

Eating Well

A guide for patients and their support people

Leukaemia
Foundation®

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About this booklet

This booklet provides helpful information on eating well for people living with blood cancer such as: leukaemia, lymphoma, myeloma, myelodysplastic syndrome (MDS), myeloproliferative neoplasm (MPN) or a related blood disorder.

This booklet has:

- A list of contents to direct you to sections that relate to eating well.
- Helpful hints and tips to help you eat well
- Helpful hints and tips to manage eating problems
- Website addresses to evidence-based online nutrition information.
- Some easy recipes for nutritious meals and snacks.

Always talk with your doctor, dietitian, or nurse about any eating problems. They will be able to give you individualised suggestions.

Rather than reading this book from start to finish, you may just want to read the parts you need now. You can always read more later.

Why is eating well important?

Good nutrition is important in life to provide our bodies with the right fuel to stay well.

Healthy eating is important for people living with blood cancers. These diseases and their treatments increase the physical and mental demands on the body.

Eating nutritious foods before, during and after treatment can help:

- Prevent unplanned muscle and weight loss
- Cope better with the side effects of cancer and treatment
- Maintain energy levels and prevent fatigue
- Fight infection by boosting your immune system
- Promote healing and repair after treatment
- Being actively involved in your treatment
- Improve your sense of wellbeing and quality of life



Basic food facts

Food provides the energy (calories or kilojoules) and nutrients (carbohydrates, proteins, fats, vitamins and minerals) our bodies need for everyday activities, growth and repair of body tissues and prevention of infection.



Nutrient	Food example
<p>Carbohydrates provide energy, especially for our brain and muscles.</p> <p>Carbohydrates are stored as sugars (glycogen) in the liver and muscles, for short-term energy and as body fat for long-term energy. These foods also provide essential energy, fibre, vitamins and minerals and beneficial antioxidants.</p>	<p>Nutritious carbohydrate foods include:</p> <ul style="list-style-type: none">• starchy vegetables (potato, sweet potato, corn)• whole grain (wheat, rice, oats) cereals, breads, pastas, legumes (lentils, chickpeas, and kidney beans), and fruit.

Nutrient	Food example
<p>Proteins are needed for all body functions, including building and repairing body tissues, and blood and hormone production.</p> <p>These foods also provide essential vitamins and minerals</p>	<p>Nutritious protein foods include:</p> <ul style="list-style-type: none">• eggs• red meat• chicken, fish• legumes, nuts, seeds• milk, cheese, yoghurt• soy products such as tofu.

Nutrient	Food example
<p>Dietary fats are an important source of energy and are necessary for healthy functioning of the immune and nervous systems, and for keeping us warm.</p> <p>Our bodies need fats to absorb vitamins and minerals and to make hormones.</p> <p>A diet rich in unsaturated fats (mainly plant and fish based) is healthier than a diet high in saturated fats.</p>	<p>Nutritious unsaturated fats include:</p> <ul style="list-style-type: none"> • extra virgin olive oil, avocados, nuts, sunflower and safflower oils • lean meat and omega 3 fats from fish such as sardines, tuna and salmon <p>Saturated fats include:</p> <ul style="list-style-type: none"> • full fat dairy foods, cream, butter, coconut and palm oils, • commercially produced biscuits, cakes and pastries • fatty meats, such as sausages and bacon, • fried takeaway food such as chips and burgers

The five food groups

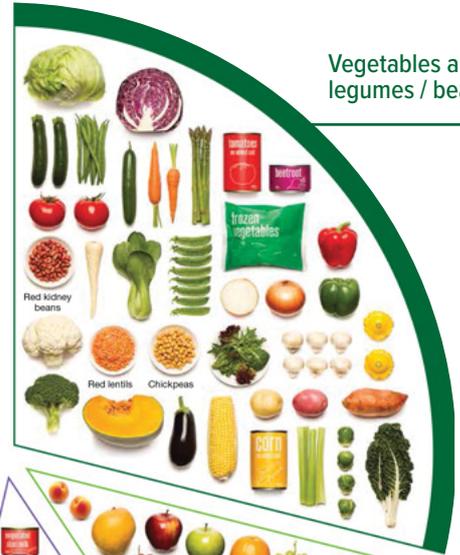
For a nutritious diet, the Australian Dietary Guidelines recommend including a variety of foods from the Five Food Groups every day: vegetables, fruit, grain foods, protein and dairy foods.¹

¹National Health and Medical Research Council (2013) Australian Dietary Guidelines

Grain (cereal foods, mostly wholegrain and / or high cereal fibre varieties



Vegetables and legumes / beans



Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes / beans



Fruit



Milk, yoghurt, cheese and / or alternatives, mostly reduced fat



Food serves per day

Bread, cereals, rice, pasta and noodles

3-6 serves a day



Examples

1 slice bread, 2/3 cup breakfast cereal,
1/2 cup cooked rice, 1/2 cup cooked pasta

Vegetables and legumes

5-6 serves per day



Examples:

1 medium potato, 1/2 cup cooked vegetables,
1 cup salad vegetables,
1/2 cup cooked legumes such as baked beans

Fruit

2 serves a day



Examples:

1 medium piece of fruit (apple, orange, pear, banana), 1 cup canned fruit, ½ cup fruit juice, 30g dried fruit

Milk, yoghurt, cheese and / or alternatives

3-4 serves a day



Examples

250ml milk, 200g yoghurt, 2 slices or 40g of cheese or 125g ricotta, 1 cup soy, rice or other cereal drink with at least 100mg of added calcium per 100ml

Meat, fish, poultry, eggs, nuts

2-3 serves a day



Examples

65g cooked lean meat (100g raw weight), 1/2 cup cooked lean mince, 2 chops, 2 slices roast meat, 85g cooked lean chicken, 100g cooked fish or a small can, 2 large eggs, 1 cup beans/cooked or canned legumes, 170g tofu, 30g nut or seed butters/paste

Top tip:

Further information and resources on healthy eating can be downloaded from The National Health and Medical Research Council:

nhmrc.gov.au/adg

Nutrition at diagnosis

When you are first diagnosed, you have a great deal to cope with both emotionally and physically. The shock of the diagnosis may affect your appetite and oral intake.

Eating well before your treatment begins can help to give you more energy and strength to cope with treatment. However, this is not always possible, as treatment sometimes needs to begin soon after diagnosis.

Using food, vitamins and other supplements to fight cancer

There is little evidence that any specific food, vitamins or supplements can cure blood cancers or disorders. However, there is evidence that a nutritious diet helps your body cope better with the effects of cancer and treatment.

There is a lot of misinformation on the internet and other media about diet, nutrition and cancer. On page 44 are websites that provide evidence-based nutrition information. This information will help ensure your diet has the energy and nutrients

needed to meet the demands of treatment, recovery and general health.

It is important to talk to your treatment team before making any major changes to the foods you eat or taking supplements (for example vitamins, minerals, herbal preparations or protein drinks). Some alternative diets may interfere with your medical treatment. Dietitians and doctors are the most qualified people to provide nutrition advice.

Dietitian – A health professional that can help with nutrition

In Australia there are differences between a dietitian and other nutritional health providers including nutritionists. Dietitians are part of a regulated profession. Their roles are to provide you with personal support to help with your health and wellbeing. They provide:

- expert nutrition and dietary advice
- advice to understand how to improve your nutritional health
- help to understand how nutrition affects the body

The dietitian at your treatment hospital can give you individual nutrition advice to help your body cope with treatment and recovery.

Accredited Practising Dietitians (APDs) can be found in hospitals, community health centres and in private practice settings.

Dietitians Australia has a list of accredited practising dietitians you can access [dietitiansaustralia.org.au](https://www.dietitiansaustralia.org.au)

Your partner, carer, relatives and friends can also play an important role in helping you to maintain a nutritious diet. For example, they could assist with shopping and cooking until you feel well enough to do so for yourself.



Dental care and hygiene

Before you start treatment, it is a good idea to have a dental check-up. This helps ensure that your teeth are in the best possible condition before treatment begins.

Using an alcohol-free mouthwash, a soft toothbrush and rinsing your mouth after every meal with salty water will help keep your mouth clean.

After treatment, your gums may be too sensitive for dental work. Your dentist and the treatment team, will advise you on the best ways to care for your mouth and teeth at different times during and after your treatment.



Planning ahead

Many people find that their normal eating patterns, appetite, and what they want to eat change during treatment.

Tips to help ensure you always have suitable and nutritious food available:

- Bulk cook and freeze individual serves. Such as, soups, casseroles, pasta sauces
- Stock up on ready-made meals and snacks. Such as, canned soups, instant pasta dishes, canned tuna/salmon, canned spaghetti and baked beans, long life custard, snack pack fruits, dried fruit, nuts, muesli bars and nutritious breakfast cereals, like oats, muesli and wheat biscuits.
- Enlist family and friends to help with shopping and cooking
- Consider community meal services such as Meals on Wheels and delivered meal providers.

Many people lose weight without planning to during treatment. This can result in muscle loss which lowers energy levels and impacts the body's ability to fight infection and recover.

Tips to help maintain body weight and muscle strength

- Try to eat a variety of foods from the five food groups
- Eat small frequent nutritious meals and include protein-rich foods (milk, cheese, yoghurt, eggs, meat, chicken, fish, legumes) at meals and snacks.
- Try to continue regular gentle exercise such as walking at least three times a week
- Exercise with a friend for motivation and support
- If you feel okay, try some light weights to build up muscle strength. Only train with weights every second day on a different muscle group, for example upper body and arms one day, abdominals and legs another day (no more than 2-3 times/week). This allows muscles to repair between sessions.
- Drink adequate fluids to stay well hydrated. Plain tap water is best, however tea and coffee count too.
- Get plenty of rest and sleep

Case Study

As a bit of a foodie and a caterer, good nutrition came easy for me. But when I found out that I could lose weight during the transplant, I decided to build myself up in the three months prior. After seeking medical approval, I did some exercise each day and tried to choose healthy and nutritious food like lean meat, fresh fruit and vegetables, rice, pasta, whole grains and lentils. By transplant day I had gained 7 kilos, was ready to take on the treatment, felt strong, energised and was in a good food and exercise routine which I continued after the transplant.

- John



Nutrition during treatment and beyond

Blood cancer and treatment (like chemotherapy and radiation therapy, immunotherapy) place extra demands on your body for energy and nutrients. At the same time, cancer and treatment can cause side effects (problems) that impact your normal eating patterns. You may find there is a change in your desire for food and ability to eat your usual amount or type of food.

Side effects and their severity vary from person to person depending on the type of disease involved, the treatment used and how an individual responds.

Although side effects can be very unpleasant, remember most are temporary and reversible. Report any side effects you experience to your doctor or nurse. Many side effects can be managed well, reducing discomfort for you. You may find that some foods you eat reduce the severity of side effects, and in some cases prevent them.

Side-effects that can affect normal eating patterns include:

- nausea (feeling sick) and vomiting
- dry/sore mouth and throat
- loss of appetite
- changes in taste and smell
- weight loss
- weight gain
- diarrhoea and/or constipation
- fatigue

Your dietitian can talk to you about high-protein and high-energy drinks and snacks if your diet remains inadequate.

Side effects

Loss of appetite

When you do not want to eat or do not feel like eating very much.

Many factors can impact appetite, including the physical and emotional effects of treatment.

Many people find that although their appetite improves after treatment, it can be some time before it returns to normal.

Eat small frequent nutritious meals and snacks throughout the day, to maintain your energy.

Include protein-rich foods with each meal and snack, for example, meat, chicken, fish, milk, cheese, yoghurt, eggs, nuts and legumes.

Make fluids count towards your protein intake by choosing milkshakes, smoothies, high-protein soups and high-protein/high-energy drinks.

Food looks and smells influences appetite: choose colourful fruit, and vegetables and consider food presentation and food aromas.

Keep meals interesting and appetising: choose a variety of different dishes and food textures such as crisp lettuce or rice crackers, soft bananas, mango, peaches or watermelon and custards and yoghurts.

Weight loss

When your body weight decreases.

May occur due to the side effects of treatment impacting appetite and the body's need for extra energy

Many people have weight loss during treatment.

To maintain weight or regain lost weight, you need to increase the amount of calories/kilojoules you are eating.

Avoid filling up on foods and drinks with little nutritional value such as broths, tea, coffee, sugar free drinks and low-fat products.

Eat small, frequent nutritious meals and snacks (every two hours), such as: nuts, bananas, dried and fresh fruit, wholegrain breads, muffins and raisin toasts, banana, carrot or fruit cake, biscuits with cheese or peanut butter, hummus and other high energy dips

Choose full fat milk, yoghurt and other dairy products

Add milk, milk powder and/or protein powders (discuss with your dietitian) to foods such as soups, casseroles, cereals and milk puddings

Add grated cheese to soups, pasta dishes and egg dishes

Eat lean meat, chicken or fish with cooked vegetables and gravy

Enrich foods with fats and oils as they are high in calories. Add olive oil to cooked vegetables, dip bread in olive oil or spread margarine thickly on bread, add milk or plain yoghurt to soups and desserts, and use oil-based salad dressings and mayonnaise

High protein/high-energy drinks may be recommended by a dietitian

Weight gain

When your body weight increases

May result from certain types of treatment and medications, for example, the use of steroid medication can cause weight gain.

When you are hungry, make sure that you make healthy food choices. Talk with your dietitian who can help you choose healthy foods

Eat smaller portion sizes

Exercise each day, talk with your treatment team about how much exercise you can do

Keep a food diary, this may help you keep track of your eating habits that might be causing you to gain weight

Speak with your doctor if you experience this type of weight gain

Nausea and vomiting

When you feel queasy or sick in your stomach.

Vomiting is another way to say 'throwing up'

They are common side effects of cancer treatment; however, symptoms are generally well controlled with improvements to anti-emetic (anti-nausea) drugs

Don't go for long periods without eating, as this may make your nausea worse. Eat small frequent meals and snacks

Take anti-nausea medication as prescribed, and tell your treatment team (doctor, nurse, dietitian etc) if you are unable to drink or eat much so your anti-emetics (anti-nausea drugs) can be reviewed.

Smells of hot foods may worsen nausea so try to avoid being in the kitchen when meals are prepared

Try cold foods such as breakfast cereal, and sandwiches, cheese and crackers, cold puddings, custard, mousse, yoghurt, tinned fruit or jelly

Try eating with a fan or open window, as the fresh air may assist appetite.

Try dry salty foods such as crackers or toast

Soft drinks (for example ginger ale) are often well tolerated, help replace both fluid and carbohydrates

Slowly sipping flat soft drinks is often better tolerated than bubbly drinks

A grated apple, ginger or papaya may help to settle nausea

Try to eat small amounts of white rice when nausea or vomiting subsides

Limit fatty and fried foods, as these take longer to pass through your stomach, causing more nausea

Dehydration

Some treatments can cause side effects such as nausea and vomiting, diarrhoea, sweating from a fever, and loss of appetite.

These side effects can lead to you not having enough fluid and salts (electrolytes) in your body. When this happens, it is called dehydration.

Varying the types of fluids you drink ensures that you are having a wider range of nutrients throughout the day.

Drink plenty of fluids to maintain hydration and to keep the kidneys functioning well.

Take a water bottle with you when you go out.

Ice blocks/cubes – made with water or fruit juice count as fluid.

Soups or high-protein high-energy drinks can make good substitutes for solid foods during this time as they contain important nutrients like proteins, vitamins and minerals.

'Healthy' fluids include:

- soups – such as pea and ham, meat and vegetable, mixed vegetable, pumpkin, miso or chicken noodle soup
- milkshakes and smoothies (made with cow or soy milk)
- juicy fruits – watermelon, oranges, apples, berries, mangoes, citrus, pineapple, grapes, plums, peaches, lychees
- fruit juices – apple, orange, pear, apricot nectar

Taste and smell changes

After treatment, some people find that food tastes or smells different, and it can take some time before these return to normal.

To improve your sense of taste and smell:

- keep your mouth clean and fresh
- enhance the taste of food by adding sauces, herbs and spices
- avoid smells you find unpleasant.

Cold foods such as sandwiches, salads or yoghurt may be better tolerated than hot foods.

Try using plastic utensils if some foods taste metallic

Try lemon drops or mints if you have a metallic taste in your mouth

Choose a different type of protein if you develop a strong dislike for a particular protein food, such as chicken, fish, tofu, eggs, nuts and cheese

Try citrus fruits

Make foods look, smell and taste more appealing.

Sore mouth or throat (mucositis)

Some treatments can cause mouth sores (ulcers) and tender gums. It can make eating and drinking painful and difficult.

This is a common and uncomfortable side-effect of some cancer treatments. It can start about a week after the treatment has finished and usually goes away after a couple of weeks.

Take pain medication and other topical drugs (applied to the sore area) before meals as prescribed, to assist oral intake.

Remove poor fitting dentures once you feel your mouth becoming sensitive

Avoid foods that irritate your mouth such as citrus fruits, spicy, salty or dry crunchy food and alcohol.

Choose soft, moist foods that are easier to chew and swallow:

- cool/warm pureed and strained soups (containing pureed meats and vegetables)
- minced meats, chicken, and fish with lots of sauce
- cow milk or soy milkshakes with honey, and yoghurt
- yoghurt with honey, for extra energy
- soft desserts, for example, custard, mousses, crème caramels, rice puddings, ice cream

- pasta with sauces
- risottos with soft chicken and well-cooked vegetables
- eggs and egg dishes such as omelette, scrambled, frittata
- soft or pureed fruits, for example, stewed apple, pear, prune, peach, watermelon, sliced or mashed ripe banana
- bread dipped in egg and lightly fried served with honey and cinnamon

Keeping your mouth as clean as possible during treatment helps prevent infections.

- Use a soft toothbrush and mild toothpaste (if recommended), and gently brush your teeth after every meal
- Use a soft floss after every meal unless your gums are sensitive
- rinse your mouth with water or a solution recommended by your doctor, dentist or nurse after every meal and every one to two hours when it feels sore
- Choose mouthwashes that are alcohol free and designed for sensitive mouths

Dry mouth

Some cancer treatments affect the production of saliva, which can cause a dry mouth.

Increase the amount of fluids you drink each day to help moisten your mouth.

Avoid dry foods – try adding extra sauce or gravy to moisten dishes.

Rinse out your mouth with water or a recommended solution after eating or as necessary to help stimulate saliva production.

Try sucking on hard lollies (or soft jellies if your mouth is sore), or chew gum, to stimulate saliva production.

Diarrhoea

Some cancer treatments can cause damage to the lining of your bowel wall. This can lead to cramping, wind, abdominal swelling (bloating) and diarrhoea (frequent passing of loose bowel motions).

If you have diarrhoea, it is important to keep yourself well hydrated to replace fluids and electrolytes lost from your body.

Drink plenty of liquids like water, diluted fruit juices, weak cordials, clear soups and weak tea.

Oral rehydration solutions from the pharmacy help to replace both fluid and the salts and minerals lost in diarrhoea.

Frequent severe diarrhoea may make you dehydrated, so it is important to seek medical advice if this occurs.

Be sure to tell your nurse or doctor if you experience any of these symptoms, or if you see blood in your bowel motion.

Take anti-diarrhoea medication only if prescribed and follow directions carefully.

Sip boiled water with sliced ginger or a teaspoon of sea salt and a tablespoon of honey

Suck on fruit juice ice cubes

Eat boiled white rice and pasta

If diarrhoea is prolonged, it may help to change to lactose-free milk and yoghurt or plant milk alternatives (soy or oat milk).

Limit foods that increase bowel action frequency, such as high fibre foods (wholegrain breads and cereals, citrus fruits, fruits with skins and seeds, dried fruit, fibrous vegetables like cabbage, brussel sprouts, peas, beans and legumes), large quantities of fruit juice, alcohol, strong tea, caffeinated drinks like coffee, and spicy food

If you get a sore bottom or anus:

- Try using a wet washer or unperfumed 'baby wipes'
- You may also benefit from applying a barrier cream (like zinc cream, lanolin or pawpaw cream) to help protect the skin around your anus.

Constipation

Changes in treatment, medications (e.g. some chemotherapy and pain relief drugs), food and fluid intake and lack of mobility for long periods can slow bowel function and cause constipation.

Inform your treatment team if your bowels are not working regularly.

A gentle laxative can help soften the bowel motion.

Increasing the amount of fibre and fluids in your diet and regular physical activity help prevent constipation.

To increase your fibre intake, try eating:

- wholemeal and wholegrain breads, cereals pasta, oats and brown rice
- fruit and vegetables — especially those with skins and edible seeds including celery, carrots, peas, green beans, broccoli, corn, oranges, plums, figs, dates, prunes, apples
- legumes or pulses – lentils, kidney beans, baked beans, chickpeas, mung beans, red and black beans, soy and white beans
- dried fruit and unsalted nuts and ground seed and nut mixes such as LSA – linseed, sunflower and almonds (buy at a supermarket)

Drink eight to ten glasses of fluid a day.

Fatigue

During treatment, and for some time afterwards, it is common to feel more tired than usual.

Listen to your body and ensure you have enough rest during the day; for example, you may need a short afternoon nap.

Gentle exercise or physical activity every day helps to give you more energy and reduce feelings of fatigue, improving and maintaining your muscle strength.

Seek advice from the physiotherapist at the hospital or an exercise physiologist or fitness instructor, who is used to working with people recovering from injury or illness. They can help prescribe activities that are appropriate to your needs and stage of treatment.

As discussed above, eating regular meals and snacks is important for health and well-being and helps prevent and cope with fatigue

Trouble sleeping

There are many reasons why you may have trouble sleeping, even when you're tired.

These include side effects of medications, inactivity, an unfamiliar and/or noisy environment and interruptions to your sleep.

Anxiety and depression can also interfere with normal sleeping patterns. Eating habits and the kinds of food you eat can affect sleep.

Talk with your treatment team about any difficulties you are having getting to sleep or staying asleep.

Limit the number of stimulant drinks like coffee, cola drinks, alcohol, and tea during the day and especially in the evening.

Eat small nutritious meals throughout the day and ensure that your last main meal is at least two hours before sleep.

Include protein-rich foods (meat, dairy foods, lentils, chicken, fish, tofu, eggs, and nuts) at each meal and snack.

Regular physical activity during the day especially in the fresh air can improve the quality and length of time you sleep at night.

If you are in hospital, you may have access to a veranda where you can sit or walk in the fresh air. Make sure you are protected from the sun.

Try a relaxing activity like stretching or meditation before sleeping.

Try a warm milk drink before bed.

Eating in hospital

If you don't feel like eating the hospital food, the hospital dietitian can give you more ideas about the types of foods to suit you at a particular time, or other available food options that are not listed on the menu. If you are on a high-protein diet you may be offered high-protein, high-energy drinks.

If you cannot eat or drink, there are other options available that will give you adequate nutrition for a short time. Ask your treatment team whether your family and friends can bring in your favourite foods. Remind them, however, not to be surprised or too disappointed if you still don't feel like eating.

Have nutritious snacks on hand for the times when you feel hungry. These could include:

- a bowl of fresh seasonal fruit (washed)
- healthy fruit and nut bars
- single serve cartons of fruit
- fresh bananas or avocados
- long life juices and protein drinks
- small packets of roasted nuts and dried fruits
- crackers and cheese
- small tins of tuna, baked beans
- multigrain or soy and linseed bread, sourdough, fresh bakery bread
- home cooked cake, for example, carrot and banana cake
- plain or flavoured milk

Food for children

Nutritious food provides the energy and nutrients needed by growing children. It also helps them to cope better with the demands of cancer and cancer treatment. It may be challenging for children to understand and eat what is 'good for them', especially when they are feeling sick, tired or simply do not have any appetite.

The following suggestions may help to improve your child's appetite and enjoyment of food during this time:

- allow your child to eat when they are hungry, which often means snacking in between mealtimes. A bowl of cereal or a fruit smoothie is a valuable source of nutrients and energy for your child, especially if they miss out on other meals during the day.
- offer your child healthy snacks and try to limit the amount of non-nutritious and high-saturated fat foods, (for example chips and chocolate), and high-sugar foods (for example lollies, sweet biscuits and donuts). These foods shouldn't replace more nutritious foods on a regular basis.
- try to make mealtimes as relaxed and enjoyable as possible. Try to continue normal family routines around food, for example, try to have the usual eating times. If your child doesn't feel like eating at this time, they may feel like eating later.
- make food more interesting by using novelty plates and cutlery, cutting foods like vegetables into different shapes, and making faces with pieces of vegetables or meat on pizza. Boxed foods may be more attractive for example dried fruit, Sustagen, protein drinks, and fruit juices.

Try offering your child some of the following nutritious and tasty foods:

- dips and vegetable sticks
- chunky vegetable, chicken and noodle soup
- homemade healthy pizza
- salmon and potato patties with fresh corn and peas
- freshly cooked salmon/chicken and vegetable kebabs with a tasty dipping sauce
- fruit salad (preferably homemade) and custard or ice cream
- slices of colourful fresh fruit pieces
- bowls of small colourful seasonal fruit within easy reach, for example plums, apricots, grapes, cherries etc
- stewed fruits for example apple, pear, rhubarb, apricots and peaches
- mashed banana with custard or ice cream toast with melted cheese and tomato, or baked beans and cheese
- vegetables like broccoli and cauliflower in a creamy cheese sauce with slithers of almonds or other nuts
- frozen fruit juice cubes or icy poles
- porridge with sugar or honey and fruit (banana, sultanas)
- tempura vegetables (vegetables cooked in a light batter) – potatoes, sweet potato, carrots, beans, pumpkin, zucchini
- stir-fries with thinly sliced meat, vegetables and noodles
- oven roasted vegetables with olive oil – beetroot, sweet potato, pumpkin or potatoes cut into chips.

General wellbeing

Vitamin and minerals

Always talk with your treatment team before taking any vitamin and mineral supplements. Many of these supplements are expensive and there is still controversy about their benefits and safety. Some may interfere with the treatment your doctor has prescribed. Eating healthy and nutritious food usually provides all the vitamins and minerals your body needs.



Alcohol

If you choose to drink alcohol, an occasional glass of wine with dinner, for example, is usually ok. There are times to avoid alcohol, like when you are taking certain medications or undergoing certain types of chemotherapy. You should discuss this with your treatment team.

The 2013 NHMRC guidelines on alcohol consumption recommend that healthy adults drink no more than two standard drinks on any day and that people under 18 years of age, and pregnant and breastfeeding women not drink alcohol at all.

The full guidelines can be seen online at

[nhmrc.gov.au/health-advice/alcohol](https://www.nhmrc.gov.au/health-advice/alcohol)

Exercise

There are many benefits to exercising on a regular basis before, during or after treatment. Exercise not only makes you feel better, it also improves your energy levels, sleeping patterns and general strength and fitness.

Talk to your doctor or nurse first, then exercise professionals about the kind of exercise that might be most suitable for you.

If you are exercising outdoors (for example going for a walk) you need to avoid direct sunlight on your skin. Your skin is particularly sensitive to the damaging effects of ultraviolet (UV) sunlight after treatment and can burn easily. You can protect your skin from the sun by wearing a hat, a long-sleeved top and pants and applying sunscreen to any exposed areas. Try to go out in the early morning and late evening to avoid the sunniest (peak UV) parts of the day.



Food and hygiene guide



Blood cancers and their treatment can affect your immune system and make you more susceptible to infection. The length of time it takes for your immune system, in particular, your white blood cell count, to recover mainly depends on your treatment. Your doctor and nurse will talk to you about how to reduce your risk of infection during this time.

It is advisable to consult your dietitian and treatment team about the kinds of foods to avoid while your white blood cell count is low. Some of these foods may include salads, paté, shellfish, seafood, some vegetables like raw mushrooms and strawberries and soft cheeses (brie, camembert).

It is always important to follow basic hygiene rules about safely storing, cooking and handling foods, to help prevent infection, especially while your immune system (white cell count) is low.

All foods contain some bacteria, which generally is not a problem as long as the food is well prepared and well cooked.

The following pages provide some simple and easy to follow rules on food safety and reducing the risk of infection.



Preparation

- always wash your hands with soap and water before handling food.
- clean surfaces and equipment thoroughly before preparing food.
- wear disposable gloves (available in supermarkets and chemists) when handling raw meat.
- wash chopping boards and knives in hot soapy water between uses when preparing both raw and ready to eat foods.
- wash and peel raw fruit and vegetables before cooking and eating.
- thaw frozen foods completely before cooking or reheating, especially raw chicken and other meats (thaw in the refrigerator overnight, not on the kitchen bench).
- reheat thawed cooked foods, until steaming hot.

Cooking

- cook meats and seafood thoroughly before serving (even if you like rare meat).
- once cooked, serve the food immediately or keep steaming hot until serving. This destroys any harmful bacteria.
- if you are using a microwave, stir food and ensure it is steaming hot all the way through before serving.
- when eating out, order food that is freshly cooked and steaming hot.



Storage

- store raw and ready-to-eat foods separately.
- always store raw meat covered and away from other foods in the fridge.
- if thawing frozen meats keep them below cooked foods to prevent contamination by spillage.
- discard raw meat in the fridge after one day.
- do not eat foods from salad bars, pie or food warmers.
- if cooking food in advance, cool and chill or freeze straightaway – do not leave food to cool on the benchtop.
- avoid foods past 'use by' date.
- avoid foods in damaged packaging.

For more tips on food hygiene and preparation visit [foodstandards.gov.au](https://www.foodstandards.gov.au)

Checklist for a healthy eating plan

- Drink lots of water every day (eight to ten glasses) – keep a drink bottle handy.
- Eat a variety of foods from the Five Food Groups (grain foods, vegetables, fruit, protein foods, dairy and alternatives) every day.
- Include a variety of colourful fruit and vegetables in season.
- Include green leafy vegetables like broccoli, cauliflower, cabbage, brussels sprouts, kale, spinach, rocket, lettuce and bok choy.
- Include coloured vegetables like carrots, pumpkin, sweet potato, capsicum, beetroot and turnip.
- Enjoy citrus fruits and kiwis to increase vitamin C intake.
- Cook vegetables in extra virgin olive oil to increase nutrient absorption (vitamins A, D, E and K).
- Always wash fruit and vegetables before cooking and/or eating.
- Include protein foods (meat, chicken, fish, legumes, eggs, dairy food) with every meal and snack. (Eggs are very nutritious and can be enjoyed daily. Recent research indicates eggs do not raise cholesterol and do not need to be avoided for heart health)
- Eat fish (fresh, frozen or tinned) such as salmon, snapper, herring, sardines, and perch up to three times a week.



Include dairy foods such as milk, yoghurt and cheese or calcium fortified plant alternatives (for protein and calcium)

Ensure an adequate fibre intake by including lots of minimally processed plant foods such as whole grains, cereals (especially oats which are low GI or provide longer lasting energy), vegetables, seeds and nuts.

Include garlic, onion, spices like turmeric and herbs like parsley, coriander, sage, basil, thyme when preparing meals as these are rich in vitamins, minerals and other beneficial plant compounds (phytonutrients).

Limit deep fried, non-nutritious, high fat and sugar foods, such as chips, donuts etc.

Ensure your intake of essential fats is adequate by eating foods such as avocado, olive oil, nuts, fish (especially oily fish like salmon), flaxseeds and oil, and sunflower seeds

Limit alcohol intake to no more than two standard drinks on any one day.

Have at least two alcohol-free days a week. Ask your doctor about alcohol, you may be told to avoid alcohol completely during treatment).

Quit smoking (contact the Quitline, or your GP if you need help to do this – it is hard for many people).

Take some regular daily exercise. Small lots of 10-15 minutes a couple of times a day is beneficial. But remember to only do as much as you are comfortable with.

Stretch, meditate, do yoga and try to laugh more!

Kitchen and pantry suggestions

To make life easier and make nutritious choices simpler, here are some non-essential, but useful suggestions to have on hand in your kitchen or pantry:

whole grain breakfast cereals like oats, muesli, weet-bix	packets of dry biscuits, for example, grain crackers, water crackers and/or rice crackers	herbs – parsley, coriander, basil, sage, rosemary, thyme
tinned legumes -chickpeas, lentils, red kidney beans etc	small tins of tuna, sardines and baked beans for quick snacks	olive oil or vegetable oil for cooking
tinned tomatoes for pasta sauces and casseroles	onions, garlic and ginger	sauces like hoi sin sauce, soy and sweet soy,
dried noodles and pasta	spices – cinnamon, nutmeg, turmeric, coriander, cumin, basil, oregano, star anise	rice noodles
		long-life milk and custard

Top tip:

Try something different such as flat breads and wraps, and corn tortillas or go to your local bakery and ask for their variety of seeded or wholemeal breads. If you are gluten intolerant, there are many types of gluten-free breads available in supermarkets and bakeries

Freezer foods

vegetables including stir-fry mix of carrots, broccoli, capsicum, sugar snap peas, water chestnuts	frozen raspberries and blueberries are a great standby for smoothies and desserts	pre-cooked meals: casseroles, bolognaise sauce
corn and peas, broad beans, cauliflower, baby beans and spinach	fish, chicken fillets, lean red meat (beef or lamb)	bread

References and useful website addresses



Australian Dietary Guidelines

nhmrc.gov.au/adg

Dietitians Australia, What are the Australian Dietary Guidelines?

dietitiansaustralia.org.au/health-advice/what-are-australian-dietary-guidelines

Dietitians Australia, Seeing a dietitian in Australia

dietitiansaustralia.org.au/seeing-dietitian-australia

Dietitians Australia, Find a dietitian

member.dietitiansaustralia.org.au/faapd

Cancer Council, Nutrition and Cancer

cancer council.com.au/cancer-information/living-well/nutrition-and-cancer/

Cancer Council, iHeard – cancer myths and facts:

cancer.org.au/iheard/search/

Cancer Council, Position Statement/Diet and Exercise

cancer.org.au/about-us/policy-and-advocacy/position-statements/diet-and-exercise

Peter MacCallum Cancer Centre, A guide to optimal cancer nutrition for people with cancer, carers and health professionals

petermac.org/CanEATpathway

Recipes

Banana berry breakfast Smoothie

Serves 1

- 1 cup milk
- 1 banana
- A handful of fresh or frozen berries
- 2 tsp chia seeds
- 1 tbsp rolled oats

Mix all ingredients in a blender and serve. Pour into 2 glasses and keep one for a snack or consume at once, depending on appetite



Overnight oats

Serves 1

- 1/3-1/2 cup rolled oats
- 3 tbsps. yoghurt
- ½ cup of chopped fresh, frozen or tinned fruit
- ½ cup milk
- Seeds or chopped nuts as desired

Place oats, yoghurt, milk and fruit in a bowl, small jar and container. Mix to combine and top with nuts or seeds. Leave in the fridge overnight or for up to 3 days for a healthy breakfast or snack.

Variation: Try the above recipe using 2 crushed Weet-Bix instead of oats



Peanut butter and banana on toast

Serves 1

Choose whole grain, rye bread or fruit bread for added fibre. Top toast with peanut butter and sliced or mashed banana. Sprinkle with chia seeds or chopped nuts for extra fibre and nutrients.



Easy omelette

Serves 1

- 2 eggs
- 2 tbsps. milk
- Leftover cooked vegetables or chopped tomato and avocado
- Fetta or grated cheese

Lightly beat eggs with milk. Pour into a heated fry pan and spread with olive oil. Add eggs, cook for 1 minute then top with vegetables and cheese. Once edges begin to bubble, flip in half to finish cooking. Enjoy with grainy bread and a green salad.



Easy healthy dinner

Serves 1

- 1 fillet of meat or salmon or ½ chicken breast (100-150gm meat/per person)
- 1 medium or 2 small potatoes per person
- Enough colourful vegetables or salad to fill half of each dinner plate

Grill, barbeque or pan-fry fish/chicken/meat in extra virgin olive oil. Boil or microwave potatoes or bake in olive oil until golden. Steam or microwave vegetables.

Serve plate with ¼ of plate area each of protein and carbohydrate (potatoes) and ½ plate area colourful vegetables of salad



Homemade healthy burger

Serves 1

Add grilled meat, chicken, fish or vegetable pattie to a whole grain bun with colourful salad vegetables and a cheese slice. Enjoy with tomato sauce or chutney.



Easy baked potato

Serves 1

Boil, roast or microwave 1 unpeeled medium potato. Cut open and serve with your choice of colourful cooked, raw or tinned vegetables, tinned beans, tinned tuna and grated cheese.



Easy and nourishing chicken and vegetable soup

Serves 1

- 1 peeled and chopped onion
- 4 tablespoons olive oil
- 4-6 cups of mixed chopped or frozen vegetables
- 1 L beef, chicken or vegetable soup or 2 tsps stock powder
- 500gm sliced chicken fillets
- ½ cup red lentils
- Fresh chopped herbs to garnish

Heat oil in a large pot and add chopped onion. Stir until browned

Add garlic, vegetables and chicken stir gently for a few minutes until chicken is cooked through before adding stock and lentils.

Turn heat down to a simmer and add extra water if needed.

Simmer for 45-60 minutes or until soup thickens and vegetables are soft.

Enjoy as a chunky soup or blend for a smooth soup.



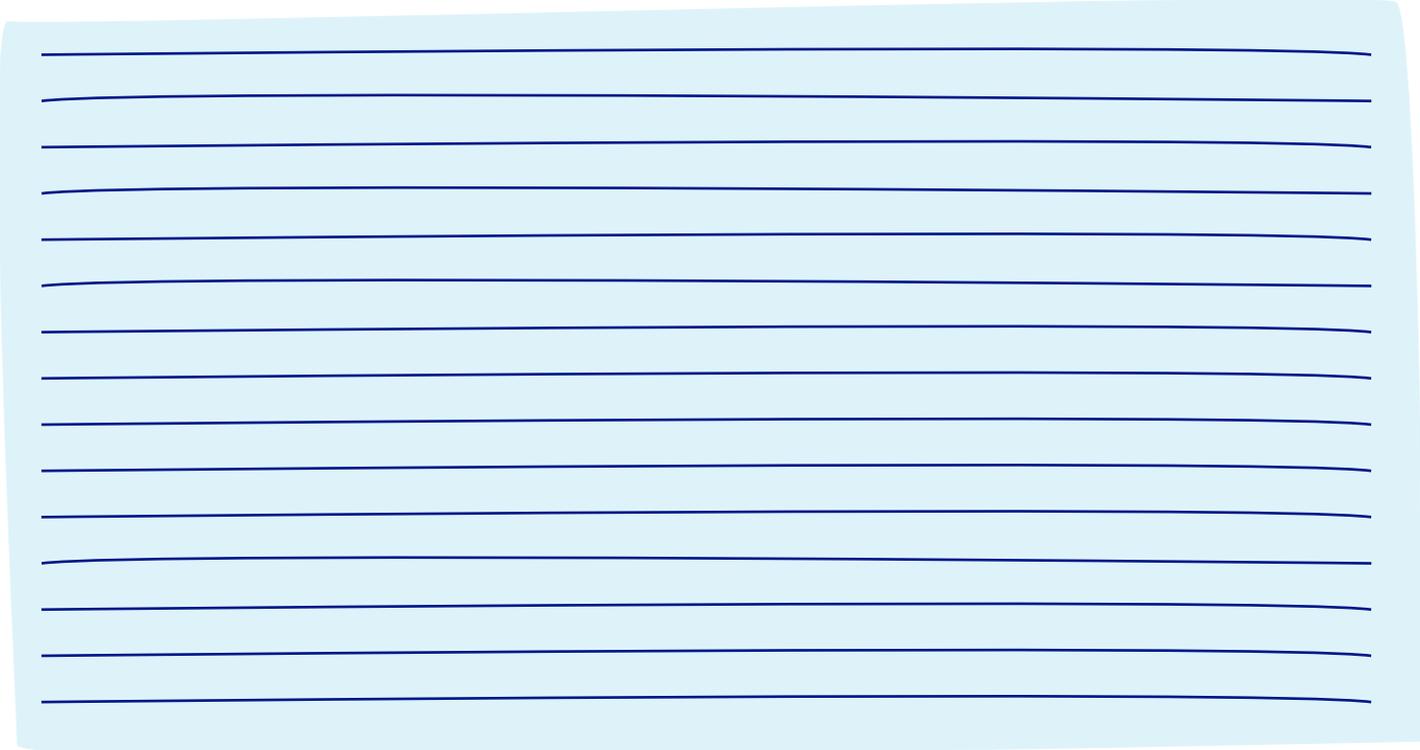
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Other recipe ideas and notes



A large light blue rectangular area with rounded corners, containing 18 horizontal dark blue lines for writing.



Leukaemia Foundation®

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The Leukaemia Foundation acknowledges the traditional owners of country throughout Australia and recognises their continuing connection to land, sea and community. We pay our respects to their Elders past, present and emerging.

The Leukaemia Foundation cares about our environment. Please recycle or dispose of thoughtfully.

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