

Helping your child

eat well





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About this booklet



Josie

Diagnosed with
cancer in 2015.

Children with cancer may experience problems with eating and drinking due to the side effects of treatment, medications or the disease itself. Eating well is important to help your child better tolerate treatment, maintain growth and have enough energy to continue to enjoy their favourite activities.

There are some common side-effects your child may experience during treatment that could affect their appetite and taste, such as mouth sores, nausea, constipation and diarrhoea. While not all children will experience these side-effects, it is important as parents/caregivers to understand what you can do if and when they come up. The information in this booklet is only a guide and should not replace medical advice. If you do have any concerns about your child's eating you should talk to your medical team.

While it is important for children to eat a well-balanced diet, children with cancer may have different nutrition requirements. Eating well means getting a variety of foods from the four main food groups (meat and alternatives, milk and milk products, breads and cereals, fruits and vegetables). Healthy eating guidelines generally recommend that we eat foods high in energy (sweet foods and high fat foods) in small amounts. However, children who experience poor appetite or weight loss may need to eat more of these foods to ensure that they are getting enough energy in their diet.

Food groups



Breads and cereals

Bread (e.g. sliced, chapati, roti, rewena, naan), rice, noodles, pasta, congee, porridge, cereals, sago, steamed dumplings and buns, steamed plain cake (mantou).

Breads and cereals are high in carbohydrate, vitamins, fibre (which helps maintain regular bowel habits) and are a good source of energy.



Milk and milk products

Cow's milk or fortified (B12 and calcium) plant based milk alternatives e.g. soy milk, cheese, yoghurt.

These foods are important sources of fat, protein, vitamins and minerals, especially calcium. If your child has a poor appetite or is losing weight, choose full fat options.



Meat and alternatives

Beef, lamb, chicken, fish, kaimoana (seafood), eggs, chickpeas, lentils, tofu, nuts, seeds.*

These foods are high in protein, which is important for growth and wound healing. Foods high in protein are also good sources of energy and contain vitamins and minerals.

* Nuts and seeds are not recommended for children under the age of five due to choking risk.



Fruits and vegetables

Vegetables (broccoli, cabbage, bok choy, carrots, potatoes, yams, corn, kumara, cassava, tomatoes, taro and pele leaves, puha, watercress etc) and fruit (apples, bananas, coconut flesh, pawpaw, kiwifruit etc). Includes canned, fresh and frozen varieties.

Fruits and vegetables are a good source of fibre, vitamins and minerals.

High fat foods

Butter, cheese, avocado, margarine, cream, ghee, vegetable oil, coconut cream, nut-based oils.

High fat foods are a good source of energy and can be important when children have a poor appetite. They can be added to foods to boost their energy content.

Sweet foods

Sugar, honey, golden syrup and other sweet foods (chocolate, lollies, cakes, ice blocks).

Sweet foods are a good source of energy, which can be important when children have a poor appetite.

Helping your child eat well

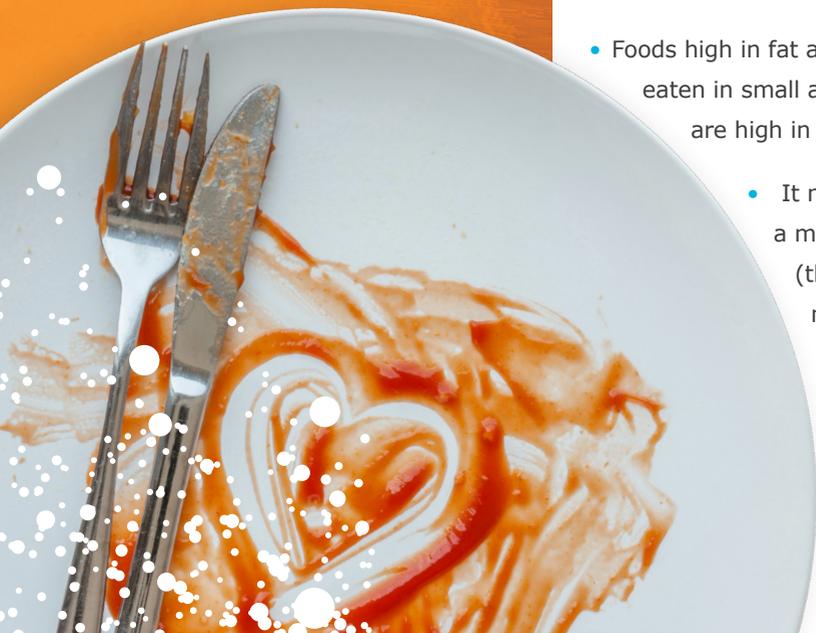
Children with a poor appetite and eating problems may struggle to maintain normal growth during treatment. This booklet provides advice to help encourage children to eat during treatment.

Increased appetite

Some children who have cancer, especially if they are on steroid treatment, can experience an increased appetite and fluid retention. This can lead to weight gain. Often this weight gain is temporary and children will return to their usual weight when treatment is finished.

What you can do

- Encourage them to eat a balanced diet, including plenty of fruits and vegetables.
- Foods high in fat and sugar should be eaten in small amounts, as they are high in energy.
- It may help to stick to a mealtime schedule (three moderate meals and 2-3 snacks per day) for your child, to help them maintain a healthy weight.



Loss of appetite

Children can experience a loss of appetite due to treatment or the cancer itself, which can cause them to not eat enough. They may lose weight or struggle to maintain normal growth. During these times, it is best to make the most of what they can manage to eat.

What you can do

- Offer your child small meals and snacks frequently throughout the day e.g. every 2-3 hours. Offer the largest meal when your child's appetite is best, this is often in the morning.
- Going for a short walk outside might help your child to feel hungry.
- Offer dessert after the evening meal.
- Choose foods that are high in energy and protein and/or add extra energy and protein into your child's food.
- If they are not hungry wait until they are ready to try a snack or drink later, rather than forcing them to eat.
- Limit high consumption of low energy foods like fruits, vegetables, clear soups and water before meals. These can be filling and are typically low in energy and protein.
- Put small amounts of food on your child's plate and during mealtimes praise them for eating, rather than focusing on what they have not eaten. Keep mealtimes to 20 minutes or less, and try to eat together as a family or have your child eat with friends.
- Involve your child in meal preparation and snack choice. This could include choosing between 2-3 different vegetables, helping to decorate the pizza or pressing the mix button on the blender.
- Make the eating environment fun: pretend the dining room is a restaurant, have a picnic on the lawn, use colourful and unusually shaped foods in fun containers and straws in drinks.

How to add extra energy and protein to meals

meal

add

Cereal/
porridge

- Full cream milk/cream/evaporated milk
- Milk alternatives: fortified soy, almond, coconut
- Honey/jam

Bread/roti/
muffin/
rewena
bread/
sandwiches

- Butter/margarine
- Peanut butter/chocolate spread/lemon curd/honey/jam/marmalade
- Mayonnaise/sour cream
- Cheese/paneer

Potatoes/
cassava/
kumara/
taro/yam

- Full cream milk/cream/evaporated milk
- Milk alternatives: fortified soy, almond, coconut
- Cheese/paneer
- Sour cream

Pasta/
noodles

- Butter/margarine/oil
- Cheese/paneer
- Cream/sour cream

Rice

- Butter/margarine/oil
- Cheese/paneer
- Avocado

Cooked
vegetables

- Butter/margarine/oil
- Cheese/paneer
- Cream/sour cream

Crackers/
biscuits

- Butter/margarine
- Cheese/paneer
- Peanut butter/chocolate spread/lemon curd/honey/jam/marmalade

Chips/
crisps

- Cheese/paneer
- Sour cream
- Avocado

Pizza

- Cheese/paneer
- Oil
- Avocado

meal

add

Sauces

- Full cream milk/cream/evaporated milk
- Milk alternatives: fortified soy, almond, coconut
- Butter/margarine/oil

Soups

- Full cream milk/cream/evaporated milk
- Milk alternatives: fortified soy, almond, coconut
- Butter/margarine
- Cheese/paneer

Curries

- Butter/margarine/oil
- Full cream milk/cream/evaporated milk
- Milk alternatives: fortified soy, almond, coconut
- Yoghurt

Meat

- Butter/margarine/oil
- Cheese/paneer

Milk
puddings

- Full cream milk/cream/evaporated milk
- Milk alternatives: fortified soy, almond, coconut
- Honey/jam/syrup

Drinks

- Full cream milk/cream/evaporated milk
- Milk alternatives: fortified soy, almond, coconut
- Ice cream/yoghurt
- Syrup

Desserts/
cakes

- Full cream milk/cream/evaporated milk
- Milk alternatives: fortified soy, almond, coconut
- Peanut butter/chocolate spread/lemon curd/honey/jam/marmalade/syrup
- Sour cream/yoghurt
- Ice cream

examples



Milk + ice cream +
flavouring (e.g. fruit,
chocolate) = Milkshake



Rewena bread +
butter + jam



Congee + meat +
vegetables + margarine/
added oil



Milk + plain yoghurt +
juice + fruit + milk powder
(+ optional ice cubes) =
Yoghurt smoothie



Toasted cheese sandwich
with buttered bread (both
sides) + cheese + tomato



Cooked green banana +
coconut milk



Mashed potato or kumara
+ cream + cheese (with
meat and buttered
vegetables)



Banana fritters + golden/
maple syrup + ice cream



Dosa or idli soaked
in ghee + syrup

Amelia

Diagnosed with
Neuroblastoma
in 2016. Pictured
with Mum Jen
and Dad Aaron.



Nausea (feeling sick) and vomiting

Your child might feel unwell due to their cancer, treatment or medication. Ask your nurse or doctor for medication to help with nausea and give this to your child at regular times.

What you can do

Nausea

- Encourage slow and relaxed eating and drinking. Offer food frequently in small portions. Sitting upright while eating may help.
- Keep your child away from odours and strong smells. These may make them feel worse. Fresh air can help.
- Chilled or room temperature food and drinks can help to minimise odours, compared to hot foods.
- Avoid greasy/fried/fatty foods that are harder to digest. Bland, dry foods may be better tolerated.

Eat

- Tinned fruit
- Plain/ginger biscuits
- Dry toasted bread
- Crackers
- Cereal
- Ice cream
- Yoghurt

Sip

- Fizzy drinks e.g. ginger ale, lemonade, soda water
- Diluted apple juice
- Cover the smell with caps and straws

Suck

- Boiled sweets
- Fruit sweets
- Mints
- Barley sugars
- Ice blocks or ice

Vomiting

- Use mouthwash to keep your child's mouth clean.
- Gradually introduce food and drinks when your child is feeling better.
- Try starting with plain foods.
- Try not to give favourite foods straight away as they may start avoiding them if they vomit these foods.
- Dry foods are usually better tolerated.

Mouth-wash Recipe

¼ teaspoon of baking soda
¼ teaspoon of salt
1 cup of water

Stir baking soda and salt in water. Gargle and spit it out. Make sure your child does not swallow the mouthwash.

Alternatively, choose alcohol-free, child-friendly mouthwashes from the supermarket or pharmacy. This is because alcohol can dry the mouth and young children can accidentally swallow the mouthwash.

Mouth and throat changes

Treatment and medication can cause a sore, dry mouth and throat. Your child may be at a higher risk of catching infections, developing oral thrush, or tooth decay. These can cause further discomfort and taste changes. Ask your nurse or doctor for medication to help.

What you can do

Dry mouth

Have

- Encourage your child to sip on chilled drinks (e.g. milkshakes, fizzy drinks, juices) or suck on flavoured ice cubes to stimulate saliva.
- Sweets, chewing gum or citrus fruits help some children.
- Offer soft and moist foods with extra sauce, cream, oils and syrups, and ensure meats are tender.

Avoid

- Try to avoid dry, sticky or chewy foods such as bread, cold meat, chocolate and pastry.

Sore mouth/throat

- Use mouthwash.

Have

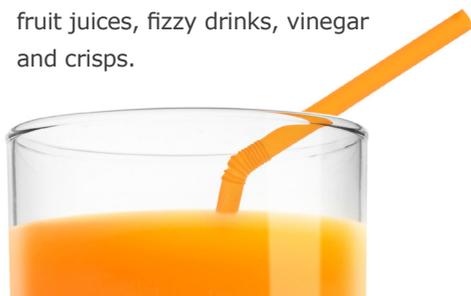
Soft, moist, bland, warm, cool, frozen food and drink:

- Mashed potato/kumara, fish pie, macaroni cheese or scrambled eggs with extra gravy and sauce.
- Soups.
- Chopped, mashed, grated or stewed fruits, vegetables and meat.
- Yoghurts, pudding, jelly, custard, ice cream, mousse, fruit puree, porridge, congee, rice or baby food.
- Nutritional supplements, homemade milkshakes, apple and blackcurrant juice (straws can help).

Avoid

Rough, sticky, salty, acidic, spicy, hot food and drink:

- Bread/toast, peanut butter.
- Curry, chillies, pepper, tomato sauces, citrus fruits like oranges, pineapple, fruit juices, fizzy drinks, vinegar and crisps.



Taste changes

It is common for children with cancer, especially those undergoing chemotherapy and radiotherapy, to experience taste changes. Many children stick to eating a limited selection of 'safe' foods that do not make them feel sick. Most changes in taste are temporary and usually improve over time.

What you can do

- Focus on foods that taste best, even if they are not your child's usual favourites.
- If your child has an aversion to red meat, try other sources of protein (chicken, fish, eggs, cheese, lentils, beans or nuts).
- Where possible, try not to give your child their favourite food before chemotherapy as they may associate this with feeling sick.
- Gradually introduce new foods alongside 'safe' foods in small amounts.

- Experiment with different spices, herbs, sauces, chutney, pickles, relish and marinades such as soy sauce, ginger or honey to flavour food.
- Try using plastic utensils instead of metal if the food tastes metallic.

Mucositis

Mucositis is a side effect of treatment where the mouth and gut become inflamed. This can cause discomfort when eating and swallowing foods.

What you can do

- Use mouthwash (avoid alcohol based washes as these can cause further irritation).
- Try soft, moist and bland food and drink. Avoid anything acidic, spicy, dry and coarse.
- Encourage fluids. Milk-based drinks and soups that are warm or chilled tend to be better tolerated.
- If your child's mucositis is severe, they might be considered for tube feeding.
- Ask the doctor for medication to help soothe the pain and inflammation.

Constipation and diarrhoea

Children can experience constipation and diarrhoea as a result of their cancer treatment. Constipation and diarrhoea can cause a child to feel unwell and have a poor appetite.

What you can do

Constipation

- Encourage your child to drink plenty of fluids.
- Eat regular meals.
- Increasing fibre intake may help. Choose wholemeal or wholegrain breads and cereals such as Weetbix, Sultana Bran, porridge.*
- Include fruits, vegetables, legumes and nuts that are high in fibre.*
- Kiwifruit, prune juices and commercial products such as Kiwicrush and Benefiber may be helpful in preventing constipation.
- Do some exercise each day, even a short walk.

* Note

a high fibre diet might not help if constipation is due to medicine or treatment. Speak to a dietitian, doctor or nurse to see if increasing fibre would be useful. Sometimes it can cause bloating and wind.

Diarrhoea

- Encourage your child to drink plenty of fluids.
- Monitor your child for signs of dehydration, which can include passing small amounts of dark urine, or passing urine infrequently.
- Try small amounts of food and snacks instead of big meals.
- Avoid fatty/greasy food and foods high in dietary fibre (roughage) e.g. dried fruit, baked beans and lentils.

Talk to your doctor or nurse to determine the cause of the diarrhoea and necessary medication.

Food safety

Food safety is particularly important when your child has cancer, especially during treatment, which may suppress immune function. When a child is neutropenic (those with a low count of white blood cells) they are especially vulnerable to infection and food poisoning. If you need further information talk to your medical team.

Guidelines

- Wash hands before eating or handling food.
- Use clean knives, chopping boards and bench tops when preparing food.
- Thoroughly wash raw fruit and vegetables.
- Cook food thoroughly until steaming hot.
- Cooked food should be stored in the fridge promptly and reheated until piping hot.

When buying takeaways or eating at restaurants

- Food should be well cooked and steaming hot.
- Food should be cooked just before it is served.
- Avoid buffets, smorgasboards, salad bars, sushi and street style food.
- If in doubt, avoid.

Foods that should be avoided

- Raw or undercooked eggs (no runny yolks) or foods containing raw eggs (such as homemade mayonnaise, hollandaise sauce, salad dressings, some desserts).
- Unwashed fruits and vegetables, raw sprouts, raw herbs.
- Shop bought cold foods such as salads, unrefrigerated sandwiches or sushi.
- Undercooked or raw meat, poultry or fish. *Canned varieties are ok.*
- Raw or undercooked kaimoana (e.g. kina, pipi, paua, koura (crayfish)). *Can be cooked and eaten steaming hot.*
- Cold meats, pâté, cold smoked fish.
- Soft cheeses (camembert, brie, feta) and blue cheese (*unless cooked*).
- Soft-serve ice cream.
- All deli foods.



Easy meals

Preparing meals and snacks in advance can save you a lot of time and money for the days where your child is booked for multiple appointments.

Here are some handy tips to help you:

- Freeze your meals, bread, meat and vegetables for later.
- Have a ready supply of convenience foods in packets or cans in the pantry. This includes spaghetti, gravy, supplemental drinks, powdered milk, and snacks as well.
- Utilise the microwave oven to efficiently cook vegetables or reheat frozen foods.

Bella

diagnosed at 13 months
with cancer.

Infants 0-12 months

0-6 months

In the first few months of life, a child relies on breastmilk or infant formula as their sole source of nutrition. Complementary foods (or solids) are introduced at around six months of age. First foods should be pureed to a thin consistency. A little breast milk or infant formula can be added to reach the desired consistency. Suitable first foods for a child include:

- Iron fortified baby cereal.
- Cooked and pureed beef, lamb, pork, chicken, fish or vegetarian alternatives (e.g. legumes).
- Congee and plain rice.
- Cooked and pureed vegetables without skins (e.g. kumara, potato, cassava, tapioca, kamokamo (marrow), pumpkin, taro, carrot).
- Pureed fruit without skins, pips or seeds. Cook to soften if necessary (e.g. pureed apple, pear).
- Commercial infant foods (age appropriate).

7-8 months

At around seven to eight months, children can progress to thicker pureed foods, or food with small, soft lumps. In addition to first foods, children can be offered:

- Mashed (rather than pureed) fruit and vegetables.
- Cheese, yoghurt or custard.
- Tofu, tempeh.
- Well cooked noodles and pasta.
- Age appropriate infant foods and cereals.

8-12 months

At around eight to 12 months of age, complementary foods should be offered before breast milk or infant formula. It is important to offer children a variety of different foods, flavours, shapes and textures. As well as foods previously listed, children can be offered:

- Cooked minced or finely chopped meat, chicken, kaimoana (seafood) offered as finger food.
- Breakfast cereals.
- Washed raw fruit and salad vegetables (with pips and cores removed).

Children 12-24 months

By 12 months of age, children should be eating small amounts of the same foods that are eaten by your family. Pasteurised whole (dark blue top) cow's milk can also be introduced as a drink after 12 months of age.

Meal ideas

- Breakfast cereal or porridge and milk.
- Sandwich quarters with cooked and mashed egg and cheese.
- Baked beans on toast.
- Cut up cooked meat/chicken/fish or dahl/lentils/tofu/falafel/vegetable patties with:
 - Mashed potato/kumara/taro/cassava or rice/noodles/pasta.
 - Sliced/grated lightly cooked vegetables.

Snack ideas

- Sliced apple or banana.
- Small pieces of carrot with peanut butter.
- Yoghurt pottle.
- Cheese and crackers.



Children 2 years +

Children at this age can start helping in the kitchen and be involved in making their own food. Here are some recipes that you can try.

Homemade chicken nuggets | serves 4

Ingredients

- 4 chicken breasts (approximately 500g)
- 5 cups (125g) cornflakes
- 3 tablespoons flour
- 2 eggs
- Salt and pepper
- Vegetable oil
- Optional – seasoning (e.g. chicken salt, garlic and herbs, fajita)

Method

- 1 Preheat oven to 200°C bake and coat a rimmed oven tray with vegetable oil (approx. 4 tablespoons) and set aside.
- 2 Remove skin from chicken breasts and cut into bite sized pieces.
- 3 Crush cornflakes by placing in a plastic bag, wrap the bag in a tea towel and crush using a rolling pin.
- 4 Place crushed cornflakes in a shallow bowl.
- 5 In a second bowl combine flour, salt, pepper with any additional seasoning. Lightly beat eggs together in a second bowl.
- 6 Working with a handful of chicken pieces at a time, coat in flour, shaking off the excess, then lightly coat with beaten egg. Finally coat in crushed cornflakes, making sure that each chicken piece is well covered.
- 7 Place coated chicken pieces on oiled oven tray and repeat with remaining chicken pieces.
- 8 Bake for 10 minutes; remove from oven and turn using tongs. Bake for another 10 minutes or until golden and chicken is cooked through.
- 9 Serve with oven baked potato or kumara chips and salad.



Pizza muffins | serves 3

Ingredients

- 3 English muffins (or small pita breads)
- ½ cup of tomato paste
- 3 cups of grated hard cheese (e.g. Colby, Edam, Tasty)
- 1 small can (227g) crushed or pineapple chunks (or fresh pineapple)
- Cooked ham, bacon or chicken (optional)
- Optional – sliced red onion and/or sliced capsicum

Method

- 1 Preheat oven to 160°C fanbake while you prepare ingredients.
- 2 Split muffins in half.
- 3 Place muffins on oven tray (cut side up) and spread with tomato paste.
- 4 Scatter over toppings and top with cheese.
- 5 Place in oven 160°C fanbake for 10 to 15 minutes or until golden on top.

Vegetable fritters | serves 4

Ingredients

- 2 eggs
- 2 cups grated or finely chopped vegetables (e.g. carrot, spinach, courgettes, corn).
- ½ cup self-raising flour
- ⅓ cup milk
- Salt and pepper
- Oil for frying
- Optional – fresh herbs or spices (e.g. mint, coriander, paprika), grated lemon rind

Method

- 1 Drain excess water from vegetables.
- 2 Lightly beat eggs together in a large mixing bowl.
- 3 Mix in the flour, seasoning and vegetables.
- 4 Gradually add milk until a soft batter forms.
- 5 Heat a large fry pan and add oil.
- 6 Scoop heaped teaspoons of mixture into pan and fry until the surface bubbles (approximately two minutes each side). Serve warm.

Serving suggestions: salad, potatoes, rice, sauces (e.g. chutney, sweet chilli sauce, tzatziki, avocado).





Fa'apapa (coconut bread) | makes 2 small loaves



Ingredients

- 2 cups flour
- 1 ½ teaspoons baking powder
- ⅓ cup sugar
- ¾ cup shredded coconut flakes
- ½ can (200ml) coconut milk or cream
- Butter or oil for greasing
- Baking paper

Method

- 1 Preheat oven to 200°C.
- 2 Put all ingredients in a bowl and mix well with your hands until the mixture forms a soft sticky dough.
- 3 Grease two sheets of baking paper with butter or oil.
- 4 Divide mixture in half and flatten each into a rectangle about 1-2 inches thick.
- 5 Fold paper over dough and tuck in edges (it should be tightly wrapped like a parcel).
- 6 Bake for 35 to 40 minutes until crust is golden brown.



Two ingredient muesli slice



Ingredients

- 3 cups toasted muesli (any brand)
- 1 can sweetened condensed milk
- Optional – ½ cup of chopped nuts or seeds, ½ cup of chocolate chips

Method

- 1 Preheat oven to 160°C.
- 2 Grease and line a tin (20 x 30cm) with baking paper (or alternatively 2 x loaf tins).
- 3 Warm condensed milk in a saucepan and mix in muesli.
- 4 Press mixture firmly into tin.
- 5 Bake until top becomes golden (approx. 30 minutes).
- 6 Allow to cool for at least 10 minutes before slicing.
- 7 Store in an airtight container for up to one week. Slice can also be frozen for up to one month.



Baked rice pudding | serves 3-4

Ingredients

- 1 cup short grain rice
- 1 can of evaporated milk
- 3 ½ cups full fat milk
- 3 tablespoons sugar
- Ground nutmeg
- 1 tablespoon* butter or margarine

Method

- 1 Pre-heat oven to 150°C.
- 2 Combine all ingredients, except nutmeg and butter, in an ovenproof dish and stir well.
- 3 Sprinkle ground nutmeg generously and put knob of butter on top.
- 4 Bake in the oven for 1½ to 2 hours. Stir the pudding halfway through baking.

* You can add extra butter if you want to add extra energy for your child.

Roroï (kumara pudding) | serves 3-4

Ingredients

- Kumara (approx. 600 grams or 5 to 6 medium size) – any variety
- Sugar
- Oil for greasing

Method

- 1 Preheat oven to 180°C.
- 2 Thoroughly wash kumara and then grate.
- 3 Place kumara in shallow baking dish and sprinkle with sugar.
- 4 Place thick slices of kumara on top of the grated kumara to prevent mixture from drying out.
- 5 Bake for one hour.
- 6 Once cooked, serve with custard or cream.
- 7 When cold, slice like bread and spread with butter.





Fruit ice cream | serves 3-4 (makes 3 cups)

Ingredients

- ½ cup yoghurt or coconut cream
- 2 ½ cup frozen mango*
- 1 teaspoon vanilla essence
- Optional (extra energy)
 - peanut butter, milk powder
- Optional (toppings)
 - coconut threads, chocolate chips or pieces

Method

- 1 Combine ingredients in a food processor.
- 2 Blend until smooth.
- 3 Serve into bowls and add any additional toppings.
- 4 Serve immediately.

*You can experiment with other frozen fruits (e.g. berries, feijoa, bananas). To freeze banana and feijoa, remove from skin, cut into pieces and freeze in a zip lock bag.



Fruity ice-blocks | serves 4

Ingredients

- ¼ cup yoghurt
- 200ml nutrition supplement drink* (see page 28)
- 1 cup of frozen berries
- ½ banana
- 4 x ice block moulds (or an ice cube tray)

Method

- 1 Puree all ingredients in a food processor or blender.
- 2 Pour mixture into ice block moulds.
- 3 Place in freezer until set (about 1 hour).

* You can substitute nutrition drink with ¾ cup of yoghurt.

Energy smoothie | serves 1-2

Ingredients

- 200ml whole or dark blue top milk
- 1 scoop ice cream or 150ml yoghurt
- 2 heaped tablespoons or skimmed milk powder or nutrition supplement powder (see page 28)
- Chopped fruit (e.g. banana) or a handful of berries
- Optional – honey
- Optional – 1 tablespoon peanut butter



Method

- 1 Place fruit pieces in blender.
- 2 Spoon in powder; add milk, ice cream or yoghurt and peanut butter (if using).
- 3 Blend well and add honey to taste.





Macaroni cheese | serves 1-2



Ingredients

- 1 cup of cooked macaroni (cooked according to packet instructions)
- ½ onion finely chopped
- 1 tablespoon butter or margarine
- 1 tablespoon flour
- ½ teaspoon mustard powder
- ¼ cup of milk
- 200ml vanilla nutrition supplement drink* (See page 28)
- 1 cup grated hard cheese (e.g. Colby, Edam, Tasty)
- Salt and pepper
- Optional – grated vegetables (zucchini, carrot), bacon, frozen peas

* You can substitute nutrition drink with ¾ cup milk.



Method

- 1 Preheat oven to 190°C.
- 2 In a saucepan cook onion in butter on a low heat for about 10 minutes until onion is soft.
- 3 Stir in flour and keep stirring until frothy. Add the mustard.
- 4 Add milk and supplement drink gradually, stirring constantly.
- 5 Cook on a low heat until sauce thickens.
- 6 Remove saucepan from heat and add salt and pepper to taste.
- 7 Stir ¾ cup grated cheese and macaroni into sauce.
- 8 Add in optional ingredients (grated vegetables, frozen vegetables, cooked bacon) and spoon into small ovenproof dish (or ramekins).
- 9 Sprinkle remaining cheese on top.
- 10 Bake in oven until golden brown (around 20 minutes).



Pantry Staples

While it is important for your child to eat a well-balanced diet with food from each of the food groups, sometimes this can be difficult, especially if your child is feeling unwell. Examples of pantry staples that might be helpful for your child are included below.



Meat & alternatives

- Chicken, fish, beef, lamb (fresh or canned)
- Baked beans, chickpeas
- Nuts



Milk & milk products

- Individual yoghurt pottles or pouches*
- Plain milk or flavoured milk
- Milkshake powder (can be added to plain milk)
- Cheese (also high in fat)



High fat foods

- Regular cream or coconut cream
- Peanut butter
- Chocolate
- Avocado
- Mayonnaise**

* Yoghurt pouches can be put in the freezer and eaten frozen by cutting the top of the packet.

** For food safety avoid mayonnaise made with raw eggs. Bought mayonnaise in a sealed jar or bottle is ok to use.



Breads & cereals

- Crumpets
- English muffins
- Porridge sachets
- Pasta (e.g. spaghetti, macaroni)
- Store bought (or homemade) muesli bars
- Creamed rice



Fruits & vegetables

- Frozen or fresh seasonal vegetables
- Canned or fresh seasonal fruit



Sweet foods

- Honey, golden syrup or maple syrup
- Individual wrapped ice blocks or ice cream
- Jelly
- Condensed milk

Nutrition support

Ideally, your child should receive all their nutrition requirements through food and drink. Sometimes however it is too difficult to eat and their weight subsequently drops. Your dietitian may first start your child on nutritional supplement drinks but if they are still losing weight, artificial nutrition support methods will be considered.

Store bought drinks

There are a number of drinks or powders that you can purchase from the supermarket. Some of these include: Complan, Sustagen, Vitoplan, Up&Go, Fast Start. If your child has a poor appetite these drinks can help your child get extra energy throughout the day. You can also add store bought powders (e.g. Complan) that come in a number of flavours to smoothies or porridge.

Tube feeding

If your child has trouble getting enough nutrition, even with oral supplements, or has issues that prevent safe and functional eating, the medical team may discuss the option of tube feeding with you. This involves inserting a soft, thin tube through the nose into the stomach through which a liquid feed containing all the energy and nutrients your child needs is delivered. Your child can still eat and drink even with the tube in. Feel free to give your child foods they fancy to stimulate their taste buds. If you have any questions, ask your dietitian, doctor or nurse.

Oral supplements

Sometimes an oral supplement may be prescribed—Paediasure or Fortini for younger children or Fortisip or Ensure Plus for those over 10 years of age. These sweet milky drinks either come in small bottles that are best chilled or in powder form, which can be added to smoothies. You can also freeze them to make ice cubes or ice cream. Oral supplements as drinks should be offered between meals to prevent your child from filling themselves with the drink instead of food at mealtimes. Your dietitian will recommend how many your child should drink.

Parenteral nutrition

Parenteral nutrition is when your child is fed directly into the blood through a vein. They are only likely to need it if their gut is not working as it should and if they are very unwell. The medical team will discuss this with you if they think there is a need for it.



Ryu

diagnosed with cancer at four years old.
Pictured with Mum Ana and
little brother Michael.

After treatment



Jonty

Diagnosed with
Leukaemia in 2016.
Pictured with Dad
Hamish.

Once your child has finished treatment, they can return to a normal diet and lifestyle!

This can be confusing and difficult for you and your child so it is good to ask your discharge team for specific advice on where to go from here. Keeping a healthy weight and adopting a healthy diet is just as important now.

What you can do

- Offer your child a variety of foods from the four main food groups (refer page 6). Have plenty of fruits and vegetables, wholegrains, some reduced fat dairy and alternatives, and protein from lean meat, seafood, legumes, nuts and seeds.
- Provide food and drinks that are minimally processed and low in saturated fats, salt and added sugar.
- Provide water freely and limit sweet and energy dense drinks like fizzy drinks, juices and sports drinks.
- Have regular mealtimes with family and involve your child in food preparation from shopping to eating.
- Encourage regular activity and limit time spent sitting in front of screens.

These recommendations are from the New Zealand Ministry of Health guidelines.

FAQ

frequently asked questions

Q

Should I be concerned if my child is not eating enough fruits and vegetables?

A

Fruits and vegetables are a good source of fibre, vitamins and minerals. Although an important part of a balanced diet, fruits and vegetables are low in energy that is especially important if your child has a poor appetite or is losing weight. To keep your child in the routine of eating fruits and vegetables, continue to serve them with meals and snacks. For example, add some fruit to your child's milkshake or grate some vegetables into pasta sauces. As your child starts to feel better, you can gradually increase the variety of foods they are eating.

Q

How can we keep mealtimes at home as normal as possible?

A

Where possible, it is important to try and maintain your normal mealtime routine. Depending on what side-effects your child experiences, they may be able to continue to have similar meals to the rest of the family. You might be able to make some adjustments to your child's meal e.g. increase/reduce the portion size or add extra butter or cheese to increase the energy. When your child is feeling well, encourage them to participate in mealtime routines as much as possible. However it is ok if they are feeling unwell to offer them something different from the family meal or allow them to eat their meal at a different time. If you have other children in your house you can discuss with them why their brother or sister might be having different foods, and why this is important to help them feel better.

Q

Do milk products create phlegm and mucus?

A

There is no evidence to show that intake of milk and dairy products increases mucus and phlegm. If your child is avoiding dairy products, you can try other alternatives such as soy or coconut products.



What about vitamin and mineral supplements?



If your child is eating a range of different foods, they probably do not require additional vitamin or mineral supplements. If your child has a poor appetite they may be prescribed nutritional drinks, which also contain vitamins and minerals. Taking high doses of vitamins and minerals in the form of tablets can be harmful and may interfere with your child's cancer treatment. If you are concerned about your child having a limited intake of food, you should discuss this with your child's doctor or dietitian before taking any supplements.



Should I be concerned my child is eating junk food?



Many children like the taste of fast food or 'junk food' such as chocolate, ice cream, chips and pizza. Although we normally advise that these foods be consumed occasionally, they can be a really important source of energy and protein if your child has a poor appetite. When your child is feeling unwell it is ok for them to eat more of these foods than normal. As your child starts to feel better, you should encourage them to eat a wider variety of food from each of the four food groups.



Is there a special diet that my child should be following?



There are many diets that claim to have several benefits for cancer. There is no evidence that cancer can be cured through diet and no 'special' diet that your child should be following. Some diets also encourage several foods to be excluded, which can result in your child not getting enough energy or nutrients. If you have any questions or wish to discuss the advantages of any special diets, it is recommended that you talk to your child's doctor or dietitian before starting.



What do I do? I am feeling overwhelmed.



Taking care of your child can be draining and as a result, sometimes parents may forget to take care of themselves. It is important to make sure you eat healthy, regular meals and stay active as well as taking time to rest. This could mean taking turns with your spouse, a family member or close friend to bring your child to appointments or make meals. Keeping a close support network with other parents who have a child with cancer can help remind you that you are not alone. Remember that Child Cancer Foundation has Family Support Coordinators that help with groceries, advice, practical and emotional support.

For more information

Food safety

The Ministry of Primary Industries (MPI) provides information to the public about food safety and hygiene, including for those people who have low immune function.

Ministry of Primary Industries:
www.mpi.govt.nz/food-safety

Guidelines for Healthy Eating

The Ministry of Health publishes guidelines for food, nutrition and physical activity for healthy children and adults. Published guidelines provide information about recommended serving sizes and food groups as part of a balanced diet.

The Ministry of Health:
www.health.govt.nz

Kid friendly recipes

Kidspot
www.kidspot.co.nz/best-recipes

Nutrition supplement drinks

For information about nutrition supplement drinks which may have been prescribed to your child, including recipes.

Pediasure:
pediasure.com

Nutricia:
www.nutricia.ie/recipes

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Child Cancer Foundation

We hope this was helpful. If you have any more questions talk to your medical team, who may refer you to a dietitian to give you more advice.

Notes

References

Ministry of Primary Industries. (2015). Food safety when you have low immunity. Wellington, New Zealand: Ministry of Primary Industries.

Ministry of Health. (2008). Food and Nutrition Guidelines for Healthy Children and Young People (Aged 0-2 years). A background paper. Wellington: Ministry of Health.

Ministry of Health. (2012). Food and Nutrition Guidelines for Healthy Children and Young People (Aged 2-18 years). A background paper. Wellington: Ministry of Health.

Ministry of Health. (2015). Eating and Activity Guidelines for New Zealand Adults. Wellington: Ministry of Health.

