

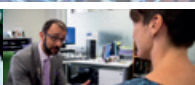
Living well with cancer – eating well

Te noho ora me te matepukupuku –
te kai tōtika



**Cancer
Society**

Te Kāhui Matepukupuku
o Aotearoa



ANY CANCER, ANY QUESTION 0800 CANCER (226 237) Cancer Information Helpline

Your general practitioner: phone _____

Your cancer team: phone _____

Your local Cancer Society: _____

24-hour emergency phone 111

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Te Kāhui Matepukupuku o Aotearoa
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You can get copies of Cancer Society booklets and information sheets from your local Cancer Society, by phoning the Cancer Information Helpline 0800 CANCER (226 237) or by downloading them from our website www.cancernz.org.nz

Ka āhei koe ki te tono kape o ngā puka me ngā whārangi pārongo a te Kāhui Matepukupuku mai i tō Kāhui Matepukupuku ā-rohe, mā te waea atu ki te Waea-āwhina Pārongo Matepukupuku 0800 CANCER (226 237) mō tētahi kape, me tikiake rānei i tō mātou paetukutuku www.cancernz.org.nz.

More information about the Cancer Society can be found in the back of this booklet.

We value your feedback on the information we provide, such as this booklet.

There is an online form you can fill in here:

www.cancernz.org.nz/cancer-information/other-links/feedback.

Living well with cancer – eating well

Eating well and staying a healthy weight is important for your health and wellbeing. Even more so if you have cancer.

Eating well can help you cope better during and after treatment. How you eat and what you eat may change.

This booklet talks about some of the changes you may experience and the eating problems you may have. It offers ways to manage these answering common questions about food and cancer.

You can find information sheets on topics in this book in te reo Māori and other languages on our website www.cancernz.org.nz.

Within the land there is a treasure. It is a gift from Papatūānuku. Her sustenance lies hidden in fruits and vegetables.

**No te whenua, he kura mā tātou.
He koha nā Papatūānuku. Kei ngā hua o te whenua tōna Mauri.**



Te noho ora me te matepukupuku – te kai tōtika

He mea nui kia pai te kai me te whai taumahatanga tōtika mō tō hauora me tō toiora.

He mea tino nui hoki tēnei mehemea kua whai matepukupuku koe.

Mā te kai tōtika e āwhina kia tū pakari ai koe i te wā o tō maimoatanga, i te wā whai muri anō hoki. Tērā pea, ka rerekē te āhua o tō kai, me ngā kai ka kainga e koe

Ka kōrero tēnei puka mō ētahi o ngā rerekētanga tērā pea ka rongo koe, me ngā raruraru tērā pea ka puta. Ka hoatu whakaaro hoki mō te whakahaere i ēnei, me tana whakautu i ētahi pātai auau e pā ana ki te kai me te matepukupuku.

Ka āhei koe ki te rapu i ngā whārangi pārongo mō tēnei kaupapa i roto i ētahi ake reo ki: www.cancernz.org.nz.

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SECTION 1: EATING WELL DURING CANCER TREATMENT



Cancer and its treatment place extra demands on you. Extra energy (calories), protein and nutrients are often needed. Eating well during and after cancer treatment will help you:

- have energy
- maintain your bodyweight and muscle
- cope better with side effects
- recover quickly
- fight infection and heal well
- improve your sense of wellbeing and quality of life.

If you were following a special diet before your diagnosis, talk with your cancer treatment team to ensure your nutritional needs are being met. If you are having problems with eating ask for a referral to a dietitian.

There is a lot of information on how to eat well. You can find some practical advice on pages 30-40.

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Coping with eating problems

You may have problems with eating due to side effects of cancer and its treatment such as:

- fatigue
- loss of appetite (not feeling hungry)
- nausea (feeling sick)
- vomiting (being sick)
- changes to taste, texture and smell
- oral health
- dry mouth
- mouth or swallowing problems
- bowel problems (abdominal pain, wind, constipation and diarrhoea)
- other problems such as changes in your weight.

Treatment affects people in different ways but most eating problems can be managed. They usually go away soon after treatment has finished. Here are some suggestions to help you with these eating problems.

Fatigue

You may feel extremely tired (fatigued) during and after treatment. This can affect your eating. Here are some tips to help you.

- Eat small, regular meals and snacks throughout the day.
- Stock up on ready to eat foods such as tinned or frozen meals and snacks such as soup, yoghurt, muesli bars, dried fruit, nuts, crackers, cheese, tinned fish, hummus and dips.
- Look for food that is easy to prepare, and local meal-delivery options.
- Plan ahead. If you have a freezer, prepare food when you are feeling more energetic and freeze these for use when you are feeling tired.



- Shop online for groceries if you do not have the energy to go to the supermarket.
- Take up offers of support from family/whānau, friends or neighbours to help with cooking meals or buying groceries.
- Avoid missing meals. Try a nutritious drink such as a smoothie or milkshake.

Loss of appetite

Changes in appetite can be normal due to the effects of your cancer, treatment, fatigue, pain, anxiety, or depression. Even though you may not feel hungry, your body still needs food to maintain your weight and support your recovery. Think of food as part of your treatment plan. The following ideas may help.

- Eat small, regular meals and snacks throughout the day.
- Don't rely on your appetite to tell you it is time to eat. Eat at regular times.

- Make the most of your appetite when it is good and you are most hungry.
- If you cannot face food, drink nutritious fluids such as smoothies, flavoured milk and supplement drinks.
- Use easy-to-eat, soft, moist food such as soup, eggs, casseroles, mashed vegetables and gravy, stewed fruit and yoghurt, and milk puddings.
- Eat calorie-rich foods like avocado, cream, butter, margarine or spreads, oil, or salad dressings and protein-rich foods like meat, fish, chicken, eggs, nuts, nut butter, hard cheese, or milk.
- Make your food look appealing by serving smaller portions and using garnishes like herbs, tomato, lemon or orange slices.
- Keep ready-to-eat meals and snacks handy for times when you do not feel like preparing food. Pre-prepared soups, frozen meals, tinned fruit, yoghurt, cheese, dips and crackers are good examples.
- Enjoy your eating by sharing it with friends and family/whānau when possible.
- Try to relax before meals or take a short walk to increase your appetite.

Nausea (feeling sick)

Nausea is a common side effect of cancer treatment. The following ideas may help you.

- Take anti-nausea medication as prescribed.
- Eat small, regular meals and snacks throughout the day.
- Try to avoid getting hungry as this can lead to nausea.
- Eat dry bland foods like toast and crackers.
- Aim to drink plenty of fluids, 1.5 litres is a good daily target. This will help reduce nausea.



- Sip fluids throughout the day, such as ginger ale, lemonade, clear broth, supplement drinks, and ice blocks, or dilute fruit and vegetable juices.
- Limit smells by eating food that is cold or at room temperature food rather than hot food.
- Avoid cooking and kitchen smells by asking for help with meal preparation or use convenience meal options.
- Try drinks and foods containing ginger, such as flat ginger beer, ginger tea, and ginger biscuits.
- Avoid fatty and spicy foods, which can increase nausea.
- Take your time over meals,
- Distract yourself with music, a favourite TV programme, or the company of others.
- Take a short walk in the fresh air before eating or try some slow, deep breathing.

Vomiting (being sick)

Vomiting sometimes follows nausea and may be caused by treatment, stress, food odours or gas in the stomach or bowel. Some changes to your eating can help.

- Take anti-nausea medication as prescribed.
- Sip small amounts of fluids as often as possible. Try dry ginger ale, cold flat lemonade, soda water, Lucozade or chilled tomato juice. Sucking on a hard lolly, crushed ice cubes or an ice block can be soothing.
- If you cannot keep fluids down or vomiting lasts for more than 24 hours, contact your treatment team.
- Start drinking and eating slowly once vomiting has stopped. Try foods like dry biscuits, pretzels, toast or bread, jelly, cooked cereals such as lemon sago, porridge or boiled rice, and soft stewed fruits such as apples, pears, and peaches.
- Introduce small amounts of milk gradually, or try yoghurt.
- Gradually increase your food intake until eating returns to normal.
- Your GP or treatment team may advise you to take a nutritional supplement.

Eating and mouth problems

Changes to taste, texture and smell

Cancer and its treatment can change the way your salivary glands work and affect your sense of taste, texture and smell.

Some foods may have less taste than before and others may have a salty, bitter or metallic taste. Your mouth may be more sensitive to food and drinks that are cold, hot, spicy, or fizzy. These changes can affect your enjoyment of food.

Improving tastes

These ideas may help to improve the taste of your food.

- If you find food tastes bland, experiment with different foods and flavours such as fresh herbs, ginger, garlic, soy sauce, gravies, spices, and relishes.
- If you have lost your taste for meat, try marinating it in soy sauce, honey, ginger, or fruit juice before cooking.
- Try alternatives to meat such as lentils, legumes, nuts, eggs, and cheese.
- If food is too salty, avoid adding salt when cooking.
- If food tastes too sweet, try foods with less sugar such as porridge, and Weetbix.
- Try refreshing, moist foods such as melons and berries.
- If you experience a metallic taste try using plastic or non-metal utensils.

Reducing smells

Here are some ways to help reduce off-putting food smells.

- Choose plain foods with low smell levels.
- Ask for help with meal preparation, or try pre-prepared or easy meal options.
- Use an extractor fan, cover pots when cooking, open doors and windows, or cook outdoors such as on a BBQ.
- Serve food at room temperature rather than when the food is hot or very cold.

Oral health

Before you start treatment you should have a dental check-up. This is to make sure no infection from your mouth will complicate your cancer treatment. Treatment to your mouth and throat, a lack of



saliva (dry mouth), and the use of extra snacks and drinks can affect your oral health. Take extra care of your teeth and reduce the risks of infection and dental problems by following these steps.

- Use a soft toothbrush to clean your teeth, tongue and gums each day.
- Avoid alcohol, smoking and over-the-counter mouthwashes which can dry and irritate your mouth.
- Make sure dentures are cleaned and sterilised regularly to avoid infection.
- Regularly use a gentle mouthwash, such as one made using the recipe below.
- Avoid sugary snacks, soft drinks and acidic fruit juices.

Mouthwash recipe

Add 1tsp salt and 1tsp of bicarbonate of soda (baking soda) to 1 litre of water.
Mix until dissolved.

Store in the fridge.

Discard after 24 hours.

Use as a mouthwash, rinsing the mouth as required. Spit out and avoid swallowing .

Use it often during the day, after food and before going to sleep at night.

This mix is a good cleanser. It helps healing, helps to break down thick saliva and reduces tooth decay.

Dry mouth

Some treatments, such as chemotherapy and radiation to the head and neck, can affect the salivary glands causing a lack of saliva, or sometimes a thick saliva or mucous, making eating difficult. A dry mouth can occur due to dehydration or due to some medication. A dry mouth and lack of saliva significantly increases the risk of infections in your mouth and throat. Here are some things that can help.

- Moisten food with gravy, sauces, custard, cream, milk, butter, margarine, oil or dressings.
- Use tender moist foods such as soups, casseroles, and minced or pureed meals.
- Sip fluids throughout the day such as water, weak or fruit tea, milk, or supplements (if needed).
- Suck ice chips and chew sugar free chewing gum.
- Dip biscuits in hot drinks to soften them.
- Avoid coffee, alcohol, smoking, and dry, salty, spicy, and very hot or cold foods.
- Use artificial saliva, gels or an oil mouth spray (do not use before your radiation treatment).
- Apply lip balm to prevent lips drying or cracking.
- If you have long-term issues with dry mouth after cancer treatment, you will need to talk with your treatment team for more specific advice.

Mouth or swallowing problems

Mouth sores, ulcers (mucositis), infections, and swallowing difficulties (dysphagia) can occur due to treatment for your cancer. Poor teeth and ill-fitting dentures can also cause pain, making chewing and swallowing difficulties worse.

If you need to adjust the texture of your food try soft, moist, pureed or minced food. If you are having ongoing mouth or swallowing issues, or you are losing weight, you may need a referral to a dietitian or speech language therapist.



Photo by Alexander Mills on Unsplash.

Pain and discomfort on swallowing

Tenderness in the mouth and throat can make it difficult to eat, but the following suggestions may help.

- Use pain relief as prescribed.
- Eat soft, moist, minced and puréed foods, which are easy to eat.
- Eat small, regular meals and snacks throughout the day.
- Use a gentle mouthwash regularly.
- Keep your mouth moist by sipping fluids during the day.
- Drink through a straw to help avoid sore areas in your mouth.
- Try drinks such as milk, milkshakes and supplement drinks to get extra calories and protein.
- Avoid alcohol and smoking.
- Avoid spicy, very hot or cold, salty, and acidic food such as kiwifruit, citrus fruit and tomatoes.

Bowel problems

Cancer and its treatment can irritate your bowel causing increased wind (flatulence), constipation and diarrhoea.

Increased wind (flatulence)

If too much wind is a problem it may help to:

- avoid drinking through a straw
- avoid chewing gum
- limit fizzy drinks, or let them go flat first
- limit 'gassy' vegetables such as cabbage, onions, cucumber, peas, lentils, and beans.

Constipation

Poor appetite, being less active than usual, and side effects of treatment can cause constipation (difficulty pooing). Eating regular meals, having enough fibre, drinking plenty of fluid, and keeping active will all help to keep your bowel working properly. The following tips may help to keep your bowel motions regular.





- Drink plenty of fluid (8 to 10 glasses – 1.5 to 2 litres daily).
- Choose high-fibre breakfast cereals such as porridge, Weet-Bix, and All-Bran.
- Increase your fibre intake by adding two or three teaspoons of wheat bran flakes to cereals.
- Choose wholegrain breads and cereals such as brown rice.
- Aim to eat at least two servings of fruit and three servings of vegetables (1.5 cups) daily if you can.
- Include some cooked dried beans and/or peas such as kidney beans, chickpeas and lentils, nuts and/or seeds in your diet.
- Try natural laxatives such as kiwifruit, prunes, and/or their juices.
- Exercise daily such as by walking, biking, and doing yoga.
- Check with your treatment team about using a laxative, stool softener, and/or fibre supplement if constipation continues to be a problem.

Diarrhoea

Infections, some medications, and cancer treatments can harm or irritate your bowel causing diarrhoea and loose watery bowel motions

(poo). Watch for signs of dehydration such as increased thirst, dry mouth, feeling tired, having a headache, and weeing less.

- Take anti-diarrhoea medication if it is prescribed by your treatment team.
- Drink more to replace lost fluids, at least 8-10 glasses (1.5 to 2 litres) of clear fluid daily such as vegetable juice, clear soup, weak tea, or fruit juice. Do not have undiluted sports drinks, as these can make diarrhoea worse.
- Try to have small frequent meals and snacks, and eat slowly.
- Include a small serving of protein in each meal such as meat, fish, chicken, eggs, tofu, milk, cheese, and yoghurt.
- Choose foods that are low in fibre such as white rice, pasta, bread, cereals, bananas, mashed potato, boiled green banana, and taro.
- Avoid foods that may upset your bowel such as wholegrain breads and cereals, dried fruit, nuts and seeds, raw fruit, unpeeled vegetables, spicy, fatty or oily foods, caffeine and alcohol.
- Try soy or lactose-free milk if you experience a temporary intolerance to milk or dairy products.

If your diarrhoea continues, see your treatment team.



After treatment for bowel cancer

After bowel surgery and treatment you may need to eat a low fibre diet for four to six weeks. You should only follow this way of eating if instructed by your doctor or dietitian.

Foods to consider avoiding include:

- seeds, dried fruit and nuts
- most raw fruit and vegetables
- grainy breads and cereals
- tough stringy food such as celery, coconut and gristle from meat
- fatty foods such as takeaways and fast foods.

Foods to try eating:

Food groups	Low-fibre choices
White breads and cereals	Rice Bubbles, porridge, and cornflakes, White rice and pasta White bread, buns, and wraps Plain crackers, muffins, biscuits and cakes
Fruit and vegetables – small servings, soft well cooked and tender	Soft fruit such as banana, melon, and tinned pears Well-cooked carrots, kumara, potatoes, pumpkin, asparagus tips, courgettes, and spinach, avocados, boiled taro and green banana Clear and smooth vegetable soup
Milk and milk products	Natural yoghurt or fruit yoghurt with no seeds Cheese, cottage cheese, sour cream, cream cheese, and ice-cream
Legumes (beans and pulses), fish, seafood, eggs, poultry, meat – soft and tender	Eggs Tofu (a little) Tuna, salmon, poached or baked fish, and fish cakes Very tender or minced red meat or chicken
Fats and oils	In moderation
Fluids	Cow or soy milk, water, tea, Milo, Complan, strained juices (not prune), clear or strained soups
Misc	Honey, salt, jam without pips, Marmite and Vegemite, butter, jellies, and smooth peanut and other nut butters

The Cancer Society has a resource called *'Improving bowel function after treatment'* that gives more guidance.

www.cancernz.org.nz/assets/Uploads/Improving-Bowel-Function-bk-v2-web.pdf

Food safety

Cancer and some treatments (such as chemotherapy and stem cell transplants) can weaken the body's immune system by affecting white blood cells that protect your body against infection. Take care when preparing food, because your lowered immunity can increase the risk of your getting sick from the food you eat.

To make food as safe as possible, see the *Food safety when you have low immunity* guidelines on the Ministry for Primary Industries site:

www.mpi.govt.nz/dmsdocument/7260-food-safety-when-you-have-low-immunity

Prepare and store food to minimise the growth of germs.

- Wash hands thoroughly before meal preparation and eating.
- Wash, dry or cook fruit, salad and vegetables.



- Handle raw meat, fish, poultry, and eggs with care, and clean thoroughly any utensils and surfaces that have been in contact with these foods. Keep raw meats separate from cooked food.
- Use pasteurised milk, cheese and juices.
- Cover leftovers and put them in the fridge within two hours. Eat within 24 hours, reheat until steaming hot, and only reheat leftovers once.
- Use ingredients that are as fresh as possible and use before their use-by date.

Know and avoid high risk foods.

- Avoid raw and smoked seafood, deli salads and meats, premade sandwiches, sushi, egg dishes and any raw or undercooked meat, fish, shellfish or chicken.

Take care if you are eating away from home. If possible ask for your meals to be made fresh and avoid foods that have been sitting for unknown periods of time.

Managing changes in your weight

Weight changes can be common during cancer treatment. Some people gain weight, while others lose weight. Mostly, it is best to try to stay the same weight you were before you had cancer to help your strength, recovery and treatment.

Weight gain

Some people gain weight due to some chemotherapy medications, steroids, hormone therapy, being less active, eating more and/or retaining fluid.



A small increase in weight is not usually a problem. But a large weight gain can affect your general health. It can increase your blood pressure and your risk of developing diabetes and heart problems. Weight increases can affect how you feel about yourself, your confidence, and energy levels.

Why you might be putting on weight

A common side effect of chemotherapy is fatigue. This can lead to you being less active. Treatment may cause fluid retention (called oedema) that can increase your weight. Chemotherapy can also cause menopause for some women. This means a lowered metabolism (the rate at which your body uses energy) and may result in weight gain. During treatment you may crave less healthy foods.

If you are having steroids as part of your treatment, side effects include an increased appetite. Long-term use can lead to a build-up of fatty tissue.

Hormonal therapy involves medicines that lower the amount of oestrogen and/or progesterone in women, and testosterone in men. Changes in hormone levels can lead to increased fatty tissue, a reduced muscle mass, and a slower metabolism.

People with cancer sometimes eat more to make themselves feel better during treatment. Over time, this can result in weight gain.

Most treatment can mean you are less active than usual over a longer period of time, often causing weight gain.

Managing weight gain

Losing weight is not easy and can take time. Don't be hard on yourself - try to set realistic goals through healthy eating and keeping active. Get family/whānau and friends to support you.

Tips for losing weight

- Talk to your treatment team about safe ways to lose weight. Avoid fad diets or medications promising rapid weight loss. You're more likely to keep weight off if you lose it slowly and steadily.
- Follow the healthy eating tips on pages 30-40.
- Try to have smaller meals - use a smaller plate and avoid going back for seconds.
- Choose whole grain bread, pasta and cereals – these contain increased fibre which can make you feel fuller for longer.
- Try to eat plenty of fruit and vegetables which are filling but not too high in calories.
- Limit fat, sugar, and white flour. Swap biscuits, cakes and sweets for unsweetened and unsalted options. Snack on fruit and vegetable sticks rather than biscuits, cake and sweets.
- Drink water instead of soft drinks, and unsweetened tea or coffee with low fat milk.
- Avoid or limit alcohol as it is high in calories.
- Try healthier ways of cooking such as steaming or BBQ instead of frying.
- Limit the amount of takeaways you eat as they are usually high in fat and salt.
- Increase your activity – (see our book Keeping Active on www.cancernz.org.nz). Always start slowly and build up gradually.

If you are concerned about your weight gain, speak to your treatment team for help in managing this.





Managing fluid retention

Call your doctor if you experience any of the following signs of fluid retention:

- if your skin feels stiff or small indents are left after pressing on the swollen area
- if you have swelling in your arms or legs, especially around the ankles and wrists
- if rings, watches, bracelets, or shoes are tighter than usual
- if your hands, elbows, wrists, fingers, or legs are less easy to move.

Weight loss

The side effects of cancer and its treatments can make it hard to maintain your weight.. Eating small frequent meals high in energy (calories), fat, carbohydrates and protein may help you maintain a stable weight.

Food to help maintain weight and strength during treatment

High protein foods	Ways to boost your calorie and protein intake
<p>Meat, fish, chicken, and eggs</p> <p>Tofu, legumes, lentils, and hummus</p> <p>Nuts and nut butters</p> <p>Milk and soy milk (oat, nut, rice and coconut milks are lower in protein)</p> <p>Cheese and yoghurt</p> <p>Nutritious drinks: milkshakes, smoothies or supplement drinks (like Complian, Fortisip, Ensure, and Sustagen)</p>	<p>Use high fat milks, blue or silver top</p> <p>Add extra milk powder to milk (enriched milk: mix 3 tablespoons of powder with 500 millilitres of milk)</p> <p>Add extra margarine, avocado, oil, sour cream or grated cheese to bread, rice, pasta, vegetables, savoury dishes and soup</p> <p>Cook food in oil or a little butter and add extra on the top</p> <p>Add a little cream to cereals, stewed fruits, desserts, baking, soups or drinks</p>
High energy foods	<p>Snack on yoghurt, custard, ice-cream, milk puddings, stewed fruit, baking, dried fruit and nuts</p> <p>Eat bread or toast, pita bread, crumpets or crackers with margarine, pâté, chutney, cheese, hummus, nut butters, avocado, jam and honey</p> <p>Choose nutritious fluids: milk, milo, milkshakes, fruit smoothies, juice and supplement drinks</p>
<p>Oils, margarine, butter, avocado, mayonnaise, cream, sour and cream cheese</p> <p>Baking such as cake, muffins, scones/pikelets, jam and cream</p> <p>Desserts such as rice and custard puddings, ice cream and jelly, instant pudding, and yoghurt</p> <p>Fruit juice and soft drinks</p>	



Photo by Amanda Vick on Unsplash.

Soup can be easy to digest, nourishing and versatile. Here are some ideas you could try.

- Try clear soups to encourage the appetite and provide extra fluid but are low in protein and energy.
- Add energy and protein to the soups with meat, legumes and cereals such as rice and noodles, cheese cream, butter and oil.
- Vary the taste with nutmeg, ground cumin or curry powder.
- Purée or blend soups if you have difficulty swallowing.
- Thicken soups with puréed vegetables, cream, eggs and enriched milk.

Nutritional supplement drinks

If you have tried increasing your calorie intake but are still struggling to eat enough, you may benefit from a nutritional supplement drink. Talk with a dietitian or your treatment team to get the right drinks for your needs such as:

- powdered drinks: Complan, Ensure, or Fortisip
- ready-to-drink liquids: Ensure Plus, Fortisip, Fortisip Multi Fibre, or Ensure TwoCal HN
- fortified fruit juices: Fortijuce, Ensure Plus juice, or Recover
- Calogen (fat only and can only be used in certain situations).

Some supplement drinks are available in supermarkets and others from pharmacies. You may be able to get a Special Authority number and prescription for supplements at minimal cost, after an assessment by your treatment team.

Feeding tubes

If your nutritional needs are unable to be met, your treatment team may suggest a feeding tube. A feeding tube can be used short or long term, to supplement your meals or be your complete source of food and fluid. It is a way to ensure that your body gets the nutrition you need while you are having treatment. Feeding tubes can be managed at home with support and guidance from your treatment team.

Tips for carers

If you are caring for someone with cancer it can be challenging to know how best to support them with any eating problems they may be experiencing. Despite your best efforts, the food you prepare may not always be eaten. Try not to be discouraged – people having cancer treatment do not always have to follow strict eating. You could:

- gently encourage them to eat little and often when they are feeling well
- serve smaller meals as this can make the meal more appealing
- keep ready-to-eat food and drinks handy, such as tinned fruit, yoghurt, milk, crackers and cheese, or frozen meals
- prepare meals that are easy to eat, such as soft, moist, pureed food, if needed
- keep mealtimes flexible
- try new recipes
- make meals as enjoyable as possible – eat together, play music, set the table with candles and flowers



- buy food in small quantities, as taste and appetite can change often
- follow safe food handling practices when preparing food.

“ It’s not always a good idea to offer the person you are supporting their favourite food. Many people told us not to eat favourite foods while on chemo. They did and never wanted to eat them again! ”

Debbie



You can read more about supporting someone with cancer on our website here:

<https://cancernz.org.nz/cancer-information/living-with-cancer/supporting-someone-with-cancer/>

SECTION 2: HEALTHY EATING AFTER TREATMENT



After treatment your body needs a variety of healthy food so that you are getting all the nutrition you need to recover. The Cancer Society recommends food choices based on the [World Cancer Research Fund Cancer Prevention Recommendations](#) and Ministry of Health Eating and Activity Guidelines.

ENJOY A VARIETY OF HEALTHY FOODS EVERY DAY INCLUDING:



plenty of vegetables and fruit



grain foods, mostly whole grain and those naturally high in fibre



some milk and milk products, mostly low and reduced fat



some lentils, legumes, nuts and seeds or fish, chicken and/or red meat (350 - 500g a week) with the fat removed.

CHOOSE AND/OR PREPARE FOODS AND DRINKS:



with unsaturated fats such as canola, corn, rice bran, soya or olive oil, avocado and margarine instead of saturated fats like butter, coconut, palm oil or cheese



that are low in salt (sodium) and choose iodised salt if using



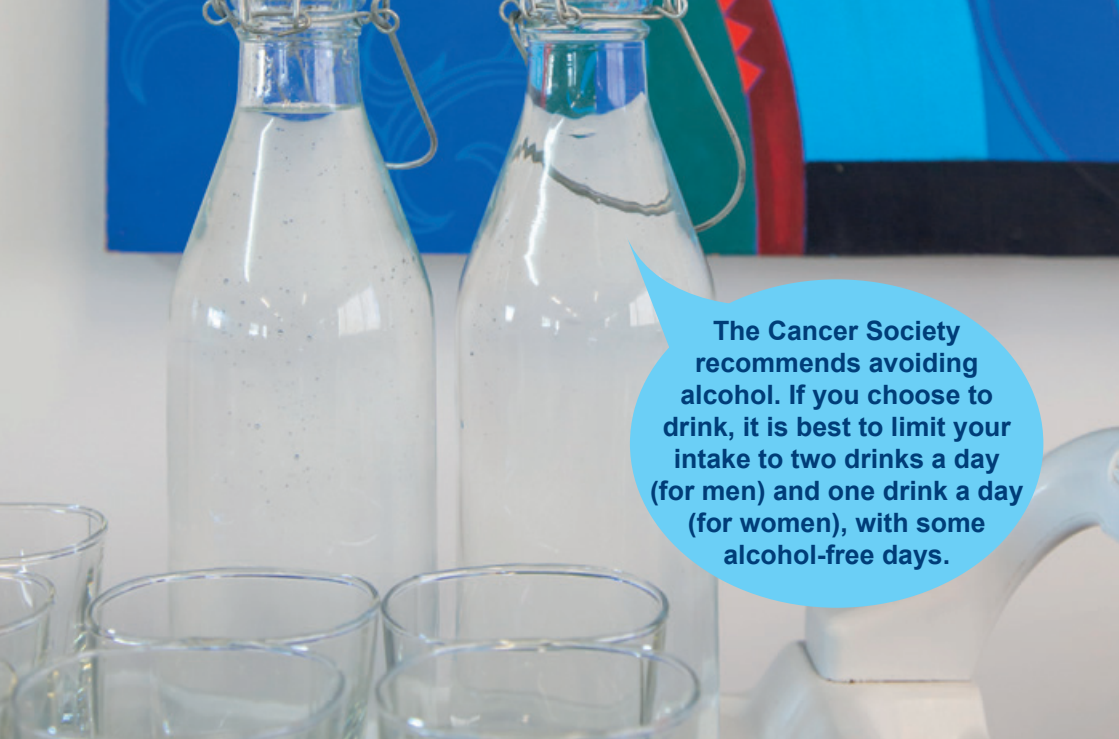
with little or no added sugar



that are mostly 'whole' and less processed such as potatoes rather than crisps.



MAKE PLAIN WATER YOUR FIRST CHOICE OVER OTHER DRINKS



The Cancer Society recommends avoiding alcohol. If you choose to drink, it is best to limit your intake to two drinks a day (for men) and one drink a day (for women), with some alcohol-free days.



1 This material has been reproduced from the World Cancer Research Fund/American Institute for Cancer Research. *Diet, Nutrition, Physical Activity and Cancer: a Global Perspective. Continuous Update Project Expert Report 2018.* Available at dietandcancerreport.org

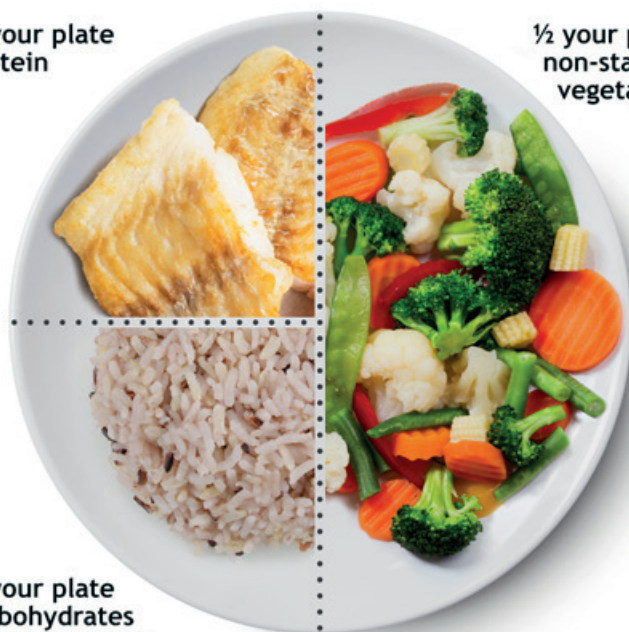
Tips for healthy eating

Reshape your plate

Make plant-based foods the main part of your meal. Using this plate model is a good way to know you are getting enough fruit, vegetables and grains.

**¼ your plate
protein**

**½ your plate
non-starchy
vegetables**



**¼ your plate
carbohydrates**
(rice / taro / kūmeka / pasta)

Serving sizes for fruit and vegetables

The Ministry of Health recommends that New Zealand adults eat at least three servings of vegetables and two servings of fruit each day.

One serve of fruit and vegetables are:

Vegetables (non-starchy)



- **½ cup cooked vegetable** (such as pūhā, watercress, silverbeet, kamokamo (squash), carrot, broccoli, bok choy, cabbage, taro leaves).
- **½ cup salad** or mixed vegetables.

Vegetables (starchy)



- **1 medium potato** (135g) (such as kūmara, taewa, yam, taro, cassava or green banana).

Serving size examples Fruit



- **1 medium** apple, pear, banana or orange
- **2 small** apricots or plums
- **½ cup** fresh fruit salad
- **½ cup** stewed fruit (fresh, frozen or canned).



For information on other serving sizes go to the Heart Foundation site: <https://www.heartfoundation.org.nz/shop/nutrition/docs/food-portions-a4.pdf?1579035340>



Eat the rainbow

We know about eating our greens. But think about the importance of eating your reds, yellows, purples and whites too? Eating a rainbow of plant-based foods helps make sure you get the mix of vitamins and minerals your body needs for hauora (health).

Adding pulses and legumes to your diet

Pulses (legumes, dried peas, lentils and beans) can be used as the main part of a dish. You can buy them in cans or cook them from their dry form. They can be mashed and used to make patties or added into loaves, soups, stir fries and casseroles with vegetables and flavourings. They can be added in to other dishes to increase the protein content.



One cup of dried beans makes about three cups of cooked beans.
Cook the beans until they are tender.



For recipes go to the following site: www.heartfoundation.org.nz/shop/food-industry/pdfs/full-o-beans-cookbook.pdf

Eating well on a low budget

It's not always easy to eat well on a low income, but there are ways you can get the most out of your food spend.

- When you are planning your weekly meals, writing a shopping list and keeping to it can help you avoid going over your budget. It is useful to use a self-scanner to keep track of the costs when you are shopping.
- Go to supermarkets known for value-for-money, and look for specials. While the local dairy or service station can be easier to get to, be aware that you may be paying more than you would at a supermarket.
- Reduce the amount of convenience, processed and snack foods you buy as these cost more than fresh foods.

- Local weekend fruit and vegetable markets usually have cheaper produce.
- Supermarkets own brands are often cheaper than branded products.
- Compare prices by looking at the price per 100grams or litre.



Make your food go further

- Make more at dinner to have for lunch the next day.
- Add cooked dried peas and beans (chickpeas, kidney beans, lentils, split peas) to a dishes to make them go further, especially curries, casseroles and stews, along with more vegetables.
- Slow cookers are great time and money savers, as you can use them to slow cook cheaper cuts of meat.



- Freeze leftovers and any surplus produce from your garden.

Adapted from 'Affordable eats' (2019) www.heartfoundation.org.nz



- **No Money – No Time** – This is a great Australian, interactive website that has healthy eating advice and budget friendly recipes nomoneynotime.com.au/
- www.nhs.uk/live-well/eat-well/20-tips-to-eat-well-for-less/
- www.workandincome.govt.nz/documents/on-a-benefit/the-great-little-cookbook.pdf

Healthy recipe ideas

The Cancer Society has an information sheet with recipe ideas for before, during and after cancer treatment. It can be found on our website here: www.cancernz.org.nz/cancer-information/treatment/eating-well-during-cancer-treatment.





Photo by Sarah Wardlaw on Unsplash.

Healthy eating habits

Healthy eating is more than the food you eat. It is about your cultural eating customs and where, when, why and how you eat. It is about enjoying life and connecting with others. Tips for healthy eating include:

- taking time to cook, eat and enjoy your food
- taking time to enjoy healthy food with family, friends, neighbours and co-workers
- be aware of when you are hungry and eat at that time
- planning what you eat and cooking more often for better nutrition
- involving others in planning and preparing meals so that you pass on your skills and enjoyment of good food
- sharing food and celebrating your culture's food traditions are important
- saying karakia or blessing food before you eat is a way of showing gratitude.

SECTION 3: CANCER AND FOOD DISCUSSION



Vitamin C

Vitamin C comes mainly from fruit and vegetables and has an important role in healing and preventing cell damage. High-dose vitamin C, given by mouth or into a vein, has been used by some people with cancer. However, this treatment has not been tested in clinical trials and to date there are no proven benefits of vitamin C supplements other than through dietary sources. While a good intake of vitamin C from fruit and vegetables is recommended, further research is needed into the benefits and harms of high- dose vitamin C therapy.

Sugar

Sugar is found in both added and natural forms in our food. It is naturally occurring in foods like milk, fruit, breads, cereals, rice and potatoes. Added sugars include white, brown and raw sugar, honey and syrups and are often used in processed food and sugary drinks.

During treatment

Some people worry that eating food with sugar will make their cancer grow faster. Sugar itself has not been shown to increase the progression of cancer. People who have cancer often have eating problems due to the cancer and its treatment. This may cause weight loss. During this time extra fat, protein, and 'added' sugar may be needed to increase your calorie intake to help maintain your weight.



You will be guided by your treatment team on the best foods to eat.

After treatment

While limiting sugar in your diet may not prevent cancer, we can all reduce our risk of getting cancer by making healthy choices. Foods with added sugar, such as highly processed food products and sugary drinks, often have no or very limited nutritional value. They can contribute to weight gain.

When you are not going through cancer treatment, limiting added sugar can be a good place to start with making your diet healthier. It can help lower your weight and provide protection from some weight-related cancers. For example, you could try avoiding sugary drinks and choosing packaged products with less than 10grams of sugar per 100grams.

You may be interested in learning more about this topic here on the Cancer Research UK blog:

<https://scienceblog.cancerresearchuk.org/2017/05/15/sugar-and-cancer-what-you-need-to-know/>

Organic foods

Organic is a term given to foods grown in ways to avoid the use of chemicals as much as possible. Claims suggesting organic foods are better when you have cancer are not supported by evidence.

Organic fruit and vegetables contain the same nutrients, vitamins and minerals as fruit and vegetables not grown organically.

Red meat

Red meat is a source of protein, iron, zinc and vitamin B12. However, to help reduce your risk of developing cancer *The World Cancer Research Fund* recommends limiting processed meat (such as ham, salami, bacon, and sausages) and avoiding large amounts of red meat.



Photo by Tom Hermans on Unsplash.

The Cancer Society suggest limiting red meat to 350-500 grams of cooked red meat each week (around three portions). Other protein rich foods that can be eaten as alternatives include legumes, lentils, tofu, nuts, seeds, dairy products, fish and other seafood, eggs, and chicken.

Higher amounts of protein, including meat, may be needed while you are having cancer treatment.

Anti-cancer diets

Many people want to know if they can fight cancer by eating certain foods or taking vitamins or supplements. There are no studies that prove that any special diet or any combinations of food, can slow or cure or keep cancer from coming back. These include: macrobiotic, low acid/alkaline, intermittent fasting, ketogenic diets (low carbs, high fats) and diets centred on vitamins, minerals, dietary supplements, and herbs.

Eating well, keeping active and maintaining a healthy body weight have been shown to reduce the risk of developing some cancers. Talk to your treatment team if you are unable to eat well, or if you want to learn more about any dietary supplements, herbs or special diets, as they may make cancer treatments less effective.

SECTION 4: FURTHER INFORMATION



Information on eating well while you have cancer treatment

- **Cancer Council Victoria.** *Nutrition and Cancer* www.cancervic.org.au/living-with-cancer/nutrition/nutrition-overview
- **Cancer Council Victoria.** *Understanding Malnutrition and Cancer: Information for people affected by cancer* www.cancervic.org.au/downloads/resources/factsheets/Understanding-Malnutrition-and-Cancer.pdf
- **Cancer Council Victoria.** *Understanding Taste and Smell Changes: Information for people affected by cancer* www.cancervic.org.au/living-with-cancer/common-side-effects/taste-and-smell-changes
- **American Institute of Cancer Research.** *Cancer Survivors* www.aicr.org/patients-survivors
- **American Cancer Society.** *Nutrition for People With Cancer* www.cancer.org/treatment/survivorship-during-and-after-treatment/staying-active/nutrition.html
- **Buckman Weinstein, Jodi. (2010)** *Tell Me What to Eat Before, During and After Cancer Treatment: Nutritional guidelines for patients and their loved ones.* USA: New Page Books
- **Katzin, Carolyn. (2011)** *The Cancer Nutrition Center Handbook—An Essential Guide for Cancer Patients and their Families.* Los Angeles: CFK
- **Van Mil, José; Archer-MacKenzie Christine. (2009)** *Healthy Eating During Chemotherapy.* USA: Kyle Books
- **Canterbury District Health Board.** *Smooth Pureed Diet* www.healthinfo.org.nz/patientinfo/Smooth%20Pureed%20Diet.pdf
- **Cancer Council SA, Australia.** *Recipes 2010-2019* www.cancersa.org.au/information/a-z-index/recipes?admin=1&__containerhide=1
- **Howells, Simone.** *Beyond the Blender: Dysphagia made easy* www.griffith.edu.au/__data/assets/pdf_file/0012/540012/Beyond-the-Blender-dysphagia-cookbook.pdf

- **Macmillan Cancer Support. (2019)** Healthy recipes www.macmillan.org.uk/information-and-support/coping/maintaining-a-healthy-lifestyle/recipes
- **National Health Service UK. (2017)** *Making the most of your pureed meals* (for head and neck cancer patients) www.royalsurrey.nhs.uk/download.cfm?ver=4377
- **Morgan-Jones, Peter; MacLeod, Rod; Ellis, Prudence; Lynch, Jessica. (2018)** *Lobster for Jasino: Fabulous food for our final days.* HammondCare Media www.hammond.com.au/shop/palliative-care/lobster-for-josino

Information on healthy recipes and eating advice

- Cancer Society information sheet. *Healthy Recipes*
- **Te Korowai Hauora o Hauraki. (2010)** *Kia Kaha Te Kai: Easy cooking for healthy whānau* www.korowai.co.nz/publications_resources/cookbook
- **No Money No Time.** This is a great Australian interactive website that has healthy eating advice and budget-friendly recipes <https://nomoneynotime.com.au>
- Gourley, Glenda. (2010) *The New Zealand Vegetable Book.* New Zealand: Hyndman Publishing
- **Healthy Food Guide.** www.healthyfood.com
- **Heart Foundation. (2016)** *Pasifika Flavours: Inspired by traditional Pacific dishes and ingredients* www.heartfoundation.org.nz/shop/food-industry/pdfs/pasifika-cookbook.pdf
- **Auckland Regional Public Health Service.** *Kai Lelei: Recipes for large families* http://ana.org.nz/wp-content/uploads/2016/11/KaiLelei_RecipeBook.compressed.pdf

- **Heart Foundation. (2018)** *Full O Beans: Tasty and affordable legume recipes for the whole family* www.heartfoundation.org.nz/shop/food-industry/pdfs/full-o-beans-cookbook.pdf
- **Heart Foundation. (2019)** *Affordable eats: Easy and tasty family meals that make your food budget go further* www.heartfoundation.org.nz/shop/food-industry/pdfs/affordable-eats-cookbook.pdf
- **Health Promotion Agency.** *My Family Recipes* www.healthykids.org.nz/eat/recipes
- Ministry of Health, [Healthy Eating, Active Living](#), 2015: www.healthed.govt.nz/system/files/resource-files/HE1518_Healthy%20eating%20active%20living.pdf
- Ministry of Health, *Eating for Healthy Vegetarians*, 2012: www.healthed.govt.nz/system/files/resource-files/HE1519_Eating-for-healthy-vegetarians.pdf
- World Cancer Research Fund, *Cancer Prevention Recommendations* 2018: www.wcrf.org/dietandcancer/cancer-prevention-recommendations.

Cancer Society information and support services

The Cancer Information Helpline is a Cancer Society phone line where you can talk about your concerns and needs with trained health professionals. Phone the Cancer Information Helpline 0800 CANCER (226 237).

Your local Cancer Society offers a range of services for people with cancer and their families/whānau. These may include:

- information and support
- volunteer drivers providing transport to treatment
- accommodation while you are having treatment away from home.

The range of services offered differs in each region. Contact your local Cancer Society to find out what is available in your area.



Auckland/Northland

Domain Lodge
1 Boyle Crescent
Grafton
Auckland
09 308 0160

Daffodil House
73 Kamo Road
Kensington
Whangarei
09 437 559360

information@akcansoc.org.nz
Northland@akcansoc.org.nz

Central Districts

Young House (District office)
127 Ruahine Street
Palmerston North
06 356 5355

3 Koromiko Road
Whanganui
06 348 7402

TSB Cancer Support Centre
71 Lorna Street
Westown
New Plymouth
06 7573006

Morris Adair Building
Gisborne Hospital
Gisborne
06 867 1795

310 Orchard Road
Hastings
06 8767638

Addis House
135 Ruahine Street
Palmerston North
06 356355

Waikato/Bay of Plenty

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511 Grey Street
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admin@cancersociety.org.nz

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Rotorua
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rotorua@cancersociety.org.nz

111 Cameron Road
Tauranga
07 571 2035 or 0800 22 77 44
tauranga@cancersociety.org.nz

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Wellington
04 389 8421

27 Kāpiti Road
Paraparaumu
04 298 8514

37 Te Ore Ore Road
Masterton
06 378 8039

102 Hardy Street
Nelson
03 539 1137

The Forum Building
Market Street
Blenheim
03 579 4379

info@cancersoc.org.nz

Canterbury-West Coast

97 Fitzgerald Avenue

Christchurch

03 379 5835

98 High Street

Greymouth

03 768 9557

32 Memorial Avenue

Timaru

03 688 0124

6B Kidman Street

Rolleston

03 925 9708

122 Kermode Street

Ashburton

03 307 7691

contact@cancercwc.org.nz

info@cancercwc.org.nz

Otago and Southland

283 Great King Street

Dunedin

(03) 477 7447

SupportiveCare@cansoc.org.nz

Waitaki District Community House

100 Thames Street

Oamaru

(03) 434 3284 or 027 674 4200

Arcade 84

5/37 Clyde Street

Balclutha

(03) 418 3916 or 027 277 7632

Alexandra Community House Office

14-20 Centennial Avenue

Alexandra

(03) 440 0754 or 027 580 0640

Wanaka Community House

40 McDougall Street

Wanaka

112B Aurum House

1092 Frankton Road

Queenstown

(03) 442 4281 or 027 536 0066

Southland

149 Spey Street

Invercargill

(03) 218 4108

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www.cancernz.org.nz

ANY CANCER, ANY QUESTION
0800 CANCER (226 237)
Cancer Information Helpline

