

Mouth Health and Cancer Treatment

Information for people affected by cancer

Cancer treatment aims to destroy or remove cancer cells. However some cancer treatments can often harm other cells in the body and cause side effects. Treatments that affect the rapidly dividing cancer cells also affect other rapidly dividing cells, such as the cells that line the mouth and gut.

This fact sheet is about side effects of chemotherapy, radiotherapy and surgery or a combination of treatments that affect the mouth area. Many people have mouth (oral) side effects even if the cancer is in another part of their body. Talk to your doctor and health care team about the side effects you may have from your treatment.

Having problems that affect your mouth can be difficult to cope with, but most gradually improve and go away after your treatment is over. There are ways to manage the side effects you may experience.

This fact sheet does not replace the advice of a healthcare professional.

Taking care of your mouth before treatment

Good oral care will help

- protect your teeth
- reduce discomfort
- help your mouth heal more quickly.

A dentist can check your mouth and teeth and may also try to plan any dental work. It may not be recommended to have dental work during treatment due to a higher risk of infection and bleeding.

Before treatment, you can take care of your mouth by:

- eating a balanced, nutritious diet including a variety of foods from the five food groups – fruits, vegetables, wholegrains, meat (or alternatives) and dairy (or alternatives)
- quitting smoking – call Quitline 13 7848 or talk to your doctor
- learning how to care for your mouth during and after treatment – ask your dentist or healthcare team for advice.



If possible, see a dentist before starting cancer treatment. You may need to see a dentist to develop an oral care plan. This is especially important if you already have mouth problems or tooth decay, or if you are having high-dose chemotherapy, a stem cell transplant or radiotherapy to the head and neck area.

Oral side effects caused by cancer treatments

Cancer treatments can lead to a number of oral side effects:

- **Soreness and ulcers in the mouth (stomatitis or oral mucositis)** – It is common to have a sore mouth. Small cracks and ulcers can form on any soft tissue in your mouth, causing difficulty in eating, talking and swallowing. These can sometimes bleed and become infected. The sores can be very painful and may worsen over time, but will improve when treatment finishes.

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- **Mouth changes** – You might experience mucositis (ulcers) in the mouth or a dry mouth (see box).
- **Tooth decay** – Your teeth may be at increased risk of decay, especially if you have a dry mouth. Oral health care advice before, during and after treatment is important to preserve your teeth and gums.
- **Mouth infections** – The most common is thrush, which usually appears as white patches or a white or yellow coating on the lining of the mouth and tongue. This can cause oral discomfort and bad breath.
- **Bleeding gums** – Your gums may look red, shiny or swollen and they may bleed. Bleeding may occur if your platelet count falls which can happen with chemotherapy. Platelets are the part of the blood that help it to clot.
- **Taste changes** – Cancer treatment may make foods taste different, which can decrease your interest in eating (appetite).
- **Trouble swallowing and opening your mouth fully** – This can be caused by head and neck cancer treatment and severe mucositis.

The type of side effects you experience depends on your treatment. Not everyone will have all of these side effects.

Check your mouth, tongue and teeth regularly during cancer treatment. If you have oral side effects, tell your cancer care team. You may be prescribed pain medication, including antiseptic lotions and sprays that can make you more comfortable. The following section also has some suggestions about ways to manage side effects.

“ I was constantly told to check my mouth. My husband wanted to help but we were not always sure what to look for. This information would have been a great help to me at the time of my treatment. ”

Mary, head and neck cancer survivor

Mucositis and dry mouth

Mucositis and a dry mouth are considered more severe side effects. They are usually caused by having a combination of treatments (such as chemotherapy and radiotherapy) to treat head and neck cancer.

Mucositis

Mucositis is damage to the cells lining the mouth and digestive tract (gastrointestinal tract or gut).

Symptoms of mucositis include:

- painful spots or sores in your mouth
- bleeding in the mouth
- mouth infections, causing a white coating on the tongue or in the throat
- difficulty and pain with eating, swallowing or wearing dentures
- sensitivity to hot, cold, salty, spicy or acidic foods and drinks.

Chemotherapy can cause mucositis anywhere in the gut. Radiotherapy only causes mucositis in the treatment area.

Mucositis may stop you from eating and drinking, and can make it easier for infections to get into your body. It usually gets better a few weeks or months after the end of treatment.

Dry mouth

Dry mouth (xerostomia) can be caused by chemotherapy, medications, surgery or radiotherapy to the head and neck area.

Damage to the salivary glands can reduce the amount of saliva (spit) produced in your mouth.

Symptoms of dry mouth include:

- not having as much saliva as usual
- thick or stringy saliva
- a sticky or dry feeling in your mouth
- problems chewing, tasting and swallowing
- difficulty speaking (the tongue may have trouble moving)
- a ridged or cracked tongue surface.

Dry mouth from radiotherapy to the head and neck area can last for many months after treatment and, for some people, it can be permanent.

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Taking care of your mouth during treatment

Problems affecting your mouth can be hard to deal with. These side effects often have an impact on the type of food you can eat, your nutrition and general health.

It is important to try to continue eating nutritious foods so your body can recover from the cancer treatment. Cancer Council's *'Understanding Taste and Smell Changes'* factsheet and *'Nutrition and Cancer'* booklet may help – visit the website or call 13 11 20 for free copies.

Tips to help manage side effects

Consider trying some of the following tips to help you manage oral side effects and prevent infection:

Keep your mouth clean

- Rinse your mouth every time you eat or drink something and at bedtime. Ask your doctor or nurse for advice about what type of mouthwash you should use. You may try ¼ teaspoon bicarbonate of soda in 1 cup of warm water, or ¼ teaspoon of salt in 1 cup of warm water, or an alcohol-free mouthwash. Swish it around your mouth and spit it out.
- If you wear dentures, make sure they fit properly. Wear them only during meals, and clean well after use by soaking in denture cleaner. Ask your healthcare team to recommend denture cleaning products that will not cause mouth irritation.
- Use a soft toothbrush or electric toothbrush and replace regularly to prevent infection. Dip it in warm water to make the bristles softer and use a mild toothpaste recommended by your dentist. Avoid whitening toothpastes as these may irritate the mouth and gums.
- If your mouth is too sore to brush or bleeds when you clean your teeth, rinse it using the mouthwashes described above.
- Ask your dentist or healthcare team if you should floss your teeth. This may not be recommended during treatment.

Contact your doctor immediately or go to emergency

You should always keep your doctor informed about your mouth side effects. However, you may have to contact a health professional or go to the emergency department immediately if you:

- have a temperature of 38°C or higher
- feel that your pain is uncontrollable
- are unable to eat or drink
- have a lot of bleeding from the mouth or many white spots (infection).

Keep your mouth moist

- Stay hydrated by drinking 6-8 glasses of water and other fluids throughout the day. Try sugar-free cordial, diluted juices, herbal tea and non-acidic drinks.
- Limit caffeine intake from coffee, tea, energy drinks and soft drinks.
- A cool mist humidifier at night can be helpful if you have a very dry mouth, check with your health care team.
- Suck on ice chips, ice blocks or soft sugar-free sweets, or use sugar-free chewing gum.
- Use lip balm, petroleum jelly or cocoa butter on your lips.

““ At times life was tough but it slowly improved. I still suffer from a dry mouth and always carry a bottle of water with me. ””

Mary, head and neck cancer survivor

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Managing pain and difficulty eating

- Take pain medications as prescribed, particularly before meals.
- Choose foods that are soft, moist and easy to swallow, such as rice, mashed potatoes, tinned fruit, slow-cooked meat, scrambled eggs and yoghurt. Use gravies and sauces to moisten foods and add flavour.
- Avoid things that may irritate your mouth, including:
 - hard, crunchy, spicy, salty or acidic foods (e.g. fruit juices, curries, chips)
 - alcohol and tobacco
 - very hot foods.
- If your mouth is dry and you find it difficult to swallow, try using artificial saliva and oral moisturisers from the chemist.
- Drink through a straw if you have mouth sores.
- Try to eat a well-balanced diet including foods from the five major food groups.

How carers can help

A partner, friend or loved one may be able to help you cope with oral side effects. A carer could:

- use a torch to look for red or white patches or sores in the mouth
- do the grocery shopping and purchase soft foods or frozen foods that may be soothing to the mouth

- help prepare meals by mashing or puréeing foods in a blender and making gravies or sauces to moisten food
- provide pain medication 30 minutes before meals
- track fluid intake (number of glasses of water/fluid each day)
- keep drinking straws, chewing gum handy
- go to the chemist to purchase artificial saliva (or other products prescribed)
- attend appointments with the doctor or dietitian.

For further information

- **Cancer Council ACT**
actcancer.org
- **Cancer Council Northern Territory**
nt.cancer.org.au
- **Cancer Council NSW**
cancercouncil.com.au
- **Cancer Council Queensland**
cancerqld.org.au
- **Cancer Council SA**
cancersa.org.au
- **Cancer Council Tasmania**
cancertas.org.au
- **Cancer Council Victoria**
cancervic.org.au
- **Cancer Council Western Australia**
cancerwa.asn.au

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Note to reader

Always consult your doctor about matters that affect your health. This fact sheet is intended as a general introduction and is not a substitute for professional medical, legal or financial advice. Information about cancer is constantly being updated and revised by the medical and research communities. While all care is taken to ensure accuracy at the time of publication, Cancer Council Australia and its members exclude all liability for any injury, loss or damage incurred by use of or reliance on the information provided in this fact sheet.



For information and support on cancer-related issues, call Cancer Council 13 11 20. This is a confidential service.