A practical guide to living with and after cancer

SIDE EFFECTS OF CANCER TREATMENT



Contents

About this booklet	4
What are side effects?	6
Treatments for cancer	7
Reduced numbers of blood cells	9
Feeling sick (nausea)	16
Hair loss and changes to hair	18
Tiredness	23
Changes in memory or concentration	26
Mouth or throat problems	29
Eating problems	33
Bowel changes	38
Skin changes	41
Numbness or tingling in hands and feet	45
Lymphoedema	47
Body image	49
Changes to your sex life	51

Fertility	54
Hormonal changes	55
About our information	58
Other ways we can help you	60
Other useful organisations	63
Your notes and questions	68



About this booklet

This booklet aims to help you understand more about the possible side effects of cancer treatment. It gives a brief overview of some common side effects that might happen with different treatments. It also suggests ways to help manage them.

There may be some side effects not mentioned here. This booklet is best read with information about the type of cancer you have. We also have information about specific cancer treatments and the side effects they may cause.

Everyone's experience of cancer and its treatment is different. The doctors and nurses at your hospital will discuss in detail with you the treatment you might have, and its possible side effects.

At the end of this booklet are some useful addresses. helpful books and websites (see pages 63–67), and pages to fill in with your questions for your doctor or nurse (page 68–69).

We've included quotes in this booklet from people who've had cancer treatment. They are from **healthtalkonline.org**, videos on our website and people who've chosen to share their experiences with us at macmillan.org.uk/cancervoices (some names have been changed).

You may also want to discuss this information with our cancer support specialists on freephone 0808 808 00 00 (Monday-Friday, 9am-8pm). Alternatively, visit macmillan.org.uk

If you're hard of hearing, you can use textphone 0808 808 0121, or Text Relay. For non-English speakers, interpreters are available.

If you have found this booklet helpful, you could pass it on to your family and friends so that they can help and support you.

What are side effects?

Side effects are changes you might get as a result of cancer treatment. They can be mild and temporary. But sometimes they can have a bigger impact on your quality of life.

The types of side effect you may experience depend on your treatment. You'll probably only have a few of the ones we mention. Some people don't experience any side effects and feel better during treatment than before diagnosis.

The thought of side effects can be frightening, but there are many ways to help manage them. You'll find suggestions for this throughout the booklet. Always ask your doctor, nurse or other health professionals before using any medicines, creams, mouthwashes, dietary supplements or complementary therapies.

Coping with cancer and the side effects of treatment can affect you emotionally too. You might find it helpful to read our booklet How are you feeling? The emotional effects of cancer.

Treatments for cancer

There are many types of cancer treatment. You may have more than one type. Your doctors will discuss with you the best options for your situation. When planning your treatment, they will look at your general health as well as the type and stage of the cancer.

The most commonly used treatments for cancer are:

- **Surgery** An operation to remove a tumour and nearby tissues that may contain cancerous cells.
- Chemotherapy The use of anti-cancer (cytotoxic) drugs to destroy cancer cells.
- Radiotherapy The use of high-energy x-rays or particles to treat disease.
- Hormonal therapies These treatments alter the way particular hormones are produced or work in the body.
- Targeted therapies This covers a number of treatments that work in different ways. These include using the body's immune system to destroy cancer cells, or blocking cancer cell growth.

Some treatments are used to treat cancer in a particular area of the body. These are called **local treatments**. They include surgery and radiotherapy. Others can treat cancer in more than one part of the body at a time. These are called **systemic** treatments. Chemotherapy, hormonal therapy and targeted therapy generally work in this way.

There are also some less commonly used cancer treatments. Your doctor will talk to you about these if they are an option.

This booklet covers some common side effects of cancer treatment and some ways you may be able to manage them. No one will have all of these effects, but some people may have more than one. There will be chapters in the booklet that aren't relevant to you. Please feel free to skip these.

We've added icons (see key below) in some sections to show the information that may apply to your treatment. Use the icons and the contents pages to help guide you.

Key

- Surgery
- Chemotherapy
- Radiotherapy

- Hormonal therapies
- Targeted therapies

Reduced numbers of blood cells







This side effect is most common with chemotherapy and some targeted therapies. It may also happen if radiotherapy is given to large areas of the body.

Blood cells are made in the bone marrow, which is in the middle of your bones. There are three different types of blood cell:

- white blood cells, which fight infection
- red blood cells, which carry oxygen around the body
- platelets, which help the blood to clot and prevent bleeding.

Some cancer treatments reduce the number of blood cells made in your bone marrow, but this usually temporary. Your doctors will check the number of blood cells in your blood regularly. They will do this with a blood test called a full blood count (FBC). Your medical team will plan your treatment so that your blood cells have time to recover between treatments.

Low white blood cell count (neutropenia)

White blood cells protect you against infection. When your white blood cell count is low, you are at risk of infections. A low white cell count is called neutropenia. A neutrophil is a type of white blood cell

Your cancer doctor or nurse will tell you when you are most likely to have low white blood cell counts during your treatment. At these times, it is important to take extra care to prevent infection.

What you can do:

- Avoid people who have an infection.
- Always wash your hands before preparing food and after going to the toilet.
- Ask your doctor or nurse if there are foods you should avoid.
- Ask your doctor or nurse if you should keep away from crowded places.



Signs of infection include:

- Developing a high temperature this may be over 37.5°C (99.5°F) or over 38°C (100.4°F), depending on the advice that you have been given by your medical team.
- Suddenly feeling unwell, even with a normal temperature.
- Feeling shivery and shaky.
- Having a cold, sore throat, cough, diarrhoea or passing urine frequently (urine infection).

Infections can usually be treated with antibiotics. If an infection is not treated quickly, it can be much more difficult to get it under control.

Always contact the hospital immediately on the 24-hour contact number you've been given and speak to a nurse or doctor if you think you may have an infection

To avoid getting an infection you may be given treatment to prevent it. Treatment to prevent an infection is called prophylaxis. Some people having chemotherapy are given a treatment called G-CSF. It helps the bone marrow make white blood cells more quickly and reduces the risk of infection. G-CSF is given as an injection under the skin (subcutaneously).



Low red blood cell count (anaemia)

Red blood cells contain haemoglobin (Hb), which carries oxygen around the body. A low red blood cell count is called anaemia. If you have anaemia, you may look pale and feel:

- tired
- breathless
- dizzy and light-headed
- aches in your muscles and joints.

If your red blood cell count is low, you may be offered a blood transfusion. This will increase your haemoglobin levels, giving you more energy and making you feel less breathless.

Sometimes a drug called erythropoietin is used instead of a blood transfusion. A nurse gives it to you as an injection under the skin (subcutaneously).



We can send you more information about blood transfusions and erythropoietin.

Low platelet count

Platelets help the blood to clot. Your cancer doctor or nurse will tell you if your platelets are low. They'll explain what you need to be aware of. If you have a low number of platelets in your blood, you may:

- bruise easily
- have nosebleeds
- notice bleeding gums
- bleed more than usual from small cuts or grazes
- have heavier periods.

You may also develop a rash of small red or purple spots just beneath the skin. This is known as a petechial rash and can be anywhere on the body. It is a sign of blood leaking out of nearby blood vessels.

Contact your doctor or the hospital straight away if you develop any of the side effects mentioned above.

You may have to go to hospital for a platelet transfusion. This is given through a drip (infusion). The platelets will start working immediately to prevent bruising and bleeding.

What you can do if you have a low platelet count:

- Use a soft toothbrush when brushing your teeth.
- If you shave, use an electric razor.
- Take care to avoid injury, for example by wearing gloves if you are gardening.
- Avoid sports and activities that can lead to injuries.

Feeling sick (nausea)











This is a possible side effect with some treatments. It can usually be very well controlled and many people have no sickness at all.

Your hospital doctors will usually prescribe anti-sickness (anti-emetic) drugs if sickness is a possible side effect of your treatment. Tell your doctor or nurse if the symptoms don't improve. There are different types of anti-sickness medicine which work in different ways. Some may work better for you than others. Often you may be given more than one type of drug.

Some anti-sickness drugs can make you constipated (see pages 38–39). Let your doctor or nurse know if this happens.

What you can do:

- If possible, let someone else cook or prepare food for you.
- Eat cold food or food at room temperature if the smell of cooking bothers you.
- Avoid fried, fatty foods or foods with a strong smell.
- Try eating dry food, such as crackers before you get up in the morning.
- Eat several small snacks and meals each day, and chew your food well.

- Ginger can help reduce feeling of sickness try crystallised ginger, ginger tea or ginger biscuits.
- Sipping a fizzy drink can help try ginger beer or ginger ale, mineral water, lemonade or soda water and sip slowly through a straw.
- Try eating peppermints or drinking peppermint tea.
- Some complementary therapies such as acupuncture may help but ask your cancer doctor first. Some people find wearing acupressure wristbands helpful. You can buy these from a chemist.

Hair loss and changes to hair









Some people having cancer treatment find that it doesn't affect their hair at all. However, chemotherapy and other medicines can damage the condition and growth of your hair. Some people find that their hair becomes thinner and in some people, it falls out completely.

Any hair loss from chemotherapy is almost always temporary. People who have radiotherapy to their head may find they have areas where their hair doesn't grow back.

Your doctor or specialist nurse will tell you if you're likely to lose your hair or have other hair changes as a result of cancer treatment. With most treatments, hair usually grows back or returns to how it was a few months after you've finished treatment.

Some chemotherapy drugs can cause hair loss or hair thinning. You may notice your hair coming out more when you brush, comb or wash it, and you may find hair on your pillow in the mornings. There may also be changes in your facial hair or your body and pubic hair. Some chemotherapy drugs also make the eyelashes and eyebrows fall out.

You may be able to prevent hair loss on your head by using a 'cold cap.' This works by temporarily reducing the blood flow and the amount of the drug reaching the scalp. The cold cap only works for some types of chemotherapy drugs and doesn't always prevent hair loss. You can ask your doctor or nurse whether one would be useful for you.



Hormonal therapies rarely cause complete hair loss but some people may notice that their hair becomes thinner. Sometimes hair becomes dry and brittle.

A type of targeted therapies called EGFR inhibitors can lead to hair thinning and changes to the texture of hair. They may also cause changes to hair on other parts of your body.

What you can do if your hair is getting thinner or breaking easily:

- Use gentle shampoos and conditioners.
- Pat your hair dry after washing it and gently brush it with a wide prong or wide-toothed comb.
- Avoid using hairdryers, straighteners, tongs or curlers.
- Don't perm or colour your hair if it's brittle or your scalp is dry get professional advice first.
- If you colour your hair, use a mild vegetable-based colourant and ask your hairdresser for advice. Always do a strand test first.

What you can do if you're losing your hair:

- Cutting hair short before chemotherapy can stop the weight of long hair pulling on the scalp, which can make hair fall out earlier.
- Wearing a hairnet, soft cap or turban at night stops your hair becoming tangled and helps to collect loose hair.
- You may be entitled to a free wig your nurse can tell you more about this.
- Ask your hairdresser about ways of styling your hair to cover any areas affected by radiotherapy.
- Visit the website mynewhair.org for information about specially trained stylists who can advise you on how to care for your hair during and after treatment. It also gives information about hairdressers who are trained in cutting and styling wigs.

'After I had chemotherapy my hair started falling out.
I was upset as it was wonderfully long. It made me so insecure when I lost it. I got a wig that resembled my hair before I started treatment. I was so pleased and it gave me the confidence to start socialising and seeing my friends again.'

Jo

There are lots of ways you can cover up, such as with hats, turbans, scarves or bandanas. If you decide not to cover your head, use a suncream with a high sun protection factor (SPF) of at least 30 on your scalp when you go outside. It is important to do this even when it's cloudy.

Your hair will usually grow back over a few months once you've finished treatment. It will be very fine at first and may be a slightly different colour or texture than before.



We have a video on our website about coping with hair loss.

You can watch this at macmillan.org.uk/hairloss

Tiredness











Most cancer treatments can cause tiredness. This can vary from mild tiredness that can be relieved with rest, to extreme tiredness where you feel you have no energy at all. Tiredness usually improves gradually after treatment ends.

Tell your cancer doctor or nurse if you are feeling very tired. Some causes of tiredness can be treated. For example, if you're not sleeping well, aren't eating enough (see pages 33-35) or if you are anaemic (see page 13).

What you can do:

- Try to keep to a regular sleep routine.
- Do a little bit each day rather than a lot at one time. If you have a big task, break it down into smaller, easier ones.
- Try to cut down on things you don't really need to do.
- Ask family and friends to help with shopping and household jobs.
- Do things when you have the most energy.
- Prepare meals in advance and keep prepared food in the freezer, ready to heat up.

- If you have children, ask for help looking after them. Some people may need extra childcare support. A social worker can usually arrange this for you.
- Some people choose to or need to carry on working during cancer treatment. Ask your employer about reducing your hours or changing your work duties to make things easier for you.

'I felt very tired when I returned to work after chemotherapy. It knocked the stuffing out of me which was a surprise as I'm normally full of energy. My employers were very supportive and allowed to work flexible hours.'

Fiona

Research shows that physical activity, such as gentle strengthening exercises combined with some walking, can help to reduce tiredness caused by cancer treatments.

Ask your doctor about what's okay for you and your level of fitness. Being active may help to boost your appetite, give you more energy and improve your general well-being. It's important to try to exercise a bit, even if you don't feel like it. It's best to try to get a good balance between being active, exercising and getting plenty of rest.



We have a video about coping with fatigue that you may find helpful. You can watch this at macmillan.org.uk/fatique



Changes in memory or concentration











Some people notice changes in memory or concentration during, and for a time after, cancer treatment. Doctors call this mild cognitive impairment (MCI). It's also called sometimes 'chemobrain' or 'chemo-fog', although it can happen in people who haven't had chemotherapy.

It's not always clear what causes MCI in people having cancer treatment. Sometimes, it may be caused directly by cancer treatment. For example, if radiotherapy is given to the brain. Or, it may be due to another side effect of cancer treatment, such as menopausal symptoms, tiredness, or a low number of red blood cells (anaemia). Anxiety and depression can affect concentration and memory as well.

Symptoms can include:

- trouble finding the right word or not being able to finish sentences
- trouble remembering facts such as names and dates

- difficulty concentrating and not being able to focus on what you're doing
- difficulty doing more than one thing at the same time (multitasking), such as answering the phone while cooking
- taking longer than usual to complete simple tasks.

These symptoms often improve gradually after treatment finishes.

What you can do:

- Keep a diary of your symptoms. They may seem worse first thing in the morning, or when you're tired or hungry. Noticing patterns can help you to plan your day so that you do more difficult tasks when you feel at your best.
- Carry a notebook and make notes, lists and reminders.
- Keep a calendar or diary or use your mobile phone calendar if you have one – to help you remember important dates and appointments.
- Keep your mind active by doing crosswords, word games or number puzzles like sudoku.
- Relaxation can help to reduce stress and may help to improve your memory and concentration.

- Physical exercise can help you feel more alert. It can also help reduce fatigue.
- Avoid alcohol if it makes your symptoms worse.

Tell your doctor or nurse if you notice changes in your memory or ability to concentrate. They can give you more information and support.



We can send you more information about mild cognitive impairement.

Mouth or throat problems









Mouth or throat problems can happen after treatments given directly to the mouth or head such as radiotherapy or surgery. They can also be caused by drug treatments such as chemotherapy or some targeted therapies.

Tell your doctor or specialist nurse if you have these problems. They can give advice and treatment to help. Occasionally, specialists such as dentists and speech and language therapists may offer treatment and support for more complex problems.

Sore mouth or throat

This is guite common with chemotherapy, some targeted therapies and with radiotherapy to the head and neck. The lining of the mouth or throat can become thinner and you may get ulcers. If this happens, you are more likely to get an infection.

The most common infection is oral thrush. This usually appears as white patches or a white coating over the lining of the mouth, tongue or throat. Tell your doctor or nurse if you have a sore mouth or throat. They can give you treatments to help.

What you can do:

- Clean your teeth or dentures gently every morning, evening and after meals using a soft-bristled or children's toothbrush and rinse your mouth regularly with salt water.
- Avoid strongly flavoured toothpaste.
- Change your toothbrush when the bristles become worn.
- Keep your lips moist by using Vaseline® or a lip balm.
- If your doctor prescribes a mouthwash, use it as advised.
- If possible, drink at least two litres (three and a half pints) of fluid a day.
- Avoid alcohol (particularly spirits and wine) and acidic drinks (orange and grapefruit juice).
- Avoid hot spices, garlic, onion, vinegar and salty food.
- Avoid smoking.

Swallowing problems

Chemotherapy and some targeted therapies can give you a sore mouth or throat, which can make swallowing painful. Treatments, such as radiotherapy or surgery, given directly to these areas can also affect swallowing.

Your cancer doctor, nurse or dietitian can give you information and support to help with swallowing problems. If you have had surgery or radiotherapy to your mouth or throat, you may be referred to a speech and language therapist for assessment and treatment.

What you can do:

- Keep eating your favourite foods, but make changes to soften them. If you have a blender, you could blend or liquidise food.
- Use sauces and gravies.
- Chop meat and vegetables finely, and casserole or stew them.

Let your nurse or dietitian know if you're having difficulty swallowing. They can advise you on making changes to your diet so you get enough calories every day.



We have more detailed information in our booklet Eating problems and cancer.

Dry mouth

Some cancer treatments can cause the salivary glands in the mouth to make less saliva, which leads to a dry mouth. This can be temporary or permanent.

What you can do:

- Speak to your doctor about drugs that can help you produce more saliva.
- Try using an artificial saliva product to moisten your mouth.
- Keep your mouth moist carry a bottle of water with you to sip from. Some people find sucking on ice helps.
- Keep your mouth clean. Brush your teeth with a soft toothbrush after every meal.
- Have regular dental checks. Lack of saliva can increase the risk of tooth decay or infections. Try chewing sugar-free gum or sucking on sugar-free sweets to help you produce more saliva.
- Avoid alcohol, caffeine and cigarettes as these can make your mouth dry.
- Try soft, moist food such as soup, melon, ice cream, and yogurt. Add gravies, sauces and dressings to moisten food.

'I've been affected by the cancer in ways I didn't expect. The operation removed a lot of my saliva glands so I have difficulty eating dry food and I always have to have water with me.'

Robert

Eating problems









If you have problems eating or your appetite isn't good, you can ask your hospital doctor or GP to refer you to a dietitian. A dietitian can tell you which foods are best for you, and if food supplements would help.

Some of the side effects mentioned earlier such as a sore or dry mouth, tiredness or feeling sick can cause problems with eating. You may have other symptoms that make eating difficult.

Loss of appetite

What you can do:

- If you don't want to eat big meals, eat small amounts as often as possible.
- Keep snacks handy. Bags of nuts or dried fruit, or a bowl of grated cheese are high-calorie (energy) foods. If these are hard for you to swallow, try yoghurt or ice-cream.
- Add extra calories to your food with butter, full-fat milk and cream
- If you don't want to eat food, try a nourishing drink, such as a fruit smoothie or milkshake. You can add ice-cream to these for extra calories.
- Try food supplement drinks and puddings. You can get these from your dietitian, chemist or on prescription.



Your appetite may change and you may have good and bad days. Make the most of the good days by eating well and treating yourself to your favourite foods.

We have a slide show on our website about things you can do to help if you've lost your appetite.
You can watch this at macmillan.org.uk/poorappetite

Increased appetite

Some medicines, such as steroids, may give you a big appetite and might make you want to eat much more than usual.

What you can do:

- Eat healthy foods such as fruit and vegetables instead of sweets and crisps.
- At mealtimes, try having smaller portions than you'd normally have.
- Try to cut down on alcohol as it is high in calories and can contribute to weight gain.
- Be more physically active.

If you're not sure about change your diet, ask your doctor or specialist nurse. You may be referred to a dietitian to help you make these changes.

Taste changes

Some treatments can affect your sense of taste.

What you can do:

- You might find cold foods taste better than hot foods.
- Use plastic cutlery if you notice a metallic taste.
- Drink herbal or fruit teas if you go off tea and coffee.
- Sharp-tasting foods, such as lemon and fruit juices, or boiled sweets leave a pleasant taste in your mouth.
- Using seasoning, herbs and spices to flavour cooking.

'I'm very sensitive to preservatives in food. I can taste them immediately.'

Robert

Indigestion and heartburn

Indigestion is discomfort in the upper part of the tummy (abdomen), usually after meals. It can be a side effect of surgery that reduces the size of your stomach. It may also be caused by radiotherapy or chemotherapy irritating your stomach lining.

You may also have heartburn, which is a painful burning feeling behind the breastbone. This is due to a backflow of acid from the stomach into the gullet (oesophagus). This can be caused by certain medicines. It can be made worse by lying flat or wearing tight clothing around the waist.

Your doctor will be able to prescribe drugs to help relieve indigestion or heartburn.

What you can do:

- Eat small, frequent meals and snacks throughout the day, rather than two or three large meals. Avoid drinking at mealtimes.
- Avoid food or drinks that irritate your stomach. These might include alcohol, fatty and spicy foods, fizzy drinks, coffee, chewing gum or hard-boiled sweets.
- Antacid medicines can help relieve irritation by neutralising the acid. Check with your doctor before taking these.
- If you smoke, stop or cut down. The chemicals in cigarettes may make indigestion worse.
- Wear loose clothing around your waist.
- Try not to lie flat on your back, especially after meals. Use extra pillows in bed or raise the head of the bed by a few inches.
- If you get a lot of indigestion at night, avoid eating for 3–4 hours before you go to bed.

Bowel changes











Bowel side effects are quite common during chemotherapy and can also happen with some targeted and hormonal therapies. Radiotherapy to the abdomen or the pelvis can cause bowel changes. Surgery to the bowel or any organs involved in digestion, such as the stomach or pancreas, can also affect your bowel habits.

Constipation

Constipation can be caused by cancer treatments and medicines such as painkillers and anti-sickness drugs. Not eating enough fibre (roughage) or not drinking enough fluids can also make you constipated. If you are less physically active than usual, you are also more likely to become constipated.

Everyone's bowel habits are different but you should tell your doctor or nurse if you haven't had a bowel movement for three days, unless this is usual for you. They can advise you on what might help and may prescribe medicine to get your bowels moving again.

What you can do:

- Try to include plenty of fibre in your diet. You'll find this in wholemeal bread, high-fibre breakfast cereals, fruit, vegetables, beans, lentils, grains and seeds.
- Drink plenty of fluids. Aim to drink at least two litres (three and a half pints) of fluid a day.

- Gentle exercise, such as walking, will help keep your bowels moving.
- Natural remedies for constipation include apricots, prunes, prune juice and syrup of figs.

Diarrhoea

Diarrhoea may be a side effect of cancer treatments. It can also be caused by infection.

Cancer treatments such as radiotherapy to the pelvis and certain chemotherapy drugs almost always cause diarrhoea. This can sometimes be severe. If you are having a treatment that is very likely to cause diarrhoea, your cancer doctor or nurse will give you specific advice to follow. Your doctor can prescribe anti-diarrhoea drugs to control it. It's important to take them exactly as explained.

In general, if you are having cancer treatment and have diarrhoea it's important to tell your doctor. They might ask you for a diarrhoea sample. If there is no infection, they can prescribe anti-diarrhoea medicines.

Sometimes, severe constipation can be mistaken for diarrhoea. This happens when the bowel is blocked by hard stools and liquid stool passes around it so it may seem as though you have diarrhoea. This is called overflow.

What you can do:

- Cut down on your fibre intake from cereals, fruit and vegetables.
- Avoid milk and dairy products, such as cheese, until the diarrhoea has stopped.
- Drink plenty to replace the fluid lost with diarrhoea. Avoid alcohol and coffee, Also avoid fizzy drinks, which can cause wind and stomach cramps.
- Eat small, frequent meals of light foods, such as white fish, chicken, eggs, white bread, pasta and rice.
- Avoid highly spiced or fatty foods.
- Eat your meals slowly.

Acidophilus or other bacteria found in live yoghurt or live yoghurt drinks may help ease diarrhoea caused by antibiotics. However, you should avoid live yoghurt while you're having chemotherapy or if your immunity is low.

Getting support

Bowel problems can be embarrassing and difficult to talk about, which can make you feel isolated. Your doctors and nurses can give you lots of support and advice. They're used to dealing with continence problems. There are drugs or other treatments that can help with your symptoms. You may be given advice about pelvic floor exercises or you may be referred for help or information about products such as pads.

Skin changes









Chemotherapy, radiotherapy, targeted and hormonal therapies can all cause skin problems. Your doctor or cancer nurse will explain this before you start treatment and give you some advice.

Dry skin C

What you can do:

- Use moisturising soaps and creams if your skin is dry or itchy. Check with your nurse before using creams if you're also having radiotherapy.
- Avoid wet shaving an electric razor is less likely to cause cuts.
- If you're out in the sun, wear a high-factor suncream (SPF 30+) on exposed areas.

Discoloured or sore skin R

If you have fair skin, radiotherapy can make the skin in the treatment area red. If your skin is dark, the area might become a blue or black colour. It may also feel sore or itchy.

What you can do:

- Only use soaps, deodorants and creams that have been advised by the radiotherapy staff.
- Wearing loose-fitting clothes around the area that has been treated.
- Protect your skin from sunlight.

Increased sensitivity to sunlight C R T







What you can do:

- Use a suncream with a high sun protection factor (SPF) at least factor 30. For some treatments you may be advised to use a suncream with an SPF of 50.
- Put sunblock on your lips.
- Wear a hat or headscarf when you are outside.
- Wear loose clothes made of cotton or other natural fibres
- Stay out of the sun during the hottest part of the day, usually between 11am-3pm. Sit in the shade when possible.
- If you have had radiotherapy, keep the treated area completely covered.



Rashes or itching (II)





What you can do:

- Ask your doctor or nurse about medicines or creams that might help.
- Take cool or lukewarm baths or showers if hot water makes the itching worse.
- Protect your skin from damage caused by scratching. Keep your nails clean and short. Rub rather than scratch the itchy area.

Sore hands and feet 🕒 🔳





Some treatments can make the palms of your hands or the soles of your feet red or sore. This is called palmar-plantar or hand-foot syndrome. Your doctor or nurse may prescribe creams or drugs to help. Sometimes your symptoms may be controlled by slightly lowering the dose of the treatment.

What you can do:

- Keep your hands and feet cool.
- Avoid hot water.
- Don't wear tight-fitting socks, shoes and gloves.
- Ask your doctor or nurse about creams that might help.

Numbness or tingling in hands and feet



Some chemotherapy drugs can cause numbness or tingling in the hands or feet (peripheral neuropathy). This is due to their effects on nerves outside the brain and spinal cord the peripheral nerves.

Symptoms include:

- numbness or tingling in your hands or feet
- pain or sensitivity
- difficulty doing up buttons, fastening jewellery or other fiddly tasks
- pins and needles
- difficulty with balance or coordination.

It's important to let your doctor know if you have any of these symptoms. They may lower the dose of the chemotherapy drug or change you to another drug. Peripheral neuropathy usually improves slowly a few months after the treatment has finished. If these symptoms continue for longer, talk to your doctor.

If your hands or feet are affected, it's important to protect them as much as possible.

What you can do:

- Wear gloves when working with your hands for example, when gardening or washing up.
- Use pot holders and take care to avoid burning your hands when cooking.
- Check the temperature of water with your elbow to make sure it isn't too hot before baths, showers or doing the washing-up.
- Wear clothes without buttons or zips. Wear gloves and warm socks in cold weather.
- Avoid walking around barefoot. Wear well-fitting shoes or boots.
- Check your feet regularly for any problems.
- See a chiropodist (a foot specialist) for foot and nail care if you need extra help.



We can send you more information about peripheral neuropathy.

Lymphoedema





Lymphoedema is swelling caused by a build-up of fluid (lymph) in the body's tissues. This can happen if lymph nodes (glands) have been removed by surgery, damaged by radiotherapy, or if a cancer is blocking them. Contact your nurse or doctor straightaway if you notice swelling in an area that has been treated. This is usually an arm or leg but may be another area of your body.

The earlier lymphoedema is diagnosed, the more effective treatment can be.

> 'I had surgery to remove the lymph nodes in the pelvic area. A few weeks later my legs started to swell up. I had to go to hospital to drain the fluid. Now, I have to wear compression garments to control the swelling.'

Eva

What you can do to help reduce the risk of lymphoedema:

- Take good care of your skin to prevent injury and infection. If you notice any changes, contact your doctor or nurse straightaway.
- Do some gentle exercise and keep active, as this can improve the flow of lymph.
- Keep to a healthy weight.
- Wear comfortable clothes and shoes, and avoid anything tight-fitting or restricting.

There are many treatments for lymphoedema if it develops. These are usually given by a specialist nurse or a physiotherapist with expert knowledge of lymphoedema.



You may find it helpful to read our booklet Understanding lympoedema. We can send you a free copy.

We have videos on our website about coping with lymphoedema. You can watch these videos at macmillan.org.uk/lymphoedema

Body image











Changes in your body can affect your body image. This is the picture you have in your mind of how you look. If your body has changed, you may feel differently about it.

You may feel upset about changes in your body or even feel you don't recognise yourself. These feelings are quite normal, but can sometimes lead to anxiety or depression.

'The surgery made me feel different about my body because the scars are a constant reminder of what's happened to you. Over the years those scars have healed and now it's very much different. I hardly think about it.'

Jane

If you feel you need extra help to adjust to changes in your body, you can ask to be referred for expert help and support. This will usually be offered by a counsellor or psychologist with specialist knowledge of body image issues. You can also talk to other people who are affected in a similar way.



We have an online community where people can share their worries and thoughts at any time. Visit community.macmillan.org.uk

What you can do:

- Regular exercise can improve your body image and release chemicals that make you feel good.
- Talk to your family and friends about how you feel and what you would like them to do to help you.
- Get information that will help you make decisions about treatment options, such as reconstruction of affected areas or replacement parts (prosthesis).
- Look at different ways to cover up changes using clothes.

We have information on organisations which can give you advice about dealing with body changes on page 65.



We can send you more information about body image and body changes.

Changes to your sex life











Your sex life can be affected by treatment in different ways.

You might feel less interested in sex because of side effects such as tiredness during treatment. Your feelings about how you look can also affect your confidence and attitude to sex.

Some treatments can directly affect your physical ability to have sex. For example by making the vagina drier or narrower, by making it difficult or impossible to get or maintain an erection or by reducing your sex drive. If treatment is likely to directly affect your ability to have sex, your doctor or nurse will tell you this.

Try not to feel embarrassed talking to your doctor or specialist nurse about changes to your sex life. They can tell you about different ways of helping with these problems, such as medication, practical solutions or counselling. You can ask for referral to a sex therapist or you can find a therapist privately.

'I discovered that the hormone treatment also supresses testosterone. I enjoyed a good sex life so a diminished libido is something I feared. I've had to ask for drugs to help."

Roy

What you can do:

- If you have a partner, let them know how you feel. Explaining why you don't feel like sex can reassure them that it isn't because your feelings for them have changed.
- There are many different ways to show how much you care for your partner. You can cuddle and touch, and explore new ways of giving each other pleasure.
- If you are self-conscious about body changes or scarring, you can maybe have sex in semi-darkness or by candlelight. Some people feel more comfortable keeping affected areas covered.
- If tiredness is a problem, it might help to have sex in the morning when you are feeling rested after a night's sleep.
- Try different positions to see which are most comfortable for you.

If you feel embarrassed talking to your doctor or specialist nurse, you can contact confidential helplines that can help (see page 65).



We can send you more information about sexuality and cancer.



Fertility











Your doctor or specialist nurse will tell you if cancer treatment could affect your fertility. In some cases, effects on fertility are temporary, but sometimes they are permanent.

Being told you have cancer and that treatment may make you infertile can be very difficult. For some people, the possibility of losing their fertility may be as difficult to accept as the cancer diagnosis. You may have planned to have children in the future or you may not have thought much about it before treatment. There is a lot of practical and emotional help available (see page 65-67). You may be able to store sperm, eggs or embryos for future fertility treatment.

What you can do:

- Talk to your partner, if you have one, about the possible effects on your fertility.
- Speak to your doctor or specialist nurse about how your fertility might be affected before treatment starts.
- You (and your partner, if you have one) can ask to be referred to a specialist fertility team.
- Counselling can be arranged if you think this would help.



We can send you more information about fertility issues for men and women.

Hormonal changes









Some cancer treatments can cause hormonal symptoms. Surgery or radiotherapy to the pelvic area, chemotherapy and hormonal therapies may all cause these symptoms. Some women may experience an early menopause as a result of treatment. Men can also experience hormonal symptoms.

Your doctors will explain beforehand if you're likely to have hormonal symptoms and give you advice about how to manage them. The symptoms can be temporary or permanent and can include:

- hot flushes and sweats
- breast tenderness (in women and men)
- mood changes
- lowered sex drive
- impotence (in men)
- changes in periods (in women)
- weight gain
- bone thinning (osteoporosis) over a long period of time.

What you can do:

- Use layers of light clothing and bed clothes that can be taken on and off if you have flushes and sweats.
- Have lukewarm baths and showers rather than hot ones to help manage flushes and sweats.
- For men, there are a number of medicines and devices that can help with symptoms, including impotence. Talk to your doctors about what may be most suitable for you.
- For women, medicines or products can help with menopausal symptoms. Hormone replacement therapy (HRT) may be prescribed for some women, but this is not suitable for everyone. Some complementary therapies can help ease symptoms. But it's important to check with your doctor before taking these.
- Talk to your doctor or nurse if you're having mood changes. They can support you and refer you to a specially trained counsellor.
- Eat a diet with plenty of calcium and Vitamin D to keep your bones healthy. A dietitian can give you advice about what to eat. You can also get advice on keeping to a healthy weight.
- Do regular weight-bearing exercises such as walking, dancing, hiking or gentle weight-lifting.



About our information

We provide expert, up-to-date information about cancer. And all our information is free for everyone.

Order what you need

You may want to order more leaflets or booklets like this one. Visit **be.macmillan.org.uk** or call us on 0808 808 00 00. We have booklets on different cancer types, treatments and side effects. We also have information about work. financial issues, diet, life after cancer and information for carers, family and friends.

All of our information is also available online at macmillan. org.uk/cancerinformation There you'll also find videos featuring real-life stories from people affected by cancer, and information from health and social care professionals.

Other formats

We also provide information in different languages and formats, including:

- audiobooks
- Braille
- British Sign Language
- Easy Read booklets
- large print
- translations.

Find out more at macmillan. org.uk/otherformats If you'd like us to produce information in a different format for you, email us at cancerinformationteam@ macmillan.org.uk or call us on **0808 808 00 00**.

Help us improve our information

We know that the people who use our information are the real experts. That's why we always involve them in our work. If you've been affected by cancer, you can help us improve our information.

We give you the chance to comment on a variety of information including booklets, leaflets and fact sheets.

If you'd like to hear more about becoming a reviewer, email reviewing@macmillan. org.uk You can get involved from home whenever you like, and we don't ask for any special skills – just an interest in our cancer information.



Other ways we can help you

At Macmillan, we know how a cancer diagnosis can affect everything, and we're here to support you. No one should face cancer alone.

Talk to us

If you or someone you know is affected by cancer, talking about how you feel and sharing your concerns can really help.

Macmillan Support Line

Our free, confidential phone line is open Monday-Friday, 9am-8pm. Our cancer support specialists can:

- help with any medical questions you have about your cancer or treatment
- help you access benefits and give you financial advice
- be there to listen if you need someone to talk to
- tell you about services that can help you in your area.

Call us on **0808 808 00 00** or email us via our website, macmillan.org.uk/talktous

Information centres

Our information and support centres are based in hospitals, libraries and mobile centres. There, you can speak with someone face to face.

Visit one to get the information you need, or if you'd like a private chat, most centres have a room where you can speak with someone alone and in confidence.

Find your nearest centre at macmillan.org.uk/ informationcentres or call us on 0808 808 00 00.

Talk to others

No one knows more about the impact cancer can have on your life than those who have been through it themselves. That's why we help to bring people together in their communities and online.

Support groups

Whether you are someone living with cancer or a carer, we can help you find support in your local area, so you can speak face to face with people who understand. Find out about support groups in your area by calling us or by visiting macmillan.org.uk/ selfhelpandsupport

Online community

Thousands of people use our online community to make friends, blog about their experiences and join groups to meet other people going through the same things. You can access it any time of day or night. Share your experiences, ask questions, or just read through people's posts at macmillan.org.uk/ community

The Macmillan healthcare team

Our nurses, doctors and other health and social care professionals give expert care and support to individuals and their families. Call us or ask your GP, consultant, district nurse or hospital ward sister if there are any Macmillan professionals near you.

'Everyone is so supportive on the online community, they know exactly what you're going through. It can be fun too. It's not all just chats about cancer."

Mal

Help with money worries

Having cancer can bring extra costs such as hospital parking, travel fares and higher heating bills. If you've been affected in this way, we can help.

Financial advice

Our financial auidance team can give you advice on mortgages, pensions, insurance, borrowing and savings.

Help accessing benefits

Our benefits advisers can offer advice and information on benefits, tax credits, grants and loans. They can help you work out what financial help you could be entitled to. They can also help you complete your forms and apply for benefits.

Macmillan Grants

Macmillan offers one-off payments to people with cancer. A grant can be for anything from heating bills or extra clothing to a much-needed break.

Call us on **0808 808 00 00** to speak to a financial guide or benefits adviser, or to find out more about Macmillan Grants. We can also tell you about benefits advisers in your area.

Visit macmillan.org.uk/ financial support to find out more about how we can help you with your finances.

Help with work and cancer

Whether you're an employee, a carer, an employer or are self-employed, we can provide support and information to help you manage cancer at work. Visit macmillan.org.uk/work

Other useful organisations

There are lots of other organisations that can give you information or support.

Cancer information and support

Cancer Black Care

79 Acton Lane, London NW10 8UT Tel 020 8961 4151 (Mon-Fri, 9.30am-4.30pm) Email info@ cancerblackcare.org.uk www.cancerblackcare.org.uk Offers a variety of information and support for people with cancer from ethnic communities, their families,

carers and friends. Welcomes people from different ethnic

groups including African, Asian, Turkish and African-Caribbean communities.

Cancer Support Scotland (Tak Tent)

30 Shelley Court, Gartnavel Complex, Glasgow G12 0YN **Tel** 0141 211 0122

Email info@

cancersupportscotland.org www.cancersupport scotland.org

Offers information and support to people with cancer, families, friends, and healthcare professionals. Runs a network of support groups across Scotland.

Disability Rights UK

49-51 East Road, London N1 6AH Tel 020 7250 8191 (Mon-Fri, 9am-12.30pm 1.30 pm - 4 pmwww.disabilityrightsuk.org

Irish Cancer Society

43-45 Northumberland Road, Dublin 4, Ireland Tel 1800 200 700 (Mon-Thurs, 9am-7pm, Fri, 9am-5pm) Email helpline@irishcancer.ie www.cancer.ie

Operates Ireland's only freephone cancer helpline, which is staffed by nurses trained in cancer care.

Maggie's Cancer **Caring Centres**

8 Newton Place, Glasgow G3 7PR Tel 0300 123 1801 **Email** enquiries@ maggiescentres.org

www.maggiescentres.org

Maggie's Centres offer free, comprehensive support for anyone affected by cancer. You can access information. benefits advice, and emotional or psychological support.

Marie Curie Cancer Care

89 Albert Embankment, London SE1 7TP Freephone 0800 716 146 **Tel** 020 7599 7777 (England) 0131 561 3900 (Scotland) 01495 740 888 (Wales) 028 9088 2060 (NI) Email info@mariecurie.org.uk www.mariecurie.org.uk

Marie Curie nurses provide free end-of-life care to people with cancer in their own homes, 24 hours a day, 365 days a year. There are Marie Curie hospices across the UK.

Teenage Cancer Trust

93 Newman Street. London W1T 3EZ Tel 020 7612 0370

www.teenagecancertrust.org

Dedicated to improving the lives of teenagers and young adults with cancer. Runs a support network and raises funds to build teenage cancer units in hospitals.

Tenovus

9th Floor, Gleider House, Ty Glas Road, Llanishen, Cardiff CF14 5BD Freephone 0808 808 1010 **Tel** 029 2076 8850 Email post@tenovus.com www.tenovus.org.uk Provides a variety of services to people with cancer and their families, including counselling and a freephone cancer helpline.

The Ulster Cancer **Foundation**

40-44 Eglantine Avenue, Belfast BT9 6DX Freephone 0800 783 3339 **Tel** 028 9066 3281 **Email** info@ulstercancer.org www.ulstercancer.org Provides a variety of services for people with cancer and their families, including a free telephone helpline, which is staffed by specially trained nurses with experience in

Counselling and emotional support

cancer care.

British Association for Counselling and Psychotherapy (BACP)

BACP House, 15 St John's Business Park, Lutterworth LE17 4HB Tel 01455 883 300 **Email** enquiries@bacp.co.uk www.bacp.co.uk www.itsgoodtotalk.org.uk Promotes awareness and availability of counselling,

and signposts people to appropriate services.

Has a database on the website where you can search for a qualified counsellor.

Cancer Counselling Trust

Edward House. 2 Wakley Street, London EC1V 7LT Tel 020 7843 2292 Email support@cctrust.org.uk www.cancercounselling. org.uk

Qualified counsellors and psychotherapists offer free, confidential counselling to cancer patients, as well as couples or families affected by cancer.

Relationships, sex and fertility organisations

Infertility Network UK

Charter House. 43 St Leonard's Road, Bexhill-on-Sea TN40 1JA **Tel** 0800 008 7464 Email admin@ infertilitynetworkuk.com www.infertilitynetwork. uk.com

A national charity that provides information, support, telephone counselling and helpful contacts for people with fertility difficulties.

Relate

Premier House. Carolina Court, Lakeside. Doncaster DN4 5RA Tel 0300 100 1234 www.relate.org.uk Offers advice, relationship counselling, sex therapy, workshops, mediation, consultations and support – face-to-face, by phone and through the website.

Relationships Scotland

18 York Place, Edinburgh EH1 3EP **Tel** 0845 119 2020 www.relationships-scotland.

org.uk

Provides relationship counselling, sex and relationship therapy and family support.

The College of Sexual and **Relationship Therapists** (COSRT)

PO Box 13686, London SW20 9ZH **Tel** 020 8543 2707 Email info@cosrt.org.uk www.cosrt.org.uk

A national specialist charity for sex and relationship therapy. Has a list of qualified practitioners and clinics providing sex or relationship therapy in the UK.

The Institute of **Psychosexual Medicine**

12 Chandos Street, Cavendish Square, London W1G 9DR **Tel** 020 7580 0631 Email admin@ipm.org.uk www.ipm.org.uk

Has a comprehensive list of doctors throughout the country who are trained in psychosexual medicine.

The Sexual Advice **Association (formerly** the Sexual Dysfunction **Association**)

Suite 301, Emblem House, London Bridge Hospital, 27 Tooley Street, London SE1 2PR Helpline 020 7486 7262 (Mon, Wed, Fri, 9am-5pm) Email info@ sexualadviceassociation.co.uk

www.sda.uk.net

A charity that aims to improve people's sexual health and well-being, and to raise awareness of how sexual conditions affect the general population.

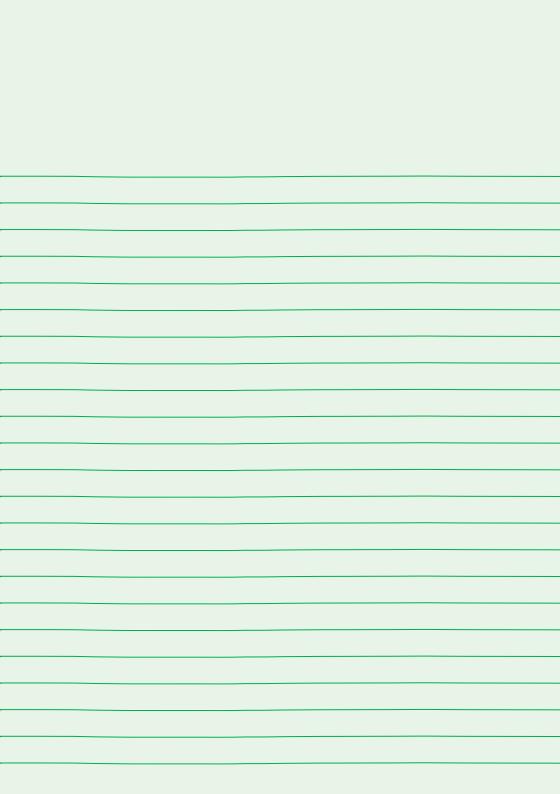
Helpful books

100 questions and answers about cancer symptoms and cancer treatment side effects. Kelvin J & Tyson L. 2nd edition. Jones and Bartlett Publishers, 2010, £12.99 Written by cancer professionals and featuring comments from patients, this guide provides information to help you understand the disease and manage treatment side effects.

Anni's cancer companion: An A-Z of treatments, therapies and healing. Matthews A. 1st edition. Singing Dragon. 2011. £9.99 A guide to making sense and use of the orthodox treatments, complementary therapies, and psychological, spiritual and holistic options available.

You can search for more organisations on our website at macmillan.org.uk/organisations, or call us on 0808 808 00 00.

YOUR NOTES AND QUESTIONS



Disclaimer

We make every effort to ensure that the information we provide is accurate, but it should not be relied upon to reflect the current state of medical research, which is constantly changing. If you are concerned about your health, you should consult a doctor. Macmillan cannot accept liability for any loss or damage resulting from any inaccuracy in this information or third-party information, such as information on websites to which we link. We feature real-life stories in all of our articles. Some photographs are of models.

Thanks

This booklet has been revised and edited by Macmillan Cancer Support's Cancer Information Development team. It has been approved by our Chief Medical Editor, Dr Tim Iveson, Macmillan Consultant Medical Oncologist.

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Can you do something to help?

We hope this booklet has been useful to you. It's just one of our many publications that are available free to anyone affected by cancer. They're produced by our cancer information specialists who, along with our nurses, benefits advisers, campaigners and volunteers, are part of the Macmillan team. When people are facing the toughest fight of their lives, we're there to support them every step of the way.

We want to make sure no one has to go through cancer alone, so we need more people to help us. When the time is right for you, here are some ways in which you can become a part of our team.



Share your cancer experience

Support people living with cancer by telling your story, online, in the media or face to face.

Campaign for change

We need your help to make sure everyone gets the right support. Take an action, big or small, for better cancer care.

Help someone in your community

A lift to an appointment. Help with the shopping. Or just a cup of tea and a chat. Could you lend a hand?

Raise money

Whatever you like doing you can raise money to help. Take part in one of our events or create your own.

Give money

Big or small, every penny helps. To make a one-off donation see over.

Call us to find out more 0300 1000 200 macmillan.org.uk/getinvolved

Please fill in your Don't let the taxman personal details keep your money Mr/Mrs/Miss/Other Do you pay tax? If so, your gift will be worth 25% more to us – at no Name extra cost to you. All you have to Surname do is tick the box below, and the tax office will give 25p for every Address pound you give. Postcode I am a UK taxpayer and I would like Macmillan Cancer Phone Support to treat all donations **Email** I have made for the four years prior to this year, and all Please accept my gift of £ donations I make in the future, (Please delete as appropriate) as Gift Aid donations, until I I enclose a cheque / postal order / notify you otherwise. Charity Voucher made payable to Macmillan Cancer Support I confirm I have paid or will pay an amount of Income Tax and/or Capital Gains Tax in each OR debit my: tax year, that is at least equal to the tax that Visa / MasterCard / CAF Charity Charities & CASCs I donate to will reclaim on my aifts. I understand that other taxes such as Card / Switch / Maestro VAT and Council Tax do not qualify and that Macmillan Cancer Support will reclaim 25p of Card number tax on every £1 that I give. Macmillan Cancer Support and our trading companies would like to hold your details in order to contact you about our fundraising, Valid from Expiry date campaigning and services for people affected by cancer. If you would prefer us not to use your details in this way please tick this box. Security number Issue no In order to carry out our work we may need to pass your details to agents or partners who act on our behalf. Signature

If you'd rather donate online go to macmillan.org.uk/donate

Date

Please cut out this form and return it in an envelope (no stamp required) to: Supporter Donations, Macmillan Cancer Support, FREEPOST LON15851, 89 Albert Embankment, London SE1 7UQ

More than one in three of us will get cancer. For most of us it will be the toughest fight we ever face. And the feelings of isolation and loneliness that so many people experience make it even harder. But you don't have to go through it alone. The Macmillan team is with you every step of the way.

We are the nurses and therapists helping you through treatment. The experts on the end of the phone. The advisers telling you which benefits you're entitled to. The volunteers giving you a hand with the everyday things. The campaigners improving cancer care. The community there for you online, any time. The supporters who make it all possible.

Together, we are all Macmillan Cancer Support.

For cancer support every step of the way, call Macmillan on 0808 808 00 00 (Mon–Fri, 9am–8pm) or visit macmillan.org.uk

Hard of hearing? Use textphone 0808 808 0121, or Text Relay. Non-English speaker? Interpreters available. Braille and large print versions on request.

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