



**Cancer
Council**
Queensland

Understanding nutrition

A booklet outlining the importance
of good nutrition before, during and
after cancer treatment.

**Practical
and support
information**

Cancer Council Helpline

13 11 20

www.cancerqld.org.au

Cancer Council Queensland is a not-for-profit, non-government organisation that provides information and support free of charge for people with cancer and their families and friends throughout Queensland. These services are made possible through the generous donations of Queenslanders and we thank them for their continued support.

If you would like to know more about the information and support services provided by Cancer Council Queensland, call our Helpline on 13 11 20 Monday to Friday, 8am to 6pm.

Disclaimer: The information enclosed is provided for educational purposes or for personal use only. Cancer Council Queensland (CCQ) strongly advises this information should not be used as a substitute for seeking medical or health care advice. We strongly recommend that you seek advice from your doctor or treating health care team before making any decision about your health care treatment. Please note that the information enclosed reflects the opinion of the author/s at the time of writing. Every effort has been made by CCQ to ensure its accuracy, however CCQ and its advisors do not accept any liability in relation to this information. This publication is current as at March 2011.

Introduction

This booklet is designed to help you understand more about cancer and nutrition. People affected by cancer often report that seeking information about cancer and treatment options assists them to feel more in control and prepared for what is happening. However people have different needs for information, different levels they are comfortable with, and their information needs change over time.

Your capacity to absorb information can also be affected by a stressful event such as the diagnosis of cancer. With this in mind, we recommend that you approach this booklet with an open mind. Read what is relevant to you and take your time to absorb the content. You may find it helpful to read it in small sections and skip over those that do not interest you at this stage. You may also find you want more detailed information than this booklet provides.

The information provided in this booklet may be helpful in deciding what questions to ask the doctor and nurses involved in your care. This booklet is not designed to replace information provided by your treating doctor or health care team. We encourage you to talk with your doctor or health team about the questions and concerns you have.

For further information, please feel free to call the **Cancer Council Helpline** on **13 11 20**, Monday to Friday, between 8am and 6pm.

Personal information

Ask your doctor or nurse to help you complete this page

Name

Doctor's name

Phone A/H

Nurse's name

Phone A/H

Dietician's name

Phone A/H

Speech pathologist's name

Phone A/H

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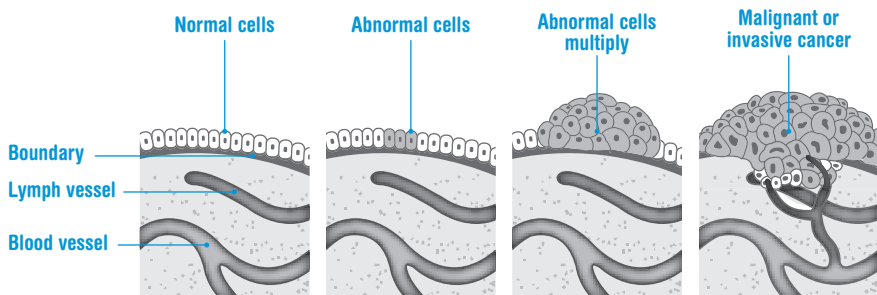
What is cancer?

Cancer is a disease of the body's cells, which are the body's basic building blocks. Our bodies constantly make new cells: to help us to grow, to replace worn-out cells, or to heal damaged cells after an injury.

Normally, cells grow and multiply in an orderly way, but sometimes something goes wrong with this process and cells grow in an uncontrolled way. This uncontrolled growth may develop into a lump called a tumour.

A tumour can be benign (not cancer) or malignant (cancer). A benign tumour does not spread outside its normal boundary to other parts of the body. However, if a benign tumour continues to grow at the original site, it can cause a problem by pressing on nearby organs.

The beginnings of cancer

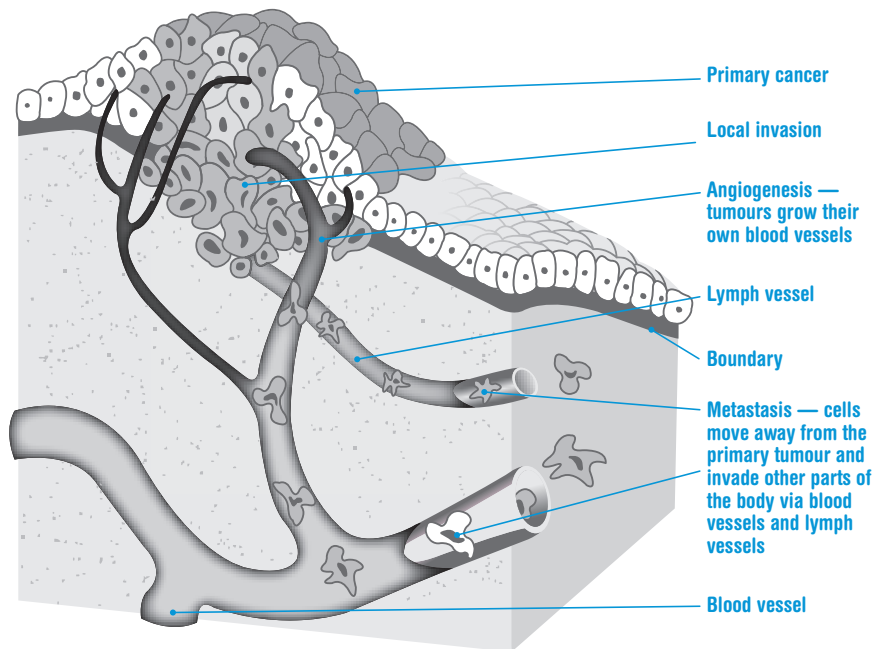


Some benign tumours are precancerous and may progress to cancer if left untreated. Other benign tumours do not develop into cancer

A malignant tumour is made up of cancer cells. When it first develops, this malignant tumour may not have invaded nearby tissue. This is known as a cancer in-situ (or carcinoma in-situ). As the tumour grows, it invades surrounding tissue becoming invasive cancer. An invasive cancer that has not spread to other parts of the body is called primary cancer.

Sometimes cells move away from the original (primary) cancer and invade other organs and bones. When these cells reach a new site, they may continue to grow and form another tumour at that site. This is called a secondary cancer or metastasis.

How cancer spreads



About this book

This book is written for people with cancer, their family and friends. It aims to assist with understanding the importance of good nutrition, before, during and after cancer treatment. It also provides suggestions on how to overcome common problems often encountered with cancer.

This book contains a lot of information, and not all of it may be relevant to you. We suggest that you familiarise yourself with the information provided, and then seek out the sections that may be relevant to you.

It can also be useful to refer back to this book regularly through your treatment period. Good nutrition is very important as it can help you to:

- ▶ Maintain wellbeing.
- ▶ Cope better with some of the effects of cancer treatments.
- ▶ Maintain your weight at a suitable level, or regain lost weight.

Throughout this booklet, some terms are used frequently. **Diet** refers to the types of food that you eat every day. **Energy** refers to the amount of calories or kilojoules a food contains. **Protein** is an essential part of everyone's diet, especially people having treatment for cancer. It is found mainly in foods such as meat, chicken, fish, eggs, legumes (e.g. baked beans) and dairy products.

This book has three 'recommendation' sections, in order to address each of the treatment stages. The sections are as follows:

1) Recommendations before treatment

This section outlines the main eating-related side-effects that may be experienced during cancer treatment. It also includes some tips to help you prepare both physically and mentally for your treatment.

2) Recommendations during treatment

This section details common problems that may occur during treatment and gives practical suggestions to manage these. However, it is important to remember that side-effects vary with treatments and not all people will have these side-effects.

This section offers a number of suggestions - remember that trial and error is a very good way of finding solutions to individual difficulties in eating. During treatment, maintaining your weight is one of the best guides to show your food intake is adequate. It is important to weigh yourself weekly, and to report any weight loss to your doctor or dietician.

3) Recommendations after treatment

This section outlines information to assist with recovery from the effects of cancer treatment.



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Recommendations before treatment

There are a number of things that may help you to prepare for your treatment. Consider the following suggestions:

- ▶ Seek accurate information about your cancer and your treatment; and
- ▶ Plan ways to cope with possible side-effects. This can help you to feel in control and gives you a positive focus during your treatment.

Not everyone will experience side-effects from their cancer treatment, but if you do, discuss them with your doctor. There are many medications that can help you to manage these. The three main types of treatment are listed below, along with common problems that may affect eating:

Surgery

A change in your food intake may begin as a result of:

- ▶ Fasting for the operation; or
- ▶ Small food intake after the operation.

Chemotherapy

Side-effects vary with individuals, and with the type of chemotherapy. Problems that can occur include:

- ▶ Nausea and vomiting;
- ▶ Ulceration and soreness of the mouth;
- ▶ Diarrhoea or constipation;
- ▶ Taste changes;
- ▶ Loss of appetite; or
- ▶ Dry mouth.

Radiation therapy

Side-effects will vary from person to person and will depend upon the length of the treatment and the area being treated.

Side-effects can be temporary and resolve after the treatment ends. However, some can continue for a period after treatment ends, particularly for those people having radiotherapy to the head and neck area. Practical suggestions for overcoming these problems are given in the section 'Overcoming common problems' (page 18).

Preparing for treatment

By eating a healthy diet in the lead up to cancer treatment, you will be more able to keep up your strength. To help you to follow a healthy diet before you start treatment, refer to pages 30–31 of this booklet.

Eating well in the lead up to treatment will also help you to cope better with any side-effects that may occur during treatment time.

If you are underweight, this is a good opportunity to gain weight, so you start your treatment at a healthy weight. For practical suggestions on how to increase your weight, refer to the section on 'overcoming common problems'. In particular, the sections on poor appetite and weight loss on pages 18–19 will be useful.

Plan ahead to make your treatment time as easy as possible. For example, ask a friend or relative to do your grocery shopping for a few weeks or make up some frozen meals that you can reheat if you don't feel like cooking.

Recommendations during treatment

People with cancer may experience a reduced appetite and weight loss. It is recommended to try and eat a balanced and varied diet. However, if loss of appetite and weight loss is a problem, you may be advised to follow a different type of diet to those commonly recommended for good health.

If you are not eating enough and are losing weight, you will need to change your diet to help slow down or stop weight loss. For practical suggestions, refer to the sections on 'poor appetite' and 'weight loss' on pages 18–19. People with cancer may experience weight gain due to the effects of treatment and medications.

Even if you are overweight, you should aim to maintain your weight during treatment. This is not a good time to lose weight, as your nutrition will suffer. When you have finished your treatment, discuss losing weight with your doctor or dietician.

Good food hygiene

Good food hygiene is important for everybody. However, if your white cell count is low, particularly during chemotherapy, extra care needs to be taken with food preparation. Most food poisoning results from improper handling and improper storage of food. You can help protect yourself by following basic food safety guidelines.

- ▶ Choose freshly cooked and freshly prepared foods.
- ▶ Always thaw frozen food in the fridge or defrost in the microwave.
- ▶ Keep raw meat covered, and keep it separate from cooked food or ready-to-eat foods.

- ▶ Thoroughly wash hands, knives and cutting boards between handling raw food and ready-to-eat foods.
- ▶ Keep hot foods hot and cold foods cold.
- ▶ Do not purchase pre-made sandwiches or salads, or food from hotboxes or buffets.
- ▶ Take care when eating out, as it can be difficult to know whether food safety guidelines are being followed.
- ▶ Avoid raw, rare or partially cooked fish, meats, poultry or eggs.

Fluids

Fluids are an essential part of any diet, and allow you to stay well hydrated. As a general guide, you should aim for at least eight to 12 glasses of fluid per day. The quantity of fluid you need may vary depending on your type of treatment. Your doctor or nurse will give you guidelines about how much fluid you should drink per day.

Remember that fluids such as coffee, tea and cola drinks contain caffeine, and may actually contribute to dehydration. For more information ask your doctor.

What about alcohol?

It will depend on the type of cancer and the treatment required, as to whether or not alcohol is suitable. It is a good idea to check with your doctor about drinking alcohol while you are having treatment.

Unproven diets and alternative therapies

Having been diagnosed with cancer, it is natural to look for a 'cure'. Unfortunately there are no special foods, diets or vitamin supplements that have been scientifically proven to cure cancer or to stop it from reoccurring.

Alternative diets are often expensive, restrictive and repetitive. Many alternative dietary treatments, particularly those that cut out food groups such as meat or dairy products are likely to be low in energy (kilojoules), protein, fat, iron, calcium and zinc as well as other vitamins. This can cause unwanted weight loss, tiredness and decrease your immune function.

Some alternative therapies can be harmful when used in combination with conventional therapy. It is important that the doctor, nurses and pharmacist are aware of all the treatments you are undertaking.

Should I follow a vegetarian diet?

If you do not follow a vegetarian diet, it is not necessary to change your diet to avoid meat. At this time there is no evidence to suggest that vegetarian diets are more helpful or have any special benefits in the treatment or cure of cancer.

If you are already following a vegetarian diet, you can continue this diet if it is carefully planned and provides enough energy to maintain your weight. Vegetarian diets vary in the foods that are included, although all avoid red meat. In general the risk of nutrient deficiencies and weight loss is greater with greater food restrictions. Strict vegan diets that avoid all animal foods, including meat and eggs, are often low in vitamin B12, iron, zinc and energy. Talk to your dietician or doctor if you plan to follow a vegetarian diet.

Do I need to take extra vitamins and minerals?

If you are concerned that you are not eating a balanced diet for a period of time - but you are not losing weight, then taking one multivitamin capsule or tablet per day may be advisable. Large doses of single vitamins or minerals are not recommended and can be harmful.

If you are losing weight, using commercial nutritional supplements (such as Ensure, Nutridrink, Proform or Sustagen) are a better option to taking multivitamin capsules. This is because commercial nutritional supplements provide vitamins and minerals, as well as

protein and energy, and assist in preventing further weight loss. Refer to page 34 for information on commercial nutritional supplements.

Nutrition for children

Children who undergo treatment for cancer need extra energy for growth and prevention of weight loss. Loss of appetite or feeling ill is a common side-effect of treatment for childhood cancers. Do not force children to eat at this time. Instead, offer high energy foods between treatments when your child is feeling better.

To add extra energy, try adding butter and cream to vegetables such as mashed potatoes or sprinkle light olive oil on top of hot food. Ask your dietician for a list of high energy snacks. Be generous with sauces, as foods can taste bland to children on treatment. Children often prefer salty, savoury foods like chips to sweet creamy foods.

Try not to allow children to waste tummy space on food that is low in energy. For example, crackers with butter and cheese or peanut butter are better than dry biscuits. Be flexible in meal patterns, as well as choice of foods. For example, allow breakfast cereal for dinner if that is what your child prefers. Do this within reason, as children will often request food and not eat it.

Give small frequent meals, rather than three large meals per day. Too much food offered at once could discourage the child to eat, and be off-putting. Always have snacks with you for your child, as it is easy to skip meals during the many hours spent waiting for treatments and doctors.

If you are concerned your child is eating poorly or is losing weight, please ask your nurse or doctor to contact the dietician. Remember you cannot force an unwell child to eat, and often tube feeding is required as good nutrition and is a vital factor in the treatment of childhood cancer.

Notes for carers

The diagnosis and treatment of cancer can be a difficult time for the patient and their family and friends, particularly those who take on the role of caring for them. In terms of food, there is much you can do to assist your friend or loved one.

Some helpful hints:

- ▶ Encouragement and support is important, but try not to push the patient to eat or drink.
- ▶ Be prepared for the patient to experience taste changes from day to day, particularly during treatment periods.
- ▶ Make sure the patient has food at home that is ready-to-eat for when they feel like eating. For example, tinned fruit in the cupboard or yoghurts in the fridge, and a frozen meal in the freezer.
- ▶ Be flexible and willing to try new ideas or recipes.
- ▶ Eating is a social activity and effort spent on making it a pleasurable experience will be worthwhile. Eat with the patient as often as possible as people often eat better with company.
- ▶ A well balanced diet may not be achievable, and the patient may only want a small range of foods. This is not a problem, as it is likely to be for a short period of time. Supplements may be useful, and are listed on pages 38–39.

Speak to your doctor or dietician if you have concerns or call the **Cancer Council Helpline** on **13 11 20** Monday to Friday, 8am to 6pm.



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Recommendations after treatment

Once your treatment finishes, the eating-related side-effects associated with chemotherapy, radiotherapy or other treatments should gradually resolve. If some side-effects persist, talk to your doctor about managing these.

If weight loss or weight gain has been a specific problem, your doctor and dietician will be able to help you address this. In addition, if difficulties with chewing or swallowing have been a specific problem, your doctor and speech pathologist will be able to assist.

Once the cancer treatment and side-effects have resolved, you may wish to think about following the guidelines for healthy eating and regular physical activity. A varied and balanced diet, as well as an active lifestyle, will help your recovery by allowing your body to regain strength and rebuild tissues. There is no evidence to suggest the foods you eat will prevent the cancer from recurring. However, there is much evidence showing that some cancers can be prevented by following a healthy lifestyle.

The recommendations outlined in the following pages will assist you to follow a healthy diet, and keep your body weight within a healthy weight range. Also included are some recommendations to assist you to take part in regular physical activity. These guidelines are also important in preventing undesired weight gain, as well as providing many other health benefits.

Healthy eating

The 'Australian Guide to Healthy Eating' has been developed to help people choose a healthy diet using a variety of foods. It provides information about the amounts and kinds of food you need each day to get enough of the nutrients that are essential for good health and wellbeing.

The five food groups are:

- ▶ Bread, cereals, rice, pasta, noodles;
- ▶ Vegetables, legumes;
- ▶ Fruit;
- ▶ Milk, yoghurt, cheese; and
- ▶ Meat, fish, poultry, eggs, nuts, legumes.

These foods provide the important nutrients the body needs.

To eat a healthy diet

- 1) Choose foods from each of these five food groups every day.
- 2) Eat:
 - ▶ Plenty of plant foods (bread, cereal, rice, pasta, noodles, vegetables, legumes and fruit).
 - ▶ Moderate amounts of animal foods (milk, yoghurt, cheese, meat, fish, poultry, eggs) in the proportions shown by the guide.
 - ▶ Small amounts of the extra foods, including oils and margarines.
 - ▶ Spread margarine thinly on your bread and toast.
 - ▶ Only a small amount of oil or margarine used in food preparation and cooking.

- 3) Choose different varieties of foods from within each of the five food groups from day to day, week to week and at different times of the year.
- 4) Drink plenty of water. These guidelines also give information on how many serves of each of the five food groups you should eat each day. For a full copy of these guidelines, call the toll-free number: 1800 020 103 (ext: 8654).

These guidelines can also be found on the internet at <http://www.health.gov.au>. Other important recommendations include:

Taking care to:

- ▶ Limit saturated fat and keep total fat intake to a moderate level;
- ▶ Choose foods low in salt;
- ▶ Limit your alcohol intake if you choose to drink; and
- ▶ Consume only moderate amounts of sugars and foods containing added sugars.

Prevent weight gain: be physically active and eat according to your energy needs. Care for your food: prepare and store it safely. More detailed information can also be found on the internet at www.nhmrc.gov.au/publications/synopses/dietsyn.htm.

Guidelines for physical activity

Physical activity is another vital factor in maintaining a healthy lifestyle. After your treatment and recovery is over, you may want to think about increasing your physical activity level. By doing just 30 minutes of moderate-intensity activity every day, even if it is done in three 10 minute bursts, will make a big difference to your health and your fitness levels. Walking is a good example of a moderate-intensity activity.

The 'National Physical Activity Guidelines for Australians' may help you to get started:

- 1) Think of movement as an opportunity, not an inconvenience.** Try to look at all movement as an opportunity to improve health, rather than a time wasting inconvenience.
- 2) Be active every day in as many ways as you can.** Make a habit of walking or cycling instead of driving the car, or do things yourself instead of using labour saving machines.
- 3) Put together at least 30 minutes of moderate intensity physical activity on most, preferably all days.** Moderate-intensity activity includes things such as a brisk walk or cycling. Combine short sessions of different activities of around ten to 15 minutes each to a total of 30 minutes or more. The 30 minutes does not need to be in a continuous block.
- 4) If you can, also enjoy some regular vigorous exercise for extra health and fitness.** Vigorous exercise makes you 'huff and puff'. For best results, this should be added to the above guidelines on three to four days a week for 30 minutes or more each time.

For information about the guidelines and how to get started, call 1800 020 103, and ask for the PHD publications request line.



Overcoming common problems

Some people with cancer experience difficulties with eating. These problems may be related to the disease itself, while others may be temporary side-effects of treatment. This section aims to offer suggestions to help you overcome any problems that may arise.

Talk to your family and friends about your needs and concerns, especially those who shop or prepare meals for you. Remember, trial and error is also a very good way to find solutions for eating difficulties. Some people may require specific dietary advice, in which case your doctor will refer you to a dietician. Remember, not everyone will experience these problems.

Poor appetite

This is frequently a side-effect of cancer or the treatment of cancer. It may be caused by a number of factors including worry and stress, or medications and treatment schedules may increase tiredness and lead to poor appetite.

- ▶ Try to keep to a regular eating pattern. You may not feel hungry but your body still needs nourishment. Small meals taken frequently may be better tolerated.
- ▶ Try to have something to eat every two hours during the day.
- ▶ There may be times of the day when you feel more like eating. Take advantage of this by eating well at these times.
- ▶ Eat what you feel like, when you feel like it. For example it's ok to have cereal at dinner time and a main meal at lunch.

- ▶ Have a range of ready prepared foods and snacks on hand for times when you don't feel like preparing food. Cook larger quantities in advance and store in the freezer. Remember to practice good food hygiene.
- ▶ Fluids at meal times tend to fill you up. If this is causing you to eat smaller portions, try drinking fluids after and between meals. Alternatively, choose fluids that are high in energy and protein such as milk, milkshakes or commercial supplements.
- ▶ Gentle physical activity can stimulate appetite. For example, take a short walk around the block or even around your backyard.
- ▶ Enjoy meals as a social occasion - eat with family and friends where possible and present food in an attractive manner.
- ▶ Treat yourself to your favourite foods.

Weight loss

If you are underweight or losing weight you will need to include more protein and more energy in your diet. This may involve eating foods that are high in fat and sugar. Including extra fat and sugar in your diet will be for a relatively short period of time. This should not affect your overall health. If you have any concerns, please discuss them with your doctor or dietician.

Good sources of protein and energy include: meat, fish, poultry, milk and dairy products, eggs, legumes (e.g. baked beans, kidney beans, chick peas, lentils) and nuts. For extra protein: aim to include meat, fish or poultry at least once a day, and preferably more.

Use full cream milk and dairy foods wherever possible:

- ▶ Add milk or milk powder to dishes such as scrambled eggs, soups and porridge.
- ▶ Have milk drinks regularly (refer to page 35 on ‘Nourishing drinks’).
- ▶ Include milk-based desserts such as mousse, rice pudding and custard and use cheese in cooking, e.g. sprinkled over a meal, on vegetables, in sauces or as a snack.

Use eggs frequently:

- ▶ In egg dishes, e.g. scrambled eggs; or add to soups, sauces and custards.

Other suggestions:

- ▶ Use peanut butter or cheese freely on sandwiches or crackers.
- ▶ Use baked beans as a snack.
- ▶ Try adding legumes to soups, salads and casseroles.
- ▶ There are also commercial supplements you may wish to try (refer to pages 38–39).

For extra calories use foods that are high in fat and sugar:

- ▶ Add butter, cream, sour cream and mayonnaise freely when preparing meals.
- ▶ Fry food whenever possible.
- ▶ Include dessert-type foods each day e.g. mousse, rice puddings and custard.

Weigh yourself weekly to check whether you are maintaining your weight.

Weight gain

Some people may find their weight actually increases during treatment. This can occur in women with breast cancer or gynaecological cancers, and men treated for prostate cancer who may be taking certain medications, or receiving hormone therapy or chemotherapy.

Sometimes weight gain can occur because certain medications cause your body to hold on to excess fluid. This is called oedema. If this is the case your doctor may prescribe medication to help get rid of the excess fluid. Some medications, such as steroids, may increase your appetite, which can lead to eating extra food and calories. If this is the case, following the 'Guidelines for Healthy Eating' on page 15.

If weight gain is a problem for you, aim to keep your weight as stable as possible during treatment. Moderate, regular physical activity may be beneficial (always check with your doctor before commencing an exercise program). Once your cancer treatment is finished, it may be useful to talk to a dietician about reducing your weight. For more information on incorporating physical activity after your treatment is finished see page 16.

Nausea and vomiting

Nausea, with or without vomiting, is a side-effect of some cancer treatments. You may also feel nauseous if you are anxious or emotionally upset. Prolonged nausea and vomiting can prevent you from eating properly. Always talk to your doctor if you are experiencing nausea. There are medications that might help to control the nausea and vomiting.

Other ideas that can help:

- ▶ Try 'cold' foods, as these have less odour. For example: sandwiches, salads, puddings such as creamed rice and blancmange, yoghurts, tinned fruit.

- ▶ Snack on dry biscuits, toast and crackers.
- ▶ Cold clear fluids such as cordial, lemonade, ginger ale, fruit juices and jelly.
- ▶ Eat regularly to prevent hunger, as hunger can often make nausea worse.
- ▶ Eat small amounts, often and slowly.
- ▶ Avoid fatty, rich and spicy foods.
- ▶ Avoid cooking odours - try using a microwave if you have one to reduce these odours or even avoid the kitchen during cooking time.



Cancer Council Queensland's booklet ***Understanding Chemotherapy*** also has useful hints and advice. Call the **Cancer Council Helpline** on **13 11 20** Monday to Friday 8am to 6pm to obtain a copy.

Chewing and swallowing problems

This may be due to disease in or around the mouth and throat. Surgery to remove the cancer, and radiation therapy or chemotherapy to this area can also cause problems. If teeth are extracted, chewing may be more difficult.

- ▶ Most importantly, ensure good oral hygiene. Keep your mouth clean with regular mouthwashes and gargles. Make sure you use an alcohol-free mouthwash. Your treatment centre may be able to recommend suitable products.

- ▶ You may need to change the consistency or texture of your foods to make them easier to manage. There are specialty cookbooks available for some extra ideas. For example *Good Looking, Easy Swallowing**
- ▶ Try not to persist with a more solid diet if it is taking you a lot longer to chew and swallow, or if you are experiencing coughing, choking or food sticking in your mouth or throat.
- ▶ There may be a need for you to alter the thickness of your drinks. If you are experiencing problems swallowing normal fluids, notify your doctor who may refer you to a speech pathologist for assessment. Foods and drinks which are very hot or very cold may irritate your mouth. If so, limit or avoid. Highly spiced or acidic foods such as citrus fruits may irritate the mouth or throat.
- ▶ If you are having problems with your dentures, only wear them at meal times, or take them out and try softer foods that do not need to be chewed. If you are receiving radiation therapy to the head or neck area, you may need to discuss when to wear your dentures with your doctor or radiologist.

In some cases a nasogastric or PEG feeding tube may be needed to help you get the extra nutrition and fluids you need. However, the doctors or dieticians will talk to you about this first. With a tube in place, you will still be able to eat and drink as normal.

If pain when chewing or swallowing is a problem, tell your doctor, who will be able to advise on suitable medications.



**Good Looking, Easy Swallowing* by Janet Martin and Jane Backhouse. Published by JFC Foundation, South Australia, 1994. Available for purchase through the South Australian Government Bookshop for \$33.00 on Tel. 132 324.

Dry or coated mouth

A dry or coated mouth can result from radiation therapy or chemotherapy as saliva may be reduced or become thick. Most importantly, ensure good oral hygiene. Keep your mouth clean with regular mouthwashes and gargles. Make sure you use an alcohol-free mouthwash. Your treatment centre may be able to recommend suitable products. It is also important to have your mouth checked during this time to rule out oral thrush, which can be a problem during treatment.

These other suggestions may also help:

- ▶ Moisten your foods with gravy and sauces, and drink fluids with all your meals and snacks.
- ▶ Dry or crumbly foods are best moistened; or avoided if they cause problems.
- ▶ Sucking on ice may be helpful.
- ▶ Ask your doctor or dentist about using artificial saliva.

Taste changes

This may result from disease, radiation therapy to the head and neck area, or from chemotherapy. Smell and taste may be affected. Some common complaints are that – “all food tastes the same”; “food is like cardboard”; “food has a metallic taste”; “I no longer like the taste of my favourite food”; or “food has no taste at all”.

Important note: If you also have a sore mouth, sore gums or sore throat, talk to your doctor or dietician, as some of the following suggestions will not be suitable.

To help overcome changes in taste the following may be useful:

- ▶ Flavourings should be adjusted to suit tastes. For example, if red meats are upsetting, other high protein foods such as fish, poultry, eggs or dairy foods should be encouraged.
- ▶ Alter the flavour of meat, chicken or fish by marinating it in sauces or dressings such as fruit juices, Asian-style sauces or honey.
- ▶ Seasonings and spices may also be used. Try adding small amounts of flavourful seasonings, such as basil, oregano or rosemary. You may find tart foods such as lemon or oranges have more taste.
- ▶ Try using a straw positioned to the back of the mouth to help bypass the tastebuds.
- ▶ Trial and error may be the answer. Experiment with different foods. For example, if you normally eat cheddar cheese, try a stronger mature cheese for extra flavour.

Food may taste bland, but remember it still provides the nourishment your body requires. Once treatment is over, your taste may return over time.

Indigestion and heartburn

This may result from radiotherapy to the oesophagus, chest or stomach area. The discomfort may cause you to reduce your food intake and lead to weight loss.

- ▶ Smaller, more frequent meals may help.
- ▶ Eat slowly and chew your meals well.
- ▶ Avoid spicy, fried and fatty foods if they make your symptoms worse.

- ▶ Caffeine, alcohol and tobacco may worsen your heartburn or indigestion.
- ▶ Avoid lying down directly after a meal.
- ▶ Avoid bending over. For example, avoid gardening immediately after eating.



If indigestion or pain persists, tell your doctor, who may prescribe suitable medication.

Diarrhoea

Diarrhoea can be due to a number of different factors including treatment, medications or anxiety. Diarrhoea induced by radiotherapy (usually to the pelvic area) does not necessarily need a change to diet. Dietary changes to help ease radiation induced diarrhoea have not been well established, however it is important to maintain an adequate diet. If diarrhoea is due to a different factor, a temporary change in diet can sometimes help.

If diarrhoea is a problem:

- ▶ Cut down your fibre intake by replacing wholemeal bread and cereals with white varieties.
- ▶ Avoid raw fruit and vegetables with skins, seeds, nuts, and legumes such as baked beans.
- ▶ Choose plain, bland foods and avoid highly spiced and fatty foods.
- ▶ Drink plenty of fluids as your body may lose a lot of fluid while you have diarrhoea.
- ▶ Avoid very hot or cold drinks.
- ▶ Limit alcohol, coffee and strong tea.

Sometimes temporary lactose intolerance can cause diarrhoea. In such cases it may be helpful to change to soy milk or low lactose milk until diarrhoea resolves. If diarrhoea is persistent, it is best to consult your doctor to determine the cause and the correct treatment. Your doctor may prescribe suitable medications.

Constipation

Constipation may be due to a number of causes. These may include reduced food and fluid intake, inadequate activity, medications or a reluctance to use bowels because of discomfort.

- ▶ Each day drink at least eight to 12 glasses of fluid. This will help to keep stools soft.
- ▶ Gentle exercise each day may also help. Talk to your doctor or physiotherapist about the amount and type of exercise that is right for you.

If you can increase fibre, try including foods such as:

- ▶ Wholegrain breads, cereals and pasta;
- ▶ Dry fruit and nuts;
- ▶ Lots of fresh fruit and vegetables;
- ▶ Fresh orange juice, prune juice or pear juice are possible alternatives especially for those people on fluid diets;
- ▶ Legumes, and pulses such as baked beans, kidney beans, soya beans and chick peas.

Unprocessed bran and fibre supplements can have potential risks, so make sure you talk to your doctor before starting these. If constipation persists, talk to your doctor about suitable medications.

Check with your doctor to see if you can increase the fibre in your diet.



Bowel obstruction

Some people may be at an increased risk of developing a bowel obstruction due to the location of the cancer, or due to previous abdominal surgery. If you are at risk, your doctor or nurse will discuss this with you. You may need to follow a low-fibre diet to reduce the risk of developing a complete bowel obstruction. This involves avoiding many of the high fibre foods listed on pages 30–31. You will need to monitor your bowel movements and discuss any changes with your doctor.

Your doctor or dietician will be able to advise you on a low fibre diet if this is required. Often people need to change the consistency or texture of their food to help with chewing or swallowing difficulties, or pain when eating. An assessment of your swallow by a speech pathologist may be advisable.

The different consistencies or textures of foods include:

Soft diet: This includes softened or well-cooked foods, such as casseroles and mince dishes, and foods moistened with sauces or gravy. Foods should be able to be broken easily into bite sized pieces (1.5cm). This may be helpful when some difficulty is experienced with chewing or swallowing, or your mouth is dry or coated.

Minced diet: Foods should be moist, soft and broken up into pieces no bigger than 0.5cm. Foods that are hard, chewy or stringy should be avoided – for example peas, corn, pineapple and tough meat.

Pureed diet: Foods mashed or blended into a paste and served with a gravy or sauce. A blender, vitamiser or food processor will make food preparation much easier. This consistency is useful when chewing and swallowing becomes very difficult.

Important points to remember:

- ▶ A change in the texture of your diet should only occur when you experience difficulties with your current meals, resulting in you eating less food or taking too long to eat your meals.
- ▶ Have regular meals and snacks throughout the day.
- ▶ Choose a variety of foods from the food groups, as modifying the texture of your diet should not compromise your nutrition.
- ▶ Keep the fridge and cupboard stocked with ready or easy to prepare meals and snacks. These may include frozen, packet or canned foods.
- ▶ Look on the supermarket shelves for ideas.

Foods to enjoy

It is a good idea to see a dietician when you are on a fluid diet to make sure you are getting all the vitamins and minerals, protein and energy that your body needs.

FOOD TYPE	SOFT DIET	MINCED DIET	PUREED DIET	FLUID DIET
Meat	Casseroles, stew, mince dishes, fish dishes.	Minced or well-cooked meat, chicken or fish. Serve with extra gravy or sauce.	Blended meat, chicken, fish dishes with gravy or sauce. Serve with extra gravy or sauce.	Soups made with meat, chicken, fish. Add milk, butter, cream, egg, cheese.
Meat alternatives	Omelettes, quiche, scrambled or poached eggs, baked beans.	Poached, scrambled or boiled eggs, tofu, pureed baked beans, cottage cheese, soufflés with small pieces.	Scrambled or soft poached eggs, mashed baked beans.	Soups made from beans, lentils and peas. Add milk, butter, cream, egg, cheese.
Cereals	Bread is softest when fresh. Cut off crusts and use mayonnaise, butter or wet topping to moisten bread. Breakfast cereals with extra milk (avoid dried fruit or nuts and crunchy breakfast cereals for example muesli). Pasta.	Porridge. Well moistened dry breakfast cereals with little texture for example Cornflakes, Weetbix, Rice Bubbles. Well cooked pasta.	Porridge, semolina. Serve with extra milk and sugar.	Thin porridge or semolina with milk. Add cream and sugar.
Drinks, extras	Commercial supplements (see pages 35-38)			

FOOD TYPE	SOFT DIET	MINCED DIET	PUREED DIET	FLUID DIET
Fruit. Avoid acidic fruits	Banana, pear, mango, pawpaw, watermelon. Canned or stewed fruits.	Soft, canned or cooked fruits without seeds or skins.	Pureed or mashed fruit.	Fruit juice (nectar varieties). Mashed soft fruits or blended canned fruits can be added to drinks or custard and ice cream.
Vegetables. Avoid acid vegetables	Mashed or well-cooked with butter, cream or cheese sauce.	Soft well cooked vegetables. Easily mashed with a fork.	Blended or mashed with milk, cream, butter, cheese.	Vegetable juices. Add pureed vegetables to soups.
Soup	Meat, chicken and/or beans with vegetables – homemade or canned.	Soups with easy-to-chew meats or vegetables. Piece size should be 0.5cm or less.	Blended, homemade or canned. Add milk, cream, egg, cheese. Dr MacLeod's Boost soups.	Blended, homemade or canned. Add milk, cream. Dr MacLeod's Boost soups.
Dairy foods and desserts	All dairy and desserts except dry cakes or anything with nuts, seeds, dried fruits, coconut or pineapple or other hard fresh fruits such as apple.	Milk, milkshakes, custard, ice cream, creamed rice, blancmange, junket, baked egg custard, mousse, soft cheesecake (no crust), yoghurt (with pieces). Soft fruit pies with bottom crust only.	Milk, milkshakes, custard, ice cream, blancmange, junket, baked egg custard, mousse, soft cheesecake, yoghurt (no pieces).	Milk, milkshakes, thin custard, ice cream, blancmange, mousse, yoghurt (no pieces), fromage frais.

Nutritious snacks

There are many side-effects of your treatment that can impact on your food intake and affect your appetite, but there are also many other factors which may make food difficult to access or prepare.

For example, time spent travelling to the hospital, waiting around for appointments and staying in temporary accommodation with limited cooking facilities. Have a range of quick and easy snacks that are suitable to eat when you are away from home, or when you don't feel like preparing a meal.

Nutritious snacks in-between meals are also useful if you are not eating as much as you normally do at meals or you are losing weight.

Some ideas:

- ▶ Ready-to-use drinks are handy for travel and are useful if preparation is difficult. Examples include Sustagen, Ensure and Resource.
- ▶ Flavoured milks, milkshakes, smoothies, fruit juice drinks.
- ▶ Dairy desserts such as custard, creamed rice, pudding, blancmange, yoghurt, fruche, mousse, junket, ice cream.
- ▶ Cheese.
- ▶ Hard boiled eggs.
- ▶ Biscuits with cheese, peanut butter or butter and vegemite.
- ▶ Celery and cream cheese.

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- ▶ Buttered pikelets, scones, muffins, fruit buns or raisin toast. Add jam, syrup or honey for extra energy.
 - ▶ Breakfast cereal and milk.
 - ▶ Sandwiches, toast, crumpets or muffins with toppings such as egg or egg mayonnaise, cheese, cold meats, canned salmon or tuna, peanut butter, banana, baked beans, avocado, or pate.
 - ▶ Hot chips to accompany a meal.
 - ▶ Chocolate bars, muesli bars, sweet biscuits, cakes and slices. Look for those with fruits and nuts for added energy.
 - ▶ Potato crisps or corn chips with dips – dips made from cream cheese or sour cream or beans (eg. hommus) will be the most nutritious options.
 - ▶ Dried fruit, nuts and seeds.
 - ▶ Fresh or tinned fruit served with cream, custard, ice cream or yogurt.
 - ▶ Cream soups.

Supplements and nourishing drinks

If you cannot manage an adequate diet and you are losing weight, then it is recommended you use supplementary fluids. These fluids include ready-to-drink commercial supplements, as well as nourishing drinks you can make at home.

Supplements and nourishing drinks contain protein and energy, as well as the other vitamins and minerals. These drinks can be used to replace fluids such as water, tea, coffee, bonox, soft drinks and cordials, which are a poor source of nutrients. Milk is a common base for nourishing drinks, as it is a high protein and energy fluid itself. Full cream milk has more energy than low fat milk and so is preferable to use at this time.

Nourishing drinks are useful if:

- ▶ You are underweight or losing weight - to assist with weight gain or weight maintenance.
- ▶ Your overall food intake is decreased due to a poor appetite or nausea.
- ▶ You are relying mainly on a fluid diet.

Use these drinks at:

- ▶ Morning tea, afternoon tea, supper or with meals.

What can I use if I have diabetes?

If you have diabetes or high blood sugar, products such as Sustagen, Ensure, Proform and milkshakes tend to be suitable as they have a low glycemic index. This means they will have little impact on your blood sugar levels.

What if I am lactose intolerant or allergic to milk?

If you are lactose intolerant, then milk may give you diarrhoea. Lactose intolerance may also occur as a result of some types of cancer treatments. In this situation ordinary milk can be substituted with low lactose milks.

These include, 'Zymil' and 'Lidell's' lactose free milks milk, as well as fortified soy milks such as 'So Good'. Lactose free supplements are also available. Allergies to milk are very rare, but if so, use soy milks or soy-based supplements.

Making nourishing drinks

You can make your own nourishing drinks at home using full cream milk and milk powder, or using commercial supplement powders. Refer to pages 38–39 for a list of supplements. You may wish to make up a jug of drink to last through the whole day. Below are some examples:

Classic milkshake

- 1 cup milk or soy milk.
- 1 heaped tablespoon milk powder or 'Sustagen' or 'Ensure Hospital' or 'Ensure Essential'.
- 1 scoop ice cream.
- Flavouring as desired, e.g. chocolate, strawberry, coffee, vanilla.

When prepared with full cream milk and milk powder this recipe provides:

Energy: 1100 kj **Protein:** 12g **Fat:** 15g

Smoothie

- 1 cup milk or soy milk.
- 1 heaped tablespoon milk powder or ‘Sustagen’ or ‘Ensure Hospital’ or ‘Ensure Essential’.
- 1 ripe banana or cup tinned fruit.
- 1 scoop ice cream.

Try mixing your own combinations of ingredients. When prepared with full cream milk and milk powder, this recipe provides:

Energy: 1600 kJ **Protein:** 15g **Fat:** 15g

Enriched milk

- 1 litre full cream milk.
- 6 tablespoons of milk powder.

Use enriched milk in soups, desserts and cereals.

There are a variety of other powdered drink bases, such as ‘Milo’, ‘Aktavite’, ‘Quik’ and ‘Malt’. These powders add flavour but are not such a good source of additional nutrition when compared with the following commercial supplements.

Commercial nutritional supplements

Over the next two pages is a list of common nutritional supplements, which are readily available in Queensland. These products can be purchased through commercial pharmacies and some hospital pharmacies, as well as the following organisations.

Nutrition Australia Small charge for delivery
6/100 Campbell St, Bowen Hills QLD 4006
Phone (07) 3257 4393

APHS Pharmaceuticals Small charge for delivery
Via Greenslopes Hospital Pharmacy
Newdegate Street, Greenslopes 4102
Phone 1300 793 177

The Wesley Pharmacy Small charge for delivery
The Wesley Hospital Building
451 Coronation Drive, Auchenflower QLD 4066
Phone (07) 3371 1754

A dietician can suggest the most appropriate supplement for you, and where it can be purchased. Your choice of supplement should be based on your needs, on availability and on the cost of the supplement.

Under the Repatriation Pharmaceuticals Benefits Scheme, nutritional supplements can be provided for some DVA cardholders. Your dietician will be able to determine if you are eligible for supplements under this scheme.

Milk-based drinks

PRODUCT NAME	DESCRIPTION
Enprocal Powder (540g can, 2.1kg can)	Powder*
Ensure Essential (900g can)	Powder* Gluten free and contains fibre
Nutridrink (1kg can)	Powder* Lactose free and gluten free
Proform (1kg can)	Powder*
Sustagen (250ml tetrapak)	Ready-to-drink, Available from supermarkets
Sustagen Hospital Formula (900g can)	Powder*
Sustagen Hospital Formula with fibre (900g can)	Powder* contains fibre

Soy-based drinks

PRODUCT NAME	DESCRIPTION
Ensure (237ml can) or (200ml tetrapak)	Ready-to-drink; lactose free; gluten free
Ensure Hospital (400g or 1kg cans)	Powder; lactose free; gluten free
Ensure Plus (237ml can) or (200ml tetrapak)	Ready-to-drink; lactose free; gluten free; available in drinking yoghurt style
Enrich Plus (200ml tetrapak)	Ready-to-drink; lactose free; gluten free
Fortisip (200ml tetrapak)	Ready-to-drink; lactose free; gluten free
Fortisip Multifibre (200ml tetrapak)	Ready-to-drink; lactose free; gluten free; contains fibre
Resource Plus (237ml tetrapak)	Ready-to-drink; lactose free; gluten free

Soups

PRODUCT NAME	DESCRIPTION
Dr MacLeod's Boost soups (400g can)	Powder*; available in four flavours

Juice-based drinks

PRODUCT NAME	DESCRIPTION
Enlive Plus (220ml tetrapak)	Ready-to-drink
Fortijuice (200ml tetrapak)	Ready-to-drink
Resource Fruit Beverage (237ml tetrapak)	Ready-to-drink

Desserts and snacks

PRODUCT NAME	DESCRIPTION
Boost – Vanilla pudding (500g can)	Powder*
Dr MacLeod's Boost jellies (560g can)	Powder*
Ensure Pudding (113g tub)	Ready-to-eat
Forticreme Pudding (125g tub)	Ready-to-eat
Sustagen Instant Pudding (450g can)	Powder*

Specialised Drinks: Use on the recommendation of a dietician.

PRODUCT NAME	DESCRIPTION
Forticare (125ml tetrapak)	Ready to drink; enriched with fish oil
Prosure (240ml tetrapak)	Ready to drink; enriched with fish oil
Resource Support (237ml tetrapak)	Ready to drink; enriched with fish oil

There are a range of fish-oil containing capsules and liquids available from pharmacies. That may be used on the recommendation of a dietician or doctor.

When using powdered drink bases, prepare as per directions on the can.





For further information,
please feel free to call the

Cancer Council Helpline
on 13 11 20,

Monday to Friday,
between 8am and 6pm.



Coping with cancer

“There is a fear that goes through you when you are told you have cancer. It’s so hard in the beginning to think about anything but your diagnosis. It’s the first thing you think about every morning. I want people diagnosed with cancer to know it does get better. Talking about your cancer helps you deal with all of the new emotions you are feeling. Remember, it’s normal to get upset.”

—Katrina, cancer survivor

When you are told you have cancer, the diagnosis affects not only you, but also your family and friends. You may feel scared, uncertain, or angry about the unwanted changes cancer will bring to your life and theirs. You may feel numb or confused. You may have trouble listening to, understanding, or remembering what people tell you during this time. This is especially true when your doctor first tells you that you have cancer. It is common for people to shut down once they hear the word “cancer.”

There is nothing fair about cancer and no one “deserves” to have it. A cancer diagnosis is hard to take and having cancer is not easy. Accepting the diagnosis and figuring out how cancer fits into your life is challenging. The good news is that more than 60 per cent of cancer patients will survive more than five years after diagnosis. For those diagnosed with advanced disease there are many treatments and services to assist you to live a good quality life while living with cancer.

After you are diagnosed with cancer, you may feel shock, disbelief, fear, anxiety, guilt, sadness, grief, depressed, and anger. Each person may have some or all of these feelings, and each will handle them in a different way.

There are many resources and people to help you through this phase of your life and you do not need to go through this on your own. The following tips for managing come from those who have survived the cancer journey themselves.

- ▶ Gather information about your cancer diagnosis and treatment so that you are informed about your body, your treatment and potential treatment side-effects. Knowledge can help lessen the fear of the unknown.
- ▶ Be your own advocate. Even though people facing cancer cannot change their diagnosis, they can seek out reliable, up-to-date information and talk to family members, friends, and their health care team. Finding good sources of support can help people with cancer take control of their situation and make informed decisions.
- ▶ Bring a family member or friend along to appointments. They can serve as an extra pair of ears, help you remember things later, and give you support.
- ▶ Ask for support from family, friends, and others. Just having someone who cares and will listen to you can be very helpful. If friends or family members are not able to be supportive, find others who will. Health care professionals (such as social workers, psychologists, or other licensed health professionals) and support groups can be extra sources of support.

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- ▶ Pay attention to your physical needs for rest, nutrition and other self-care measures.
 - ▶ Find out what helped other patients and families manage their cancer, and/or talk with other people diagnosed with the same type of cancer.
 - ▶ Take one day at a time.

Cancer Council Queensland has a range of support services available to those affected by cancer. **If you are seeking information, support, guidance or practical assistance** make the call and speak to a trained health professional who can respond to your query while providing support. Call the **Cancer Council Helpline** on **13 11 20** Monday to Friday, 8am to 6pm for more information.

Talking to your doctor

Getting all the facts about your cancer and its treatment helps you to feel more in control. Here are some tips for communicating with your doctor.

- ▶ **Talk with your doctor as often as necessary.**
- ▶ **Take someone with you to your doctor's appointments.** Have a family member or a friend with you, so that they can ask questions, write down the answers and help you keep the information straight.
- ▶ **Don't be afraid to ask.** If you have questions of a confidential nature about any aspect of your treatment, don't hesitate to ask your doctor. For example, you may have questions about the cost of medications and treatment. If your doctor cannot answer these questions, ask to be referred to someone who can.
- ▶ **Don't be afraid to interrupt.** Stop the doctor to ask about technical terms or statements you don't understand.
- ▶ **Write it down.** You'll feel more confident of what you know if you have it in writing. Urge the doctor to make notes for you (if you can't read the doctor's handwriting, let the doctor know).

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- ▶ **Take your time.** Whenever possible, talk with your doctor when you both have enough time. If your doctor doesn't have time to sit down and really explain things, suggest an appointment at a specific time when you, a friend or family member and the doctor can talk at length.
 - ▶ **Where to start.** If you're not sure what to ask or how much information you need, start by getting your general practitioner's help, for example: "If you were me, what would you ask?"

The **Cancer Council Helpline** may also be able to assist.
Call **13 11 20 Monday to Friday, 8am to 6pm.**

Notes



Cancer Council
Helpline

13 11 20

For information and support call
Monday to Friday, 8am - 6pm

www.cancerqld.org.au