### TAIORANGA ME TE KAI WHAIMURI I TE MATE PUKUPUKU

KAI AFTER CANCER -HEALTHY EATING AND NUTRITION



### Kai after Cancer

'Wading through the advice around food and figuring out what worked for me took time. It's not one-size-fits-all, but lots of people feel the need to tell you how you should be eating.'

Young person

Nutrition is giving your body the nutrients it needs to function well. When combined with exercise and a healthy weight, it is an important way of helping your body stay strong and reducing the risk of developing other health conditions in the future.

### **MYTHS**

There is a lot of advice out there about what and how you should eat, and it is common to feel overwhelmed by it all. Let's start by busting open the myths about kai and cancer, based on the most up to date information and evidence.

MYTH: Organic Kai is better. There is no evidence that organic kai is higher in nutrients that help to prevent cancer than non-organic food farmed in traditional ways. As long as you are eating food from the four key food groups, it shouldn't matter whether it's organic or not. If you choose to eat organic food that's absolutely fine. The key is to make sure, organic or not, that you are eating from the four key food groups.

MYTH: Red meat causes cancer. Red meat is a source of protein, iron, zinc and vitamin B12 and there is no research to suggest you should stop eating it entirely. However, the World Cancer Research Fund recommends limiting processed meat (such as ham, salami, bacon, and sausages) and only having red meat a few days a week to support a balanced diet.

MYTH: Sugar feeds cancer and makes it grow. There is no evidence that consuming sugar makes cancer cells grow faster or causes cancer. However, over-consumption of sugar, particularly added sugars in soft drinks and processed foods, can contribute to obesity, which is a risk factor for other health conditions.

MYTH: I need herbal supplements. Most people who eat a well-balanced diet don't need to take herbal supplements. However, if you do, with so many on the market, how do you know which one to take, or whether the ingredients are appropriate for you? Some ingredients in herbal supplements impact on the effects of medication, so getting advice before purchasing or taking them is important.

MYTH: Anti-cancer diets help prevent cancer returning. There are no studies that prove that any special diet can slow, cure, or keep cancer from coming back. This includes; macrobiotic, low acid/alkaline, intermittent fasting, ketogenic diets (low carbs, high fats) and diets centred on vitamins, minerals, or supplements. The challenge is that if a diet is not specifically tailored to your body, it might not give your body the nutritional goodness that it needs. Fortunately, healthy eating, keeping active and maintaining a healthy body weight has been shown to reduce the risk of developing some cancers as you get older.

### He aha hei kai? What to eat?

### So what does a well-balanced diet look like and what should I be eating?

According to the Ministry of Health 2020 Eating and Activity Guidelines, eating a variety of foods in suitable amounts from all food groups will go a long way towards meeting your daily nutritional needs. The four food groups are:

- 1. Fruit and Vegetables
- 2. Grain Foods (Fibre)
- 3. Milk and Milk Products (Dairy)
- 4. Lean Meat and Alternatives (Protein).

What kai to eat and how much you need in your diet is explained below.

A healthy balanced diet will give you all the vitamins and nutrients your body needs to provide you with energy, strong bones, an effective immune system, help with digestion, and reduce the risk of obesity and related diseases.

### What and why?

### **FRUIT AND VEGGIES**

Eat as many colours as you can, Red: tomatoes or strawberries; Green: broccoli or kiwifruit; Orange: carrot or mandarin; Purple: eggplant or plum; White; potato or pear.



### How much and how often?

### At least 2 servings of fruit and 5 servings of vegetables every day.

A serve is the amount that fits into the palm of your hand.

- ½ cup of cooked veggies e.g. broccoli, peas, corn, spinach, puha
- A medium potato or kumara (it's good to keep starchy veg like this to a minimum)
- 1 cup of salad
- 1 cup fruit salad apples, pears, bananas or oranges or tinned fruit
- 2 small apricots or plums

Replacing your higher-calorie foods with fruits and vegetables (which tend to be lower in calories) can lead to a lower calorie intake.

### What and why

### **GRAIN FOODS (FIBRE)**

Breads, cereals, rice, and pasta.



### How much and how often

### At least 6 servings each day.

A serving is approximately:

- 1 roll,
- 1 medium slice of rewana/bread
- 1 cup of cornflakes or rice bubbles or 2 weetbix
- ½ cup of cooked porridge
- ½ cup of muesli
- 1 cup of cooked pasta, noodles or rice.

### **MILK AND MILK PRODUCTS (DAIRY)**

Milk, cheese and yoghurt



### 2-3 servings every day.

A serving is:

- 1 cup of milk,
- 1 pottle of yoghurt
- 2 slices of cheese or ½ cup of grated cheese.

Reduced or low-fat options are lower in fat but have higher calcium and protein, so make good choices all round.

### **LEAN MEAT AND ALTERNATIVES (PROTEIN)**

Lean meats, chicken, seafood, eggs, legumes nuts and seeds.



### 2.5 or more servings each day.

A serving is:

- 2 slices of cooked lean meat e.g. roast lamb, chicken, beef or pork
- ¾ cup of cooked mince
- 1 medium fillet of cooked fish
- 2 chicken drumsticks or 1 chicken leg
- ¾ cup of cooked beans (e.g. kidney beans, baked beans or lentils)
- 1 medium pāua or kina
- 1 egg
- ¾ cup of tofu.

Try lean meat such as beef or pork with the fat trimmed, skinless chicken or seafood. Limit red meat to only 2-3 times a week.

Remember to choose foods, drinks and snacks that are lower in fat, salt and added sugar. Use cooking methods such as grilling, baking or microwaving instead of frying. See the plate guide to help you work out how much of each food group you should have on your plate.

### What Does a Healthy Diet Look Like?

A good tip to remember is that you should have more veggies and grains than meat on your plate.



### What if I am vegetarian?

If you are vegetarian, it is important to get the vitamins and minerals you need without meat. Choose kai with lots of iron such as wholegrain cereals, dried fruits and dark green leafy vegetables and ensure you get enough vitamin C through fresh fruit or veggies to help your body absorb the iron.

If you are dairy free and do not eat cheese, milk or eggs, you'll need to get protein from foods such as tofu (soy bean extract) or vegetarian substitutes. If you drink dairy free milk such as soy, almond or oat, choose one that has added calcium and vitamin B12.

For more info on how to get a healthy and balanced veggie diet, check out the pamphlet Eating for Healthy Vegetarians at www.healthed.govt.nz

### Tips for common food challenges after treatment

Cancer treatment and its side effects can result in challenges with eating and weight and you may need help as you transition.

NOTE:
Tips and advice
provided below
do not replace advice
from a registered
dietitian.

### When I had cancer, I had to eat differently. What can I do to start eating better?

If you struggled with poor appetite or weight loss during treatment you may have been encouraged to eat more high energy and high fat foods to maintain your weight. When treatment is over, many young people struggle to make the switch to a healthier, more balanced diet. Remember - The purpose of making positive changes to your diet is to help you avoid excessive weight gain and to support you to develop and maintain positive eating habits for the future. Educating yourself on a healthy diet can help you get started.

### What can I do if I am underweight?

Side effects such as mouth sores, nausea, constipation, diarrhoea or changes to your taste buds are all factors that may have contributed to you losing your appetite or struggling to eat, and this may have contributed to weight loss. If you are currently underweight, your body may not be getting the nutrition it needs and you may need to try healthier ways to gain weight. Some tips to help:

**Take your time.** Introducing new foods to your diet and enjoying kai again can take a while.

**If you still have nausea** (feel sick) talk to your healthcare team about continuing to take anti-nausea medications as prescribed.

**Avoid eating high sugar snacks.** Good nutrition is just as important as calories.

**Speak to your healthcare team** about which nutritional supplements would be best for you.

**If you are struggling with your appetite** try eating smaller, regular meals and snacks throughout the day rather than big meals less often.

**Last, but not least, eat when you're hungry** and don't wait for a mealtime.

### **TIPS FOR HEALTHY WEIGHT GAIN**

If you are underweight, remember once you have reached your optimal weight you will need to switch to a more balanced diet so you do not continue to gain weight.

### **EAT HIGH PROTEIN FOODS**

High protein foods include meat, fish, chicken, eggs, tofu, legumes, lentils, hummus, nuts and nut butters, cheese and yogurt.

### **DRINK HIGH PROTEIN DRINKS**

This includes milkshakes, smoothies, or supplement drinks (like Complan, Fortisip, Ensure, and Sustagen). It also includes milk and soy milk (but note that other milks such as oat, nut, rice, and coconut milks are lower in protein).

### **EAT HIGH ENERGY FOODS**

Oils, margarine, butter, avocado, mayonnaise, cream, sour cream and cream cheese. Baking such as cake, muffins, scones/ pikelets, jam and cream. Desserts such as rice and custard puddings, ice cream and jelly, instant pudding, and yoghurt.

**DRINK FRUIT JUICE.** Fruit juice is high in energy and also offers some nutrients and minerals

### **OTHER TIPS**

- Use high fat milks, blue or silver top.
- Add extra margarine, avocado, oil, sour cream or grated cheese to bread, rice, pasta, vegetables, savoury dishes and soup.
- Cook food in oil or a little butter and add extra on the top.
- Add a little cream to cereals, stewed fruits, desserts, baking, soups or drinks.
- Snack on yoghurt, custard, ice-cream, milk puddings, stewed fruit, baking, dried fruit or nuts.
- Eat bread or toast, pita bread, crumpets or crackers with margarine, cheese, hummus, peanut butter, avocado, jam and honey.

### TIPS FOR HEALTHY WEIGHT LOSS

Switching to a balanced diet will help you develop healthier eating habits and in turn reduce weight gain. Here are some tips:

Swap out certain foods for healthier options. For example, swap potato chips for popcorn. Check out the 'Swap this for that' table on page 7 for guidance.

Take your time. Try to lose weight slowly and steadily. Make a couple of changes at a time, like swapping fizzy drink for water, then make other changes gradually.

Eat smaller meals. Use a smaller plate and avoid going back for seconds.

**Steam or BBQ your food** instead of frying and limit the amount of takeaways you have.

Get your friends and whānau on board. They can tautoko (support) you. Share the resources in this booklet and mahi tahi (work together) to create healthy kai options.

Pack a healthy lunch and snacks. This will help stop you buying from the shop or café. You will have more success with switching to healthy kai if you have it on hand.

Complete a weekly meal plan.

Prepare your meals each day so you have healthy snacks available. Do a good weekly shop to stop you 'popping in' to the supermarket where you might be tempted to buy snacks.

Keep active. Losing weight is not just about your eating habits. Check out tips to help you get moving.



**HEALTHY SNACKS AND LUNCH IDEAS** Choose healthy snacks and lunches lower in

saturated fat, salt and sugar such as:

Bread/Sandwiches. Use different types of wholegrain bread such as rolls, rewena, wraps or pita bread. Add your favourite fillings or spread such as marmite, hummus or avocado.

Healthy baking. Fruit buns, scones, fruit bread or homemade pancakes are healthier than sugary muffins or cakes.

Breakfast cereal. Breakfasts such as Weetbix or muesli are good for digestion. Serve with low fat milk or yoghurt.

**Popcorn.** This can be a quick cheap snack. Add only small amounts of butter, salt or sugar, and if buying ready-made popcorn, choose the plain varieties.

Crackers with cheese or dips. Choose low fat crackers, rice or wholegrain options.

Nuts and seeds. Make sure you choose unsalted or low fat options.

Fresh fruit with yoghurt in a bowl or blended into a smoothie. Bananas, watermelon, oranges, kiwifruit and apples are delicious options.

Low fat yoghurt or plain or flavoured low fat milk.

Veggie sticks with dip or spread. Try hummus, saltreduced peanut butter, cottage cheese or other dips).

Pasta and rice or reheated leftovers. This includes anything with veggies such as stews, homemade stir fries, and soups.

Salad. Include protein like kumara, taro, rice or eggs to keep you full. You can also include lean meat like chicken, or a veggie option like falafel. Include vitamins and minerals from lettuce, spinach, carrot, cucumber or tomatoes and increase flavour with low fat dressing.



### What should I drink?

Drink mostly wai (water). Stay hydrated by aiming for 6 - 8 glasses a day. This reduces the risk of constipation and is good for your skin, hair and gut too.

Choose tap or sparkling water, sugar free soft drinks, unsweetened tea, and coffee. Limit drinks with a high sugar content like fizzy, sports or energy drinks, sweetened coffee, and sweet tea.

### Eating when you're out and about

We all love a good takeaway, but if you are out and need a snack or meal, try healthier options such as:

- Kebabs or wraps (with salad)
- Filled bread rolls
- Pizza with more veggies than cheese
- Sushi
- Pasta with tomato based sauces
- Rice or noodle-based takeaways (not fried) with lots of vegetables
- Baked or stuffed potatoes.

Keep some fruit and a bottle of tap water in your bag in case you get hungry or thirsty.

### **MAKE KAI FUN AGAIN**

### Try some of these tips to help you enjoy it again:

- Treat yourself to a new cookbook or take cooking classes.
- Try food boxes to test new recipes-cook as a flat together to try some healthy competition.
- Celebrate your culture or other cultures traditions or special occasions like
   Matariki or Chinese New Year, sharing kai and undertaking traditional cooking methods or food preparation.
- Make it social eat with neighbours or co-workers, have shared lunches or picnics. Cook with your whānau, flatmates or partner.
- Set healthy eating goals. Track your progress on an app or diary, share your success with others or reward yourself when you do well.
- Don't rush. Take your time preparing and cooking kai and make it enjoyable.

### When I had cancer, there was so much focus on what to eat, that I'm struggling to find food enjoyable. What can I do?

If you had a bad experience with kai when you were on treatment, find new ways to bring enjoyment back to your meal experience, rather than just focusing on what you put in your mouth. Cooking and healthy eating is more than the food you eat.

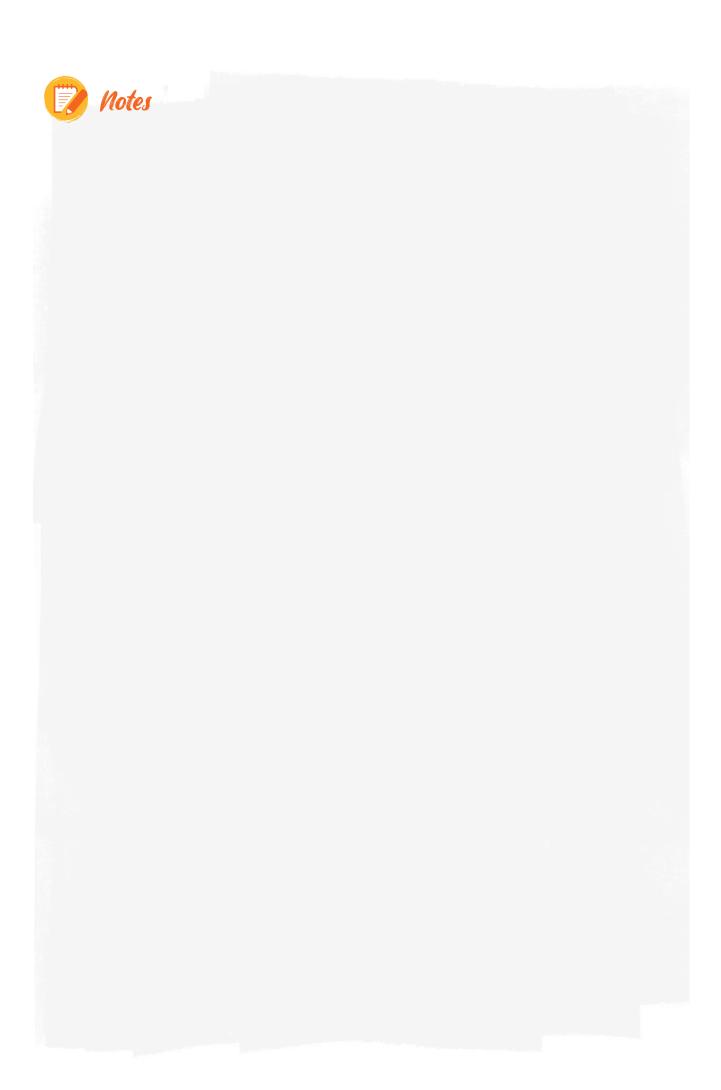
### Try and keep your relationship with kai and your body - positive

Proper nutritional advice does not come from social media or magazines. It comes from speaking with a health provider, such as a dietitian. With the huge emphasis in society on looking good and diet culture, it can be easy to develop unhealthy eating habits or thought patterns without even realising it. Sometimes our mood can also affect our food intake. Pay attention to how you're feeling before you eat so you can be mindful of your food choices.

If you are binging or denying yourself food, reach out for support from your AYA Key Worker or healthcare team.

If weight gain is affecting how you feel about your body, check out our 'Body Image after Cancer' booklet for some tips to help.

Healthy eating
has so many health benefits.
Once you start eating the right kai,
you will have more energy, you will
feel better and your body will love
you for it. For ideas on healthy snacks
to make at home, tear out the
following posters and put
them up in your kitchen.





# **HEALTHY MEAL** TOTA WX XX X



# AND SNACK IDEAS

These simple ideas can be made by using everyday kitchen appliances (eg. toaster, fridge

Using the steps below, mix and match foods to create exciting and affordable meals and snacks.

1. Start with a whole grain or wholemeal base:

## MIX AND MATCH!





Bagel, avocado & tomato

Foast, peanut butter

crackers

tortilla

**English muffins** 

corn thins or rice cakes\*

microwave brown rice\*

toast

bread











Baked beans & tomato on toast

margarine

tomato paste

avocado

peanut butter

cottage cheese

hummus or bean spread

2. Choose a spread:









Brown rice, boiled egg, tuna & vegetables







Pita with hummus & salad

heartfoundation.org.nz

legumes or baked beans canned

boiled

egg

Egg, lettuce, hummus wrap

dried herbs

resh or

reduced-fat

spices (eg.











mixed spice,







Frozen or canned fruit



(eg. blueberries, pineapple)



cinnamon)









vegetables (eg. corn)

tuna or salmon

canned

canned

Fresh seasonal fruit (eg. sliced apples, banana)

 $\nearrow$  Tear or cut out to pop on the fridge

3.Add toppings: SWEET

SAVOURY

### **RESOURCES**

### **WEBSITES**

www.nutritionfoundation.org.nz - recommendations for healthy eating.

**www.healthyfood.com** - has free recipes with images and guidance on healthy food choices.

**www.healthed.govt.nz** - see the healthy eating section.

**www.heartfoundation.org.nz** - for recipes, downloadable posters and tips for healthy eating.

**www.toitangata.co.nz** - kaupapa Māori based approaches to food. Includes recipes.

### **APPS**

**Easy Diet Diary NZ.** A free app featuring a calorie counter, diet tracker, and barcode scanner which tells you what ingredients are in the product. The app aims to monitor energy, protein, fat, carbohydrates and a limited number of micronutrients. Additional features of the app allow weight and exercise monitoring.

**Foodswitch NZ.** This app helps search and compare nutritional information on food products. By scanning the barcode of a food label, you get easy-to-interpret nutritional information presented using colour-coded, traffic light labels of red, amber and green along with suggestions for healthier alternative foods or products.

**Foodeye.** Allows you to access food information such as ingredients, nutritional information, nutrition claims and allergen warnings. You can add or delete foods from your comparison list in your online profile for future use. You can also search for the product by scanning the barcode or search by name, brand or category.

Self Check In	Yes / No
I am aware of what foods I need to eat to stay healthy	
I know where to find recipes and tips to help me with a balanced diet	
I know where to go for support with healthy eating	
My healthy eating goals are to:	
People who can support me with these goals are:	
Notes	