

Understanding

Mouth Health and Cancer Treatment

A guide for people affected by cancer

Cancer treatments can cause side effects that affect the mouth (oral) area. We hope this fact sheet will help you, your family and friends understand more about the mouth changes you may experience and how to care for your mouth before, during and after treatment.

How cancer treatment affects the mouth

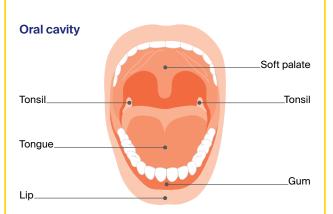
Many types of cancer treatments cause side effects in the mouth area. For example:

- some chemotherapy and targeted therapy drugs damage the healthy cells in the mouth, causing mouth sores (ulcers), infections or taste changes
- radiation therapy to the head and neck area may damage cells in the mouth (including taste buds) and/or the saliva (spit) glands, causing pain, saliva changes, taste changes and difficulty swallowing
- some radiation treatments can change the strength of muscles and nerves in and around the mouth, making chewing and swallowing difficult
- surgery to the head and neck area can affect your speech and the ability to open your mouth, taste, chew and swallow.

You may find food feels dry and difficult to chew or swallow, or food tastes different, or that you are more or less sensitive to food flavours, textures or temperature. Some foods may taste more acidic, spicy, salty, bland or "prickly".

Having ongoing problems with your mouth can be frustrating and difficult to cope with. Taking care of your mouth before, during and after treatment will help protect your teeth, mouth lining and gums and reduce discomfort.

Mouth care before treatment



If possible, visit your dentist before starting cancer treatment. It is especially important if you already have mouth problems (such as tooth decay, broken and sharp teeth, wobbly teeth, gum disease).

Before having chemotherapy, a stem cell transplant or radiation therapy to the head and neck area, your treatment team may refer you to a dentist to check if it is safe to proceed with treatment. You may need to have teeth that are decayed or loose removed before treatment. There can be more risk of infection or bleeding if you have dental work during or after certain cancer treatments.

Your dentist can plan any dental work you need before your treatment. They can also tell you how to look after your mouth during treatment.

"Find a dentist who understands the effects of treatment and get advice for the health of your teeth long term." JULIE

Oral side effects caused by cancer treatments

Each person reacts differently to treatment. Whether you experience side effects and if they are mild or severe depends on your treatment and how your body reacts to it. Sometimes changes are temporary and disappear after treatment ends. For some people, changes are longer lasting or even permanent.

Your treatment team will discuss the oral side effects that you may experience and suggest ways to manage them (see the next page for more information). Common oral side effects are:

Mouth changes – You might have mouth sores and ulcers (oral mucositis), thick saliva or a dry mouth (xerostomia). See opposite.

Tooth decay – Your teeth may be at increased risk of decay, especially if you have a dry mouth.

Mouth infections – The most common infection is oral thrush, which usually appears as white or red patches, or a white/yellow coating on the mouth and tongue. Thrush can affect your taste, cause bad breath and be uncomfortable. Your treatment team can prescribe medicine to help treat mouth infections.

Bleeding gums – Your gums may look red, shiny or swollen and they may bleed. Bleeding may occur if you don't have enough platelets in your blood, which can happen with chemotherapy. Platelets help the blood to clot.

Taste changes – Cancer treatment may make foods taste different (e.g. bland, bitter or metallic). You may lose interest in eating (loss of appetite).

Trouble swallowing (dysphagia) – Treatment to the head and neck area can affect swallowing. If you are having difficulty swallowing, you can ask your doctor for a referral to a speech pathologist.

Difficulty opening your mouth (trismus) – This can be caused by the cancer or cancer treatments. If opening your mouth is difficult, a speech pathologist may be able to help you.

If you are experiencing side effects, tell your treatment team and they may prescribe medicine to manage pain or symptoms or suggest ways to make eating, drinking and swallowing easier.

Your doctor may refer you to a dietitian or speech pathologist to help you manage your oral side effects and make eating and drinking easier.

► For more information about caring for your mouth, see our Changes to Taste and Smell fact sheet and our Nutrition for People Living with Cancer booklet.

Oral mucositis and saliva changes

Oral mucositis

Some treatments – for example, radiation therapy to the head or neck area, some chemotherapy and targeted therapy drugs – can damage the cells lining the mouth. This is known as oral mucositis. Symptoms include:

- painful spots, sores or ulcers in your mouth
- bleeding in the mouth
- mouth infections such as oral thrush
- discomfort and pain when eating, drinking, speaking or wearing dentures
- · sensitivity to certain foods and drinks.

Some medicines help to reduce the discomfort when you eat, drink or speak, and can be applied directly to the mouth sores to numb them. Mucositis usually gets better a few weeks or months after treatment ends.

Dry mouth and saliva changes

Radiation therapy or surgery to the head or neck area, some chemotherapy drugs and some pain medicines can reduce the amount of saliva (spit) in your mouth or make your saliva thick and sticky.

Symptoms 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 (your tongue may have trouble moving)
- ridges or cracks on the tongue or corners of the mouth
- difficulty with swallowing saliva or spitting it out
- a thick coating on the tongue
- taste changes.

How quickly these symptoms improve is different for every person. Talk to your treatment team about what to expect after treatment.

Taking care of your mouth during and after cancer treatment

Cleaning



- Rinse your mouth several times a day ask your treatment team what type of alcohol-free or homemade mouthwash to use and how often to use it.
- If you wear dentures, make sure they fit properly. Take them out after eating and clean them well. Keep them dry when you're not wearing them.
- Clean your teeth with a soft-bristled toothbrush and replace regularly (at least every 3 months) to prevent infection. Use a mild fluoride toothpaste recommended by your dentist.
- Avoid whitening toothpastes, which may irritate your mouth and gums.
- If your mouth is too sore to brush, or bleeds when you clean your teeth, rinse it using the mouthwashes recommended by your treatment team.

Get professional help



- Visit your dentist before having treatment for cancer.
- Tell your treatment team if you notice any changes to your mouth – they may prescribe medicines and mouthwashes that can make you more comfortable.
- If you are struggling to eat enough food or you notice you are losing weight, ask to speak to a dietitian.
- Ask a speech pathologist or dietitian what you can eat or drink if you are having difficulty or pain when swallowing food or drink.
- Visit speechpathologyaustralia.org.au to find a speech pathologist and dietitiansaustralia.org.au to find an accredited practising dietitian.
- Talk to your doctor and nurse about medicines to relieve pain and help with healing.

Eating and drinking



- Drink 6–8 glasses of water and fluids throughout the day.
 Carry a water bottle with you and take frequent sips.
- Limit how much caffeine you drink (e.g. from coffee, tea, energy drinks or soft drinks) and reduce alcohol, as both can increase dryness in the mouth.
- Suck on ice chips or ice blocks, eat soft sugar-free sweets, or try sugar-free chewing gum.
- Eat soft foods that are moist and easy to swallow, such as rice, mashed potatoes, mashed vegetables, tinned fruit, soup, scrambled eggs, yoghurt, custard and minced or slow-cooked meat, chicken or fish. Use gravies and sauces to add flavour and make foods easier to eat.
- Avoid dry, rough or crunchy foods that irritate your mouth (e.g. chips, nuts, toast, crackers), vinegar, spices, salty foods, alcohol, very hot or very cold foods and drinks, and citrus or tangy tomato-based food and juice.
- Drink through a straw if you have mouth sores. Paper or silicone straws may taste better than metal straws.
- If you are eating less or losing weight, choose nourishing drinks like milk, smoothies or nutritional supplements.

Protect your mouth





- Check your mouth, tongue and teeth for changes daily during treatment. Any white spots or pain might mean an infection.
- Consider using a cool mist humidifier at night. This can be helpful if you have a very dry mouth.
- Quit smoking or vaping as it will irritate your mouth and make dryness worse.
- Your dentist may be able to apply fluoride treatments, which can slow any tooth decay.
- Keep lips moist with a lip balm containing beeswax, shea butter, lanolin or plant-based oils. Avoid lip balms based on petroleum jelly.

"Once I started chemotherapy, I went off my food. My mouth felt very dry, which made food taste unappetising. Adding extra sauce helped." HELEN

When to contact your doctor or go to emergency

Talk to your doctor or nurse about any side effects you have or any changes you notice in your mouth.

Go to the emergency department immediately if you:

- have a temperature of 38°C or higher
- feel that your pain can't be controlled
- · are unable to eat or drink
- · have uncontrolled bleeding in the mouth
- are unable to open your mouth (trismus)
- have difficulty breathing (shortness of breath)
- have facial swelling.

How carers can help

A partner, family member or friend may be able to help you manage any oral side effects. They could:

- check your mouth for red or white patches or sores
- buy soft or frozen foods for you that may be soothing to the mouth
- help prepare meals that are easy to eat
- attend medical appointments with you.

Questions for your doctor

You may find this checklist helpful when thinking about the questions you want to ask your doctor.

- Will cancer treatment affect my mouth?
- How should I clean my mouth while on treatment?
- Do I need to visit the dentist?
- Are there any food or drinks I should avoid?
- What products can I use for dry mouth or mouth sores?

Where to get help and information

Call Cancer Council 13 11 20 for more information about cancer and treatment. Our experienced health professionals can listen to your concerns, put you in touch with services and send you our free booklets. You can also visit your local Cancer Council website.

ACT	actcancer.org
NSW	cancercouncil.com.au
NT	cancer.org.au/nt
QLD	cancerqld.org.au
SA	cancersa.org.au
TAS	cancer.org.au/tas
VIC	cancervic.org.au
WA	cancerwa.asn.au
Australia	cancer.org.au

Other useful websites

You can find many useful resources online, but not all websites are reliable. These websites are good sources of support and information.

Cancer Australia	canceraustralia.gov.au
Cancer Council Online Community	cancercouncil.com.au/OC
eviQ (cancer treatment information)	eviq.org.au
The Thing About Cancer podcast	cancercouncil.com.au/ podcasts
Head and Neck Cancer Australia	headandneckcancer.org.au

Acknowledgements

This information was reviewed by: Dr Sophie Beaumont, Head of Dental Oncology, Peter MacCallum Cancer Centre, VIC; Dr Teresa Brown, Assistant Director Dietetics, Royal Brisbane & Women's Hospital, QLD; Ken Colbert, Consumer; Sarah Davies, Head and Neck Nurse Practitioner, Chris O'Brien Lifehouse, NSW; Dr Adrian DeAngelis, Oral and Maxillofacial Surgeon, Royal Melbourne Hospital and OMFS, VIC; Tess Dunlop, Speech Pathologist, Peter MacCallum Cancer Centre, VIC; Elizabeth Egan, Clinical Nurse Consultant Oncology, St John of God Subiaco Hospital, WA; Alan Harding, Consumer; Dr Michelle Kang, Oral Medicine Specialist, Sydney Oral Medicine, Sydney and Hunter New England Local Health Districts, NSW; Julie McGirr, 13 11 20 Consultant, Cancer Council Victoria; Amy O'Halloran on behalf of Chris O'Brien

Lifehouse Dietetics Team, NSW; Megan Sanders, Clinical Dietitian, Head and Neck Services, Peter MacCallum Cancer Centre, VIC.

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.

This fact sheet is funded through the generosity of the people of Australia. To support Cancer Council, call your local Cancer Council or visit your local website.



