visit the Wig Salon on the 3rd floor of Princess Margaret Hospital where you will find lots of options and staff who are trained to help patients with cancer. Call 416-946-6596 for more information.
 - If you do not want to wear a wig, you can try scarves, hats, or turbans
 - Contact the “Look Good Feel Better” program that is offered at Princess Margaret Hospital for other tips. Call 416-946-2075 for more information.
 - Some of the cost of your wig may be covered by private insurance. Speak to your insurance company.

Nail and Skin Changes

Some chemotherapy and radiation may cause skin, scalp, and nail changes, such as:

- Redness
- Dryness
- Itchiness
- Nail changes (brittle, cracked, yellowed, split, dark line on the nail bed)
- Peeling
- Acne, rash
- Skin and nail color changes



When should I get medical help?

Call your doctor or nurse if you experienced one or more of the following:

- Tenderness or pain, swelling, redness on fingertip, soles, and palm of the hands
- Difficulty grasping things (like pen or mug) or difficulty buttoning your shirt
- Loss of sensation, constant numbness and tingling
- Wide-spread rash (face, neck, chest, back, arms, and legs), severe itchiness, pus-looking rash/acne
- Difficulty sleeping or doing daily activities (like cooking, typing)
- Feeling embarrassed or distressed, or worrying about how you look. Or, if you start to stay away from friends or avoid going out in public

What can I do for skin and nail care?

- Bathe or shower in warm water instead of hot water. Hot water dries out your skin
- Gently pat your skin dry instead of rubbing it.
- Use a moisturizer that is alcohol-free or oil to soften your skin. Creams are more effective than lotion in relieving dry skin. Try keeping the cream in the fridge because the cooling effect helps to soothe dry skin.
- Do not squeeze or scratch pimples or acne. Ask your doctor or nurse before using any over-the-counter acne medication. Some rashes may look like acne, but are not acne. Using an incorrect product may worsen your rash.
- Use non-allergenic and alcohol free skin care and make-up products (like Aveeno, Vaseline). Oatmeal bath helps soothe the skin and reduce itchiness.
- Apply sunscreen lotion (SPF 30 or higher, and PABA free) frequently, and wear a wide-brimmed hat and long sleeve clothing. Some chemotherapy can make your skin more sensitive to sunlight and worsen the rash.
- Cut your nail short. Use cuticle cream or remover instead of tearing or cutting the cuticles of your nail.
- Contact the “Look Good Feel Better” program that is offered at Princess Margaret Hospital for other tips. Call 416-946-2075 for more information.

Intimacy and Sexuality

Cancer treatment can get in the way of your ability to enjoy sexual activity and intimacy with your partner because of:

- Treatment side-effects (fatigue, nausea, diarrhea, pain, vaginal dryness, early menopause, difficulty having an erection)
- Negative emotional stress (sadness, anger, fear, guilt, or depression)
- Physical changes caused by the treatment, such as surgical scar, hair loss, breast removal, having a bag to drain stool or urine, excessive weight loss or weight gain.
- Stress (worrying about financial situations, job, disability, family obligation)

What are some of the sexual problems that I may experience?

- Loss of interest in sex and/or intimacy
- Irregular menstrual period, early menopause
- Erectile dysfunction (difficulty keeping an erection)
- Pain while having sex
- Feeling unattractive or worrying about changes in the way you look
- Problems with incontinence (controlling urine or bowel movements)
- Difficulty finding a comfortable position during sex

What can I do to manage sexual problems?

- To reduce menopause-like symptoms, you may try:
 - Choosing light clothing and wearing layers that can be removed
 - Avoiding caffeine and alcohol
 - Exercise
- To relieve vaginal symptoms (dryness, irritation, infection)
 - Use a water-based vaginal lubricant when having sex
 - Wear cotton underwear and pantyhose with a breathable cotton lining
 - Avoid wearing tight slacks and shorts
 - Your doctor or pharmacist may recommend a gel, estrogen-based cream or vitamin E vaginal suppository to help reduce vaginal dryness and irritation

- For men who experience erectile dysfunction (not being able to have or keep an erection):
 - Tell your doctor if are not able to have or keep an erection. Your doctor may want to adjust or change your medication, or prescribe medication (such Viagra or hormone replacement).
 - Your doctor may suggest the use of vacuum devices or penile implants as a different option to medication
 - You can try Kegel exercise to help strengthen your pelvic muscle and to improve blood circulation to the genital area. You can do this exercise by squeezing the muscle around your pelvic area and hold it for 10 seconds before relaxing it again. Do 5 to 10 contractions each time, and repeat it at least 5 times a day.
 - Avoid drinking alcohol prior to having sex, as alcohol may affect your ability to maintain an erection
 - Talk openly and honestly with your partner. This may help ease you and your partner's anxiety or expectations.

- Aside from sexual intercourse, try other things that you and your partner can do to be intimate:
 - Experiment with different touches, positioning, or sexual activities
 - Be aware of your emotions. Seek professional help if necessary
 - Plan ahead and rest
 - Share your feelings openly about sex and intimacy with your partner.
 - Create an intimate environment (soft music, candles, apply your favourite scent)
 - Learn what makes you and your partner feel good without intercourse

Fertility

How can cancer treatment affect my fertility?

Some chemotherapy drugs can cause infertility (inability for women to become pregnant or for men to father a child). Other causes of infertility in cancer patients may include:

- Radiation to the pelvic areas for both men and women
- Surgery, such as removal of the ovaries, hysterectomy, removal of the prostate gland or seminal vesicles (an organ that produces semen)

Women should avoid getting pregnant while undergoing chemotherapy. Many of the chemotherapy drugs can cause harm to the unborn fetus or cause birth defects. Let your healthcare team know if you think you may be pregnant. If you are already pregnant, your healthcare team will help you determine your options.

Are fertility changes permanent?

Depending on your age, type of chemotherapy used, and your overall health, you may experience a permanent or temporary infertility. It is important to discuss any concerns you have about your ability to become pregnant or to father a child with your healthcare team prior to starting any treatments.

Some options that may be available to you include:

- Sperm banking – a process where a man’s sperm is collected before chemotherapy treatment starts. The sperm are kept frozen, until the man has completed all of his cancer treatment and is ready to start a family.
- Egg freezing – a process where a woman’s eggs are collected before chemotherapy treatment starts. The eggs are kept frozen until the woman has completed all of her cancer treatment and is ready to start a family.

These procedures need time and cost money, so they must be explored early.

For more information

- Fertile Hope (www.fertilehope.org)
This is a non-profit organization dedicated in providing reproductive information and support for cancer patients and survivors dealing with infertility issue.
- For more information about sperm banking or egg freezing, go to
 - <http://www.mountsinai.on.ca/care/fertility/services/oncology-tissue-sperm-bank>
 - http://www.repromed.ca/cancer_patients_storage.html

Important Contact Information

Princess Margaret Hospital: 416-946-2000

Weekdays (Monday-Friday) between 9:00 am to 4:00 pm

Call your clinic and ask to speak to a nurse.

My clinic phone number: _____

Weekdays from 4:00 pm - 7:30 am, any time on weekends, and during holidays:

Ask the operator to "page" the Nursing Supervisor.

Weekdays (Monday - Friday) between 7:30 am to 9:00 am

Go to your nearest Hospital Emergency Department.

For immediate care or in an emergency, call 911 or go to the nearest hospital emergency department.

Important

Know how to spot the signs of an infection. Go to the nearest hospital emergency department if you have:

- A fever above 38°C or 100°F.
- Chills, shaking, sweating or feeling unwell
- A feeling of dizziness
- Extreme tiredness, or weakness that comes on suddenly or gets worse fast
- A very fast heartbeat
- Difficulty breathing or breathing rapidly
- Burning or pain when urinating
- Confusion

Remember to tell any doctors, nurses or other healthcare professionals, that you are on chemotherapy so that you get the proper care.