



# FOOD AND CANCER - WHAT'S THE DEAL?





Navigating all the information around diet and cancer can be overwhelming. There's a lot of confusing stuff out there and we know you probably don't have the time or energy to digest it all. So we've created this guide to everything you might be asking about how what you put into your body affects it during treatment and beyond.

We've included the latest research and unpacked controversial topics in a balanced way offering you all the information you need to make decisions that work for you.



# FOREWORD by Dr Hazel Wallace

You never expect to get diagnosed with cancer, let alone when you're in your 20s or 30s. When it does happen, it understandably shakes every aspect of your world. You don't need me to tell you how much of a shock a cancer diagnosis can be, how hard treatments are, how difficult recovery can be, or how much it can change the way you feel about yourself and your body. Finding some sense of normality is key at such a turbulent time.

If there's one thing that remains totally constant throughout your treatment and recovery, it's the need to give your body the support necessary to deal with all of the treatments and stresses that are being thrown at you. Food can play an important role here. But the internet, and of course social media, is the modern-day equivalent of the Wild, Wild West – full of misinformation, dubious claims, and conflicting advice. When we asked, 45% of you said that social media makes you confused about what to eat. So, how do you know what to trust and what to listen to? It's a minefield, but hopefully, we can help with that.

When I came on board as a Trekstock Ambassador, I realised there was a need for a nutrition resource that was available specifically for people going through cancer treatment and recovery. So Trekstock and I brought together a group of doctors, dietitians, patients, and members of the Trekstock community to create a no nonsense, evidence-based, and easy-to-follow nutrition booklet to help support you.

I promise this is not another prescription and we invite you to dip in and out of it whenever you feel the need to. Remember, dealing with cancer is enough pressure for anyone, so try to be as kind as possible to yourself when you're thinking about what to eat. Food should be a pleasure as well as something to fuel your body with, so enjoy what you're eating when you can, and don't beat yourself up if you're not eating what you think you 'should'.

I hope you find this resource, and some of the further notes we've included in the back, empowering and helpful.

Happy eating,

Dr Hazel Wallace @TheFoodMedic



### **CONTRIBUTORS**



Dani Binnington

Founder of
HealthyWholeMe,
diagnosed with breast
cancer in her 30s and
passionate about
how food helped
her recovery.



Sarah Dixon

Trekstock Young Adult Ambassador, diagnosed with Breast in her 30s, passionate about food and how it helped her recovery.



Camilla Ferraro

Registered Dietitian (RD): Oncology + Surgical Nutrition (NHS), Women's Health + Eating Disorders.



Alice May Purkiss

Copywriter extraordinaire and author of Life, Lemons and Melons diagnosed with breast cancer in her 20s.



**Monika Siemicka** 

Senior Specialist Haematology and TYA Dietitian at Guys and St Thomas's Hospital.



Dr Ailsa Sita Lumsden

Consultant Medical Oncologist, Guys and St Thomas' Hospital - Having worked in Oncology for 10 years Ailsa is committed to improving knowledge and access to support for young people with cancer.



**Dr Hazel Wallace** 

Medical Doctor (BSc, MBBCh, MSc) and founder of the food medic.



Jemima Reynolds

Health Programmes Lead for Trekstock For more information about anything you've read in the booklet, or to find out how Trekstock can support you, please get in touch at hello@trekstock.com.

### ENJOY DIPPING IN

Think of this as a handbook you can dip in and out of when you need it.
We recognise in the early days of a cancer diagnosis you're bombarded with information from everywhere (and everyone!) on what to eat, what not to eat, when to eat and how to eat.

We're not here to add to that pressure. We want to make your life easier, so we aim to provide you with the knowledge and tools to make informed decisions around diet and cancer, based on the latest research. You know your body better than anyone else, so a lot of this will be about guiding you to support your intuition.

No matter where you are with your diagnosis – whether it was last week and you're trying to figure out which way is up, or it was three years ago and you're keen to find your new normal – we know how important it is to learn to trust your body again.

We hope you find this booklet empowers you and gives you the helping hand you need to make simple changes that suit you and your lifestyle.

Food is a great tool for doing just that.

#### Section 1

# HOW FOOD SUPPORTS RECOVERY

### Why is food so important?

A healthy, balanced diet provides all the nutrients we need to support our body's functions. Bodies do amazing things every day but we need to give them the right tools to help them do that, especially if they're being put through their paces elsewhere.

Good nutrition during and beyond cancer treatment can help us to maintain a healthy weight, retain muscle mass and strength and decrease overall side effects.

But cancer itself and cancer treatments can make it harder to eat a healthy diet due to changes in your taste, smell or ability to absorb nutrients.

During treatment it's super important that you're giving yourself the right amount of protein and calories to prevent malnutrition, and to allow your body to recover and heal.

### Important:

Despite what you might have read in the darkest depths of the internet, no one 'food' or 'dietary pattern' directly causes (or cures!) cancer so there's no need to be overly restrictive with your diet.

Food is about so much more than just nutrition – it provides enjoyment while sharing food with others is crucial for our social health too. So try not to get so bogged down in the nutritional nitty gritty at the expense of enjoying the food you eat.

### Should I change my diet?

You certainly don't have to but we would always encourage you to retain or adopt as many healthy eating habits as you can, during treatment or beyond. If you are considering making any changes, then we're here to help guide you through the 'facts' and dispel the 'faff' when it comes to diet and cancer.

### Just been diagnosed?

We know this isn't a club you ever wanted to be part of. But we're here to help you make sense of some of the trickier parts of this section of your life.

Those early days of cancer are a whirlwind where it's hard to remember who you are, let alone what on earth you're doing with yourself. Food can be a great place to reconnect with your body and look after yourself at what's otherwise a pretty turbulent time (understatement of the year).

Whether you're looking for guidance on what to eat to aid your recovery from surgery or what you might be able to tolerate during chemo, we want to help.

# Recently finished treatment and trying to find that elusive 'new normal'?

Finishing treatment can be an ordeal in itself. It can be a time that's rife with uncertainty and anxiety, among all the other challenges that you're facing.

During times of stress, eating well can be something that suffers. But working out the best ways to look after yourself is absolutely crucial. And science says that the emotional and mental benefits of cooking are multiple. It's a way to channel energy into something positive, a useful distraction and a way to express emotions through a different medium.

So if you're considering going vegan because you read it'll reduce your risk of cancer returning, or if you're desperate to know how to combine a new lifestyle with a balanced diet, we've got you.

# A few years down the line but keen to know more about looking after yourself?

Cancer changes things. And it keeps changing things long after treatment is over. No matter how long it is since your diagnosis, we know there's a chance you still have questions. So with research changing all the time, we've pulled together information to help you continue on with your happy and healthy lifestyle on your terms.

'First things first.

Dealing with the side effects of treatment is hard enough, let alone coping with changes to your body image too – remember to be kind to yourself.'

**Alice May Purkiss** 

### SO WHAT SHOULD I EAT?

There is no 'one diet' for cancer. It's about eating what works for you, but try to aim for...



# I'm not hungry and I'm losing weight - what should I eat?

We get that treatment can make you feel awful and that eating lots of healthy foods or large meals, often feels like too much to stomach. Sometimes it's important to make the most of your meals and snacks when you are feeling well enough, opting for calorie or energy dense options to ensure you keep your weight and energy levels up.

Opting for smaller meals and snacks over three large meals a day can also be much more manageable. Little and often can be your friend.

Try these nutritious, energy filled snack options:

- Slices of apple or banana with nut butter
- Hard boiled eggs
- Avocado on toast
- Oat cakes with spread (avocado/ cream cheese/nut butter)
- Full fat greek yoghurt with granola and berries
- Cheese toastie (don't forget to butter the bread!)
- Bowl of soup (ie. creamy pumpkin)
   + buttered toast.

Sometimes nourishing drinks are an easier way to get what you need. Try:

- Smoothies made with whole milk, plant milk or yoghurt
- Cups of soup, made with extra oil or added cream
- Hot chai or chocolate (especially good with whole milk or a dash of cream!)

A word on protein

powders...
Whilst we generally recommend getting all your nutrients from whole food and not pills or supplements, plain and neutral protein powders (whether whey or plant based) can be an easy way to add some extra protein and calories to drinks or meals like soups and

Remember protein powders should never be used as a replacement for food but as an addition to your diet.

porridge. A cheaper option is also

skimmed milk powder which is

available in most supermarkets.

## My tastes have changed, what can I do?

Taste changes affect up to 50% of people going through treatment. Treatment can make things taste unusual and some chemo can cause things to taste metallic.

### Five Clever tips to cope

- 1 If you are finding the taste of red meat too much because food tastes metallic try to opt for fish or white meat.
- 2 Avoid using metal cutlery.
- 3 Suck on sugar-free mints or lemon drops to help get your saliva going and distract from lingering bad tastes.
- 4 Go OTT with the flavouring in your meals. Add extra spices and sauces and opt for strong, sour or opposing flavours. Try using pickles and relishes or adding vinegar or lemon to your meal.
- 5 Speak to your team about mouthwashes that can help to keep your mouth fresh from bad tastes that won't go away BUT avoid any that contain alcohol as they can dry your mouth out. Brush your teeth or rinse your mouth out before meals.

The good news is, taste changes are generally temporary and your tastebuds should return to normal after finishing treatment.

## I'm nauseous, what can I eat?

Nausea is one of the biggest side effects we hear about during cancer treatment. If the thought of food is turning your stomach and you're finding it hard to bring yourself to eat anything, there are a couple of things you could try.

### Five tips to combat nausea:

- Avoid having an empty stomach as it can make feelings of nausea worse - even grazing on plain toast, oat cakes or a banana is better than nothing.
- 2 Try taking your anti-nausea medications at least 30 mins before meals and try to not lie down for at least 30–60 mins after eating.
- 3 It can be useful to avoid strong cooking smells or avoid the kitchen if you need to.
- 4 Cold or room temperature foods may be more palatable than hot or strongly flavoured meals.
- 5 Sipping on ginger tea or sucking on ginger lollies /crystallised ginger may also help. Some people find that peppermint tea can also help settle the stomach.



# One minute I have diarrhoea and the next minute I'm constipated, what can I do?

If your bowels have gone to sh%^!, don't fret - it's a really common side effect of treatment. Whilst prescribed products can be useful, there are also a few other strategies that can help get things back on track.

### Five tips to combat constipation:

- Keep your fluids up. Aim to drink enough water so your urine is pale straw coloured.
- 2 Try to eat regular meals and keep your routine fairly consistent day-to-day.
- 3 Gentle movement such as walking, especially in the morning, can help to get things moving.
- 4 Aim to increase soluble fibre.
  This means adding things like
  1-2 tbsp soaked flaxseed to your
  oat porridge, eating 2-4 prunes,
  aiming for wholegrain cereals and
  breads and trying to include extra
  servings of fresh or cooked fruits
  and vegetables.
- 5 Some people also say warm beverages can help to get things moving along nicely. So to speak.



### Five tips to combat diarrhoea:

- 1 Drink up! When you have diarrhoea you lose a LOT of fluids so it's important to replace them. Aim for fluids like water and avoid sugary drinks, juices and sports drinks as these can make the diarrhoea worse.
- 2 It can be useful to opt for plain, starchy foods when you've got really bad diarrhoea and temporarily avoid eating too much fibre (eg. raw fruits and vegetables, beans, nuts and seeds).
- 3 Avoid rich and greasy meals (such as takeaways) and spicy dishes until diarrhoea resolves.
- 4 It can be useful to temporarily avoid alcohol and coffee.
- 5 If your diarrhoea is related to antibiotic use then it may be useful to include servings of probiotic foods like live yoghurt into your diet.

### Important:

If you are experiencing severe diarrhoea (eg. up to 6 times a day) then it's important to touch base with your medical team or go to A&E as this may be an acute effect of treatment or may be caused by a bug. It's crucial to get checked out and have your fluids replaced.

# I've put on weight, what might help?

Weight gain is a really common side effect of cancer treatment that can be upsetting. Often this is due to steroid treatment increasing your appetite.

Cancer can also lead to fatigue and decreased physical activity levels and the emotional toll of a diagnosis may lead to eating for comfort too.

Our number one tip? Cut yourself some slack when it comes to weight gain. We know some medications can increase appetite and cause biochemical changes that may contribute to changes in weight, and also, often food choices have to be adapted to deal with all the side effects we've already discussed. This can lead to a temporary reliance on convenience foods or decreased intake of fruit and veg.

There are many reasons why weight may increase during treatment but it's important to know that this is 'okay' and there's no need to be so hard on yourself.

We know it's easy for us to say but try not to get overly anxious about restricting your diet to 'lose weight'. Instead when you're feeling well, focus on working towards getting plenty of fruit and vegetables, wholegrains and lean sources of protein (such as eggs, fish, poultry, tofu, nuts, seeds and red meat), and try to move your body as much as you can.

Check out page 10 for our tips on what makes up a healthy, balanced diet.

## Neutropenia – what the heck should I eat?!

If you've been told by your doctors that you're neutropenic (meaning your risk of infection is higher) you should be more careful than usual with practicing good food hygiene. When you're neutropenic your immune system is less able to resist any potential foodborne bugs, so reduce the risk of putting it through its paces.

### Five tips to manage neutropenia

- 1 Wash your hands thoroughly before eating and preparing food.
- 2 Store leftovers in the fridge and reheat dishes until piping hot!
- 3 Temporarily avoid food items that contain live bacteria (eg. all unpasteurised dairy products, soft serve icecream, mouldripened cheeses, live yoghurts and fermented foods).

4 Steer clear of uncooked foods that may harbour nasty bacteria such as raw fish and seafood, cold salads, cold meats, raw or runny egg and sushi.

5 Wash all fruit and vegetables well before cooking or eating.

Your team will give you more specific advice if you're severely neutropenic too – ask to speak to a registered dietitian at your trust.



### Section 2

### **LET'S TALK ABOUT...**

Pretty much everyone and their wife has an opinion about what you should and shouldn't be eating both during and beyond cancer treatment. The internet is awash with 'research' and 'studies' decrying meat, dairy, soya, booze and sugar while recommending fasting, juicing, going organic and going vegan.

It's a lot to process, especially when chemo brain is VERY REAL, so we've pulled together the facts on the hot topics so you don't have to.

### 1 Meat

Evidence indicates that eating red meat (beef, pork, lamb and goat) is a probable cause of colorectal or bowel cancer, but that processed red meat is a convincing cause of colorectal cancer.

Yep, the evidence is that consuming meats which have been smoked, cured or had salt or chemical preservatives added rather than having just been cooked or reformed, can increase your cancer risk.

### What's the link?

Scientists think the link between consumption of processed meats and an increased risk of bowel cancer relates to the preservatives added to these meats.

### How much is too much?

The World Cancer Research Fund advise reducing red meat consumption to 500g (cooked) per week, but avoiding processed meat entirely if possible.

The UK government have less stringent guidelines and advise simply reducing both red and processed meat consumption to 70g per day.

## Does that mean no more bacon? Salami? Chorizo?

We don't want you to worry that you can never eat bacon at brunch again. The occasional bit won't be harmful, but try to focus on quality over quantity when it comes to red meat.

If you can, it's worth choosing good quality and sustainably farmed sources and focusing on including lots of plant based foods on your plate too. Having some meat-free meals every week is a great step in the right direction.

Do you need to go vegan though? Absolutely not, unless you want to. That's a personal choice.

### 2 Dairy

First things first, currently there is NO evidence of any clear link between dairy and cancer. There has been lots of conversation around milk and dairy intake increasing levels of certain growth factors in our blood that can be linked to tumour growth. If you've ever googled 'dairy and cancer' you'll have seen this.

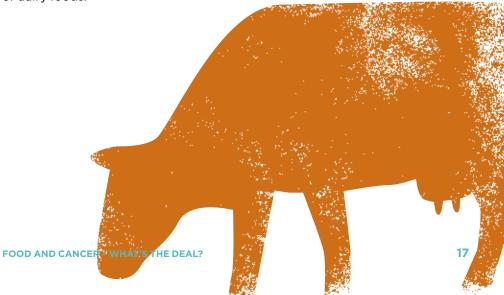
Many research studies have explored this and found no 'cause and effect' between eating dairy and increasing risk of cancer. In fact, some studies actually show increased rates of cancer in those with a lower intake of dairy foods.

## So how did dairy even become linked to cancer?

The hysteria around 'dairy and cancer' started when geologist Professor Jane Plant claimed that cutting dairy from her diet slowed the progression of her breast cancer.

The cornerstone of her work was based on the fact that women in China had lower levels of breast cancer and consume low levels of dairy. But there are many differences between Chinese and Western women that may account for this.

We can't just draw a straight line to dairy intake. Chinese women also tend to have lower rates of alcohol consumption, early pregnancy age, along with lower rates of obesity. All of these are proven to lower the risk of breast cancer.



### Calcium

# Here's what you should know about your calcium intake:

Milk and dairy products are a concentrated source of protein and calcium (which is vital for bone health and to counter the effects of steroids during cancer treatment). It's important to make a conscious effort to find these nutrients elsewhere if dairy doesn't feature in your diet.

Dairy isn't the only way to get your calcium hit. Here are some non dairy sources of calcium and how much you would need to consume to match your recommended daily allowance of calcium.

# How much calcium do we need daily?

Around 2-3 servings of dairy foods or equivalent is the recommended amount. However, if you are taking high doses of steroids, are pregnant or breastfeeding or have pre-existing osteopenia/osteoporosis then you should aim for around 4-5 servings per day.

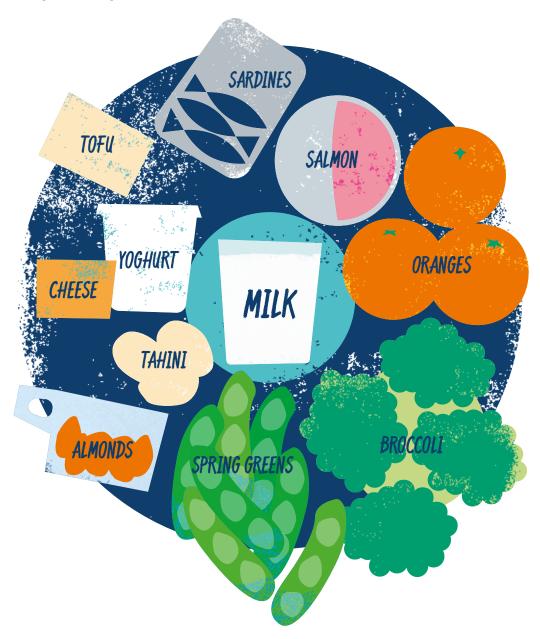
Important!

If you drink plant-based milks then make sure to buy one that is fortified with calcium - NOT all 'mylks' are created equal.

To get a similar amount of calcium as that in a glass of milk you need to consume:

- 150g yoghurt or a matchbox size piece of cheese.
- 200 mls non dairy milk (fortified with calcium)
- 60g of soya bean tofu (check the back of the pack for calcium chloride/carbonate in the ingredients though!)
- ½ tin of sardines (60g) with edible bones
- ½ large tin of canned salmon (110g) with edible bones
- 3 medium oranges
- 4 x heads of raw broccoli!
- 5 x servings (75g) spring greens
- 3 tablespoons of tahini
- A handful of whole, raw almonds.

Examples of the quantity of non dairy food you need to eat to get your daily calcium intake



### 3 Sugar

Sugar has been made the villain of our diet. But how did the sugar and cancer idea come about?

Tumour cells grow very quickly, multiplying at a fast rate and thus need a lot of glucose. SO, using this logic, if cancer cells need lots of glucose, then cutting all sugar out of our diet must help stop cancer growing in the first place, right? It's not that simple.

Stating that sugar is responsible for kick-starting or fuelling a cancer's growth is a massive oversimplification of some pretty complicated biology.

Healthy cells need glucose too and there's no way of telling our bodies to let healthy cells have the glucose they need, whilst not giving it to cancer cells. Our bodies have a fail-safe system that never lets our blood glucose level get too low. So eating less sugar will just make the body use its other resources (like fat and muscle stores) to produce the glucose it needs. Following low carbohydrate or restricted diets may also compromise our health in the long term by eliminating foods that are good sources of fibre and vitamins or minerals.



### **Cutting Out Carbs?**

This can be particularly concerning when you have cancer because some of the treatments can put the body under a lot of stress and result in weight loss and loss of muscle mass. Compromising your nutrition by restricting your diets can heighten this effect and interfere with tolerance of treatment and hinder recovery.

# Eating less sugar isn't a bad thing though?

No. Not over-consuming refined sources of sugar is still key to a healthy diet. While we don't endorse cutting sugar out altogether, we could all do with eating less of the sugar and refined carbohydrates we get from fizzy drinks, sweets, cakes, pastries and white breads.

#### 4 Booze

Alcohol consumption has been linked with many cancers including breast, bowel, liver, throat/mouth and oesophageal cancers

Consuming alcohol has also been linked to changes in hormone metabolism, increasing levels of the main form of oestrogen in women and the risk of breast cancer. So, should you cut it out completely?

Why? - Alcohol is broken down by the bacteria that live in our guts which can damage healthy tissue, such as the cells that line our large bowel - increasing the risk of bowel cancer, for example. The reason for this is that consuming alcohol has also been linked to changes in hormone metabolism, increasing levels of the main form of oestrogen in women and the risk of breast cancer. Like smoking, there is unfortunately NO safe level when it comes to drinking alcohol and cancer risk, so your best bet is to follow government guidelines.

Current guidelines suggest a maximum of 14 units per week and not all in one sitting. This is the equivalent of 14 single spirits and six pints of lager or small glasses of average-strength wine. Aim for as many alcohol free days in the week as you can.

### 5 Soya

Scared of soya? You're not alone. Somehow this perfectly acceptable source of plant based protein has got itself a pretty bad rep.

The supposed link between soya foods and cancer stems from the fact that soya beans contain compounds called phytoestrogens. The fear of eating soya, especially for people with hormone positive breast cancers, stems from the idea that these compounds are said to have 'oestrogen-like' properties so must drive the growth of breast tumours. Right?

Wrong. These plant based oestrogens are chemically different to human oestrogen. In fact, research on consumption of soy foods and cancer (although limited), suggests that eating whole soybean products like tofu, tempeh, edamame, soy milk or similar may actually have a positive impact on overall mortality and prevention of breast cancer. Women in countries with high consumption of soya foods (eq. Japan and China) appear to have lower rates of breast cancer and consuming soy-based foods even appears to decrease risk of lung cancer in non smokers.

So the bottom line is: there's no reason to avoid soya foods. When included as part of a broad diet, they provide a valuable source of plant-based protein.



20 TREKSTOCK

### 6 Fasting

Fasting and cancer is one of the 'hot topics' in nutrition at the moment. Findings from several animal studies have shown that fasting appears to both reduce the toxicity and increase effectiveness of chemotherapy. Although the results from these animal trials show promise, can they be translated to patients?

In a case report of 10 patients, being treated for a variety of cancers, those who fasted by consuming water alone, or with vitamins in some cases, before and after chemotherapy reported greater tolerance to treatment. Compared with previous non-fasting treatments, they also reported less side effects such as fatigue, weakness, and gastrointestinal symptoms.

There were some side effects reported from the fasting though, including dizziness, hunger, headaches and weight loss.

# Sounds ideal, right? Should all chemo patients, fast?

Well, no. The findings we have from animal studies and a small pool of human studies suggest that fasting during cancer treatment is not overly harmful and may be beneficial. Fasting is also seemingly easy to do, so it's understandable that patients may want to experiment with fasting during treatment BUT there are a lot of unanswered questions.

### A glimmer of hope?

Although the scientific evidence around fasting during treatment and potential beneficial effects is very LIMITED, it has resulted in a plethora of unproven claims appearing on the interwebs. Claims that fasting treats cancer, prevents recurrence, or 'renews the entire immune system' have been made but are completely unfounded. There are also many 'fasting products' including liquids and supplements being marketed online that claim to ensure 'effective' fasting during cancer treatment.

Sounds like little more than a money making scheme to us.

Any sort of fasting carries risk and can be incredibly dangerous if you're diabetic - so inform your medical team if you are ever thinking about trying any form of fasting.

Fasting is not appropriate for all patients receiving cancer treatment, especially those with a history of eating disorders, diabetes, a low body mass index (less than BMI 20) or those who have lost more than 10% of their weight in the preceding year.

### 7 Juicing

A glass of fresh made juice can be a great addition to your diet, especially to get a few extra servings of fruit and vegetables. If you're struggling to get all of your 5-a day in and don't feel up to eating a lot, juicing can be a simple solution.

But juices should never replace whole meals and we would never, ever recommend juice-only fasts, as you would be unable to get the protein, fibre and calories that your body needs to support you to thrive and maintain your weight during treatment.

When juicing only fruits we can potentially consume large amounts of sugar too, and we are also missing out on all that valuable fibre from the fruit and veg. If you're keen to have the odd juice, try including veg toospinach, kale, cucumber, carrot and beetroot work well.



### 8 The Alkaline Diet

### Are 'acidic' foods actually causing cancer?

No. The alkaline diet is based on the theory that the food that we eat has the potential to change the acid-base balance of our body. You may have read that eliminating acidic foods and only eating alkaline foods can cure cancer? This is based on **bad science**.

### Does eating acidic foods affect the pH of our body?

The short answer is NO.

Our bodies are tightly regulated and this is all taken care of behind the scenes by your lungs and kidneys. The only time blood and body pH tips out of balance is when something very untoward is going on inside the body.

The foods that we eat do not change the pH of our blood.

# 'But I know that my urine pH changes depending on the foods that I eat?'

It's true that the foods we eat can influence urine pH. Your urine is a fluid full of waste products. Excess acidity is eliminated in the kidneys. Eating more 'acidic' foods can make your urine more acidic – but just your urine, not your blood, or cells, or brain, or your big toe.

There is absolutely no link between eating foods that have an acidic pH and cancer.

### 9 Supplements

Should I take supplements? No. If you have a healthy balanced diet you should be able to get all of the essential nutrients that your body needs through food alone. You can do this by eating a diet rich in:

- fruit and vegetables
- wholegrains and legumes (beans, peas and lentils)
- dairy or fortified alternatives
- good quality meat and fish or plant foods rich in protein such as tofu, in addition to healthy fats from oils, nuts and seeds.

### However, there are a few exceptions:

- 1 Vitamin D is made in our skin following exposure to sunlight. In the UK, advice from Public Health England (PHE) is that all adults should be taking a 10 mg supplement of vitamin D each day throughout the autumn and winter months. Be sure to check your Vitamin D level with your GP and they'll advise you of the best way to supplement if necessary.
- 2 If you exclude certain foods from your diet, for example if you don't eat meat or other animal products, you might be at risk of deficiencies in certain nutrients, in particular vitamin B12. This cannot be obtained from plants. In this case we'd recommend including a supplement.

3 If your appetite is very low, or you're suffering with vomiting or diarrhoea and you don't feel like you're able to get all the nutrients from your diet, supplements can be helpful to support your nutritional needs.

There is not enough evidence to suggest that taking high dose dietary supplements can help treat cancer or stop it from coming back. Some supplements may interact with your cancer treatment so make sure to be honest with your doctor or pharmacist before starting anything new.

A cancer pharmacist will be able to check that there are no interactions that could affect the effectiveness of your cancer treatment or increase the side effects. There is not yet enough evidence to blanket recommend vitamin/mineral supplements to all patients with cancer.

In general food is the best source of vitamins and minerals, so up your daily fruit and veg to at least 5 a day.



### 10 Organic food

The truth is, research into the nutritional benefits of eating organic fruit and vegetables has been mixed and largely overhyped and in the media.

#### What's the evidence?

Findings from a recent study suggested that the risk of developing cancer was reduced by 25% in those who ate organic foods. What wasn't made clear was that this was the relative risk between those that ate a little bit of organic food vs those that ate a lot BUT the absolute risk reduction in getting cancer from eating organic food was only 0.6%!

# What's the fuss about organic?

The theoretical risk relating to nonorganic food is pesticides. There are at least three that are classified as probable carcinogens according to the International Agency for Research on Cancer.

Organic products are less likely to contain pesticide residues than conventional foods. Previous studies have found that pesticide residue is more prevalent on conventionally grown produce than on its organic counterparts.

Consuming fewer pesticide-related chemicals certainly seems like a good idea - but whether it's associated with an actual health benefit is unclear.

### Our advice?

It's a personal choice, if you can afford to buy organic produce (and we know that not everyone can) then by all means do as it may have some benefit and won't do any harm.

At the end of the day though eating adequate servings of any plant foods will likely have a bigger impact over time at helping to decrease your cancer risk, organic or not.



### **FOOD PREP MADE EASY**

## Tips and Tricks for Making Cooking Easy

We've heard from several of our community that basic tasks like shopping, cooking and tidying up after dinner can be so overwhelming when you're undergoing cancer treatment that it becomes easier to skip meals than to cook. Skipping meals or eating inadequately can result in:

- muscle loss
- increased fatigue
- delayed healing
- treatment delays
- lowered tolerance to treatments, increasing the risk for more side effects.

### So how can you make the whole process easier?

Batch cooking: If there are some days when you have more energy than others, get into the habit of cooking big pots of food. Cook enough to last you a few days or, if you have the freezer space, make enough to freeze and go back to later in the week. Things like curries, chillis, tagines, pasta sauces and stews are all easy to rustle up as a big batch (and don't usually make too much washing up either!)

Slow cooker: Slow cookers are without doubt a gift to those looking to make cooking as easy as possible. Throwing a load of ingredients into a pot and letting it cook for most of the day with little need to attend to it is a GREAT way to produce lots of meals with minimal effort.

Microwavable options: When your energy is low, it's better to eat something than not eating anything at all. Microwaveable meals are extremely low effort. Bags of veg, baked potatoes and popcorn can all work as easy options to chuck in the microwave.

Meal planning: The better prepared you are, the easier things are going to be, so planning your meals when you're feeling well can help you on the days things are a bit more tricky.

Whether you're able to plan a week ahead, a month ahead (if you've got a freezer!), or even just a few days ahead, to paraphrase a popular supermarket chain, every little helps. Call us old fashioned but a shopping list is a good way to make sure you remember everything you went to the shop for too. Chemo brain is real, right?!

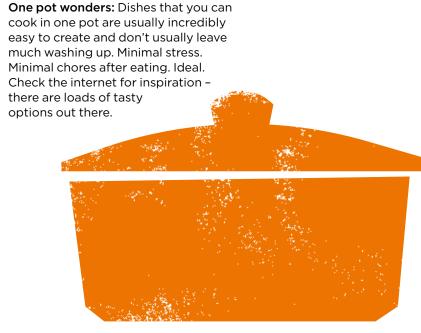
Grocery delivery: Once you've planned your meals for the week ahead, it can be really useful to do a grocery shop online and get it delivered to your house. As well as allowing you to conserve your energy for other things, this also tends to be more cost effective than shopping daily. And don't be afraid to ask the delivery team for help unpacking if you're taking a delivery on your own. Include a few items that you can easily pull out to rustle up a meal if you're caught short.

#### Pre-cooked or pre-chopped:

There's absolutely no guilt in buying things that are pre-cooked or pre-chopped to make your life easier. Most supermarkets now offer pre-prepared fruit and veg, pre-made salads or rotisserie options which are good to eat straight away or to cook with ease.

Don't be afraid to ask for help from friends and family on the weeks when you might not be feeling up to much. Often, these people are only too happy to help, they just need to be told HOW they can. Cooking, shopping and cleaning up are all things vour loved ones can help with to make your life a bit easier. Some people get their friends involved in a food rota which can be a great way for your people to rally round and help out.

Ask for help:



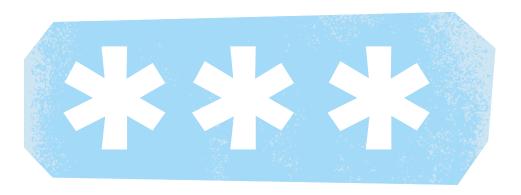
Take short cuts: We are often told to avoid processed foods and only go for fresh foods in their whole form – but let's be honest, that is pretty difficult to do in this day and age and almost all foods we consume have undergone some form of processing, so it's unrealistic to cut them out completely. While we advocate getting as much fruit and veg into your diet as you can, we also want to remind you that it doesn't always have to be fresh (frozen, tinned, juiced counts too!).

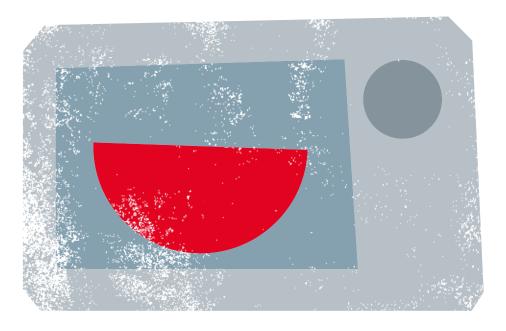
### Some of our favourite shortcuts include:

- Microwaveable packets of grains and pulses (e.g. lentils)
- Tins of beans and chickpeas
- Ready-cooked chicken, salmon fillets and tinned fish.
- Ready made stocks and soups
- Carrot batons and other pre-chopped vegetables
- Shop bought hummus and nut butters.

### If you have one, befriend your freezer:

- Maximise freezer space by storing stuff in ziplock bags rather than boxes, and stack them on top of one another like a pile of pillows. Grab some tape and label them with a black marker so you don't mix up your veggie chilli with your bolognese sauce.
- Include the date of freezing so you know what's good when.
- Portion up meat and meals before freezing. Freezing in bulk means defrosting in bulk, which often means you have to cook more than you need and you end up wasting leftovers.
- Divide batch-meals into individual portions before freezing them.





Freeze the unusual. Here are some foods that you might not have considered freezing, but doing so will change your life;

- Slice a loaf of bread before freezing it. In the morning you can simply separate a couple of slices and pop them in the toaster on the defrost and toast settings.
- Freeze fresh herbs and simply crumble them into dishes whenever you need to.
- Frozen bananas make the creamiest smoothies, and blended on their own make a one-ingredient ice cream.
- Add a teaspoon of peanut butter to the middle of a pitted date and freeze for an instant afternoon treat. Also works well with melted dark chocolate.

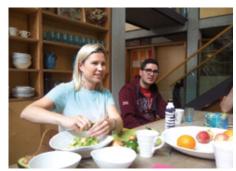






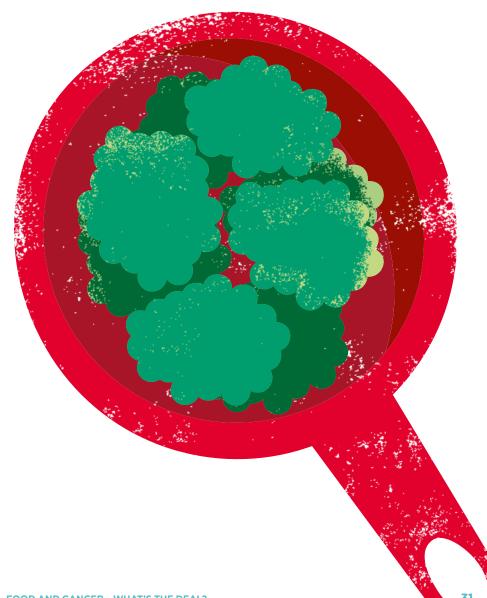








### Section 4 **RECIPES**



30



### Ingredients

- 1 onion chopped
- 4 cloves of garlic crushed
- 2 tsp cumin
- 3 tsp tikka spice
- 2 tsp turmeric
- 2 tsp chilli flakes
- Ginger 1cm/thumb grated
- 1 tin tomatoes
- Handful coriander chopped
- 1 tin chickpeas
   Drained
- 200g mushrooms Sliced
- 400g vegetable Stock
- 1 cup cashews blended (I used my nutri-blender)
- 200g of washed spinach

Team it with your favourite rice mix - mine is brown rice and quinoa, cooked in vegetable stock.

### SARAH'S CHICKPEA CURRY

I had this so much during chemo because it's so tasty and nutritious. Sometimes the chemo left a really odd taste in my mouth so the flavours from this curry overpowered that taste, I found that making this in batches was also great as I could freeze it or refrigerate and get out on the days I was too tired to cook or even think.

#### Method

- 1 Blitz the cashews and then leave to one side.
- 2 Fry off the onion and garlic in coconut oil or olive oil on a low heat for 3-4 minutes, add in the ginger, cumin, tikka spice, turmeric and chilli flakes. Add a couple tsp's of water to keep the mix cooking slowly for another 5 minutes.
- 3 Add in the chickpeas and mushrooms and cover in the paste, then add the tomatoes and stock add half of the chopped coriander. Cover and cook for 10-15 minutes. At this point you can put your rice onto cook.
- 4 Add in the blended cashews and stir through, this will add thickness and so much extra taste. Add the spinach to the top and then put the lid back on for 3-4 mins. Take off the heat and stir through the spinach and the other half of coriander.
- 5 Serve with rice of your choice.





### Ingredients

- 1 can of black beans, washed and drained
- 2 eggs
- 3 tbsp coconut oil, melted
- 45g raw cacao powder
- 120g of maple syrup
- Vanilla extract (optional) 2 tsp
- A pinch of salt
- Raspberries (to serve)

Note: If you want your brownies to become a little more fluffy, cake-like, then add 1 tsp of baking powder. If you'd like them more fudge-like, don't use the baking powder.

### DANI'S BLACK BEAN BROWNIES

I loved making these black bean chocolate brownies when I was in treatment. They're sweet and delicious but still contain a huge portion of plant-based protein, so it's a really nutritious dessert.

#### Method

- 1 Preheat your oven to 180 degree fan.
- 2 Mix all the ingredients in 1 bowl and blend until smooth.
- 3 Either pour into a lined square baking dish so you can cut chunks off later on or pour into greased muffin tins.
- 4 Tip the raspberries on top, pressing in slightly.
- 5 Bake in the preheated oven on 180 degree for about 25 minutes.
- 6 If your mixture is in muffin tins, it should only take about 15 minutes. Keep checking so that your brownies don't get too dry. The edges will come off slightly from the tin when ready.
- 7 Serve on chilled yogurt and top with berries and mint. Delicious!







### Ingredients (for 2+ leftovers for lunch)

- 1 tbsp olive oil
- 1 red onion, finely chopped
- 2 cloves of garlic, finely chopped
- 500g pork mince
- 4 rashers of smoked, rindless back bacon cut into chunks
- 5 large fresh tomatoes, quartered
- 1 tin chopped tomatoes
- Drizzle of Worcestershire Sauce
- 2tbsp smoked paprika
- 2tbsp cayenne pepper
- Squirt of tomato sauce
- Squirt of tomato puree
- 1 beef oxo cube
- 1 -2 tbsps mixed herbs
- Salt and pepper to taste
- 1 red, green or yellow pepper, sliced

Linguine and spinach to serve

# ALICE'S PORK AND BACON BOLOGNESE

I know that there are some question marks around eating processed meat during cancer treatment but when I was on chemotherapy there was very little I could stomach and this became a fast favourite. It's a made up recipe but is packed with flavour and has a good helping of veggies in it too. Serve with linguine and a wee sprinkling of cheese on the top.

#### Method

- 1 Fry your onion and garlic in a large saucepan with 1 tbsp of olive oil until soft
- 2 Add the pork mince and bacon, then fry for about 10 minutes or until browned
- 3 Throw in your tinned tomatoes along with your fresh tomatoes, making sure the fresh tomatoes are submerged
- 4 Add your paprika, cayenne, tomato sauce, tomato puree, oxo cube, herbs, worcestershire sauce and season with salt and pepper to taste. Leave to simmer for 10 minutes, then add your pepper.
- 5 The longer you leave this, the better it tastes, but as long as you leave it for a minimum of 15-20 minutes, it's good to go.
- 6 Serve with pasta of your choice and a side of spinach leaves (either fried with leeks for more veggies or just on their own)





# Ingredients Chicken bone broth/stock

- 1 chicken carcass
- 2 celery sticks roughly chopped
- 1 large carrot roughly chopped
- 1 onion quartered
- 1 tbsp black peppercorns
- 1tbsp apple cider vinegar
- As much water as is needed to cover the ingredients

#### **Chicken Noodle Soup**

- 1 litre chicken stock
- 2 carrots
- 1 courgette
- 2 tbsp white miso paste
- 1 red chilli
- Handful of frozen edamame beans
- Handful of shredded cooked chicken (I use the leftovers from the roast the day before)
- Coriander and soya sauce to serve to taste

# AILSA'S CHICKEN NOODLE SOUP

We are a busy working family so I often cook multiple meals in one go to save time. Food is a chance to be together as a family and we often have a roast chicken on a Sunday. I often make a bone broth stock from the leftovers that serves as a base for this delicious and nutritious soup. The bone broth is full of flavour and any leftover can be frozen in ice cube trays or portion sizes to become the basis of stews and soups.

### Method: bone broth/stock

Place all the ingredients in a large saucepan and bring to the boil then lower the heat and leave to simmer for anywhere between 5 and 10 hours. Scrape off any scum that appears on the surface and top up the water as needed. Drain and then store the broth.

### Method: noodle soup

Bring the stock to a simmer. Using a potato peeler, peel ribbons off the carrots and courgette. Add to the simmering stock with the rest of the vegetables and the shredded chicken. In a cup, mix the miso paste with a ladleful of hot stock then add to the pan. Add the rice noodles and cook in the simmering stock for the time indicated on the packet. Serve the soup with a garnish of coriander leaves and a drizzle of soya sauce or Tamari if gluten free.



### **Ingredients** Makes 1 loaf

- 2 cups spelt or plain flour (white and/or wholegrain)
- 1/2 cup raw sugar or golden caster sugar
- 2 tsp baking powder
- 2 tsp cinnamon, ground
- 3 medium ripe bananas (save one for slicing on the top)
- 250 ml milk (of your choice)
- 2 large eggs
- 1/4 cup olive oil
- Butter (for greasing)
- Handful granola and/ or chopped dark chocolate (optional topping)

Notes Cake will keep fresh for 2-3 days at room temperature (although sometimes if the weather is very warm we will pop it into the fridge as the banana can cause the loaf to spoil too quickly!).

# CAMILLA'S CLASSIC BANANA BREAD

It's common to be nervous about sweet treats when you're going through cancer treatment, but it's important to treat yourself to a little of what you fancy. This delicious banana bread is quick and easy – minimal effort for maximum reward.

#### Method

- 1 Preheat oven to 200 C and grease and line loaf tin with baking paper.
- 2 In a large bowl, mix together dry ingredients (flour, baking powder, cinnamon, sugar). In a separate bowl (or jug) whisk together milk, eggs and oil.
- 3 Incorporate wet ingredients into dry, being careful now to over-mix the cake batter.
- 4 Remove the skins from the bananas and roughly mash TWO of the three bananas with a fork (save one for the top). Then incorporate this mashed banana into the cake batter.
- 5 Carefully pour cake batter into prepared tin. Top with long slices of remaining banana and a handful of chopped dark chocolate and/or granola if you wish.
- 6 Bake in preheated oven for 40–45 mins and/or until cake is golden brown and skewer inserted into centre of cake removes clean. Do keep an eye on the cake as it cooks if you find it browning too quickly then simply place a sheet of baking paper on top to cover.
- 7 Allow cake to cool in tin for at least 10-20 mins before removing and allowing to completely cool on a wire rack.
- 8 Best served warm/toasted with lashings of fresh ricotta and a drizzle of pure honey!



### Ingredients

For pesto

- 2 handfuls of fresh basil
- 2 cloves of garlic, chopped
- 2 tbsp of cashew nuts
- 60ml olive oil
- Juice of a lemon
- 2 tbsp water
- 2 tbsp of grated parmesan (or nutritional yeast to make vegan)
- Salt and pepper to season
- A handful of frozen peas
- 200g of penne pasta (or pasta of choice)

# DR HAZEL'S QUICK CASHEW PESTO PASTA

The perfect quick and tasty recipe for lunch or dinner. I often double up and portion out the rest into lunchboxes for work the next day. This recipe serves 2 (or one hungry person).

#### Method

- 1 To make pesto whizz all the ingredients in a blender until desired texture achieved. Taste test and season.
- 2 Simply cook the pasta as per packet instructions (usually 8-10 mins) and add the frozen peas in for the last 4 minutes. Drain. Stir the pesto through the pasta. Serve.





# Ingredients Makes 1 portion but can be doubled up to save time:

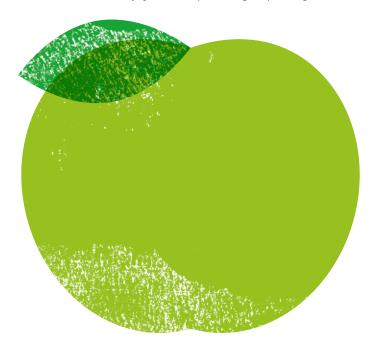
- 40g oats
- 1 grated apple
- 100ml milk
- 10g flaked almonds
- 10g mixed seeds
- 1tbsp pomegranate to serve (optional)

# MONIKA'S OVERNIGHT OATS

Life can get super busy especially when working as a dietitian in the NHS. That's where these overnight oats come in. They're a nutritious and tasty start to the day and so quick and easy to make after a long day. Why not pop them in a container and take them to work with you. Easy goodness on the go.

#### Method

Put all ingredients in a Tupperware, stir and leave overnight in the fridge. Take out in the morning and enjoy with a sprinkling of pomegranate seeds.



### Section 5

### **SIGNPOSTING**

We know there's a tonne of information out there that can sometimes be overwhelming, so if you need more information, we recommend these resources for honest, helpful advice and guidance.

Check out our YouTube videos with Dr Rupy Aujla from The Doctor's Kitchen and Kelly Anderson from Maggie's and Food to Glow unpacking more of your questions www.youtube.com/trekstock

Dr Hazel Wallace, Medical Doctor, Personal Trainer and resource contributor. Hazel is currently pursuing a masters degree in Clinical Nutrition and Public Health nutrition at University College London – The Food Medic (available from all good bookshops) www.thefoodmedic.co.uk

World Cancer Research Fund – for evidence based research and findings on diet, nutrition, physical activity and cancer

www.wcrf.org/dietandcancer

Supplement interaction checking tool www.nccih.nih.gov/health/providers/digest/herb-drug

Healthy Whole Me: Trekstock community member, former patient and resource contributor, Dani Binnington www.healthywholeme.com Life Kitchen: Free cooking classes for patients on chemo
www.lifekitchen.co.uk

Maggie's Centres run a number of nutritional classes www.maggiescentres.org

Nourish Flourish Me: Trekstock community member, former patient and resource contributor Sarah Dixon www.nourishflourishme.com

AlimentalSage: Nutritionist, NHS dietician and resource contributor Camilla Ferraro www.thealimentalsage.com



# A NOTE FROM TREKSTOCK

We hope you found this useful, we'd love to hear how it's helped you

Share your nutrition journey @trekstock #trekstock

Any questions you have, drop us a line and we'll be happy to help hello@trekstock.com



Thank you to LetterOne for their continued support of Trekstock's programmes to help get young adults moving again through and beyond cancer.

