

# Eating well during cancer treatment

Nutrition and Dietetics

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Information for Patients

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## Introduction

Many people find they struggle with eating and drinking during their cancer treatment. This change in eating and drinking can be caused by the cancer itself, or be a side effect of the treatment. When you can't eat as much, this can cause weight loss.

Weight loss can make it more difficult for you to manage your cancer treatment. Some patients find that they have more side effects.

This booklet aims to provide you with;

- information on how to manage some common side effects of treatment that can impact on your eating and drinking.
- it also provides ways you can increase your eating to stop further weight loss.

This booklet focuses on the side affects you may see from chemotherapy, radiotherapy or immunotherapy.

We hope you find this information helpful. If you continue to have problems with weight loss and not eating and drinking enough, please contact your cancer nurse specialist (keyworker), or your medical or treatment team, to request a referral to see a dietitian.

**Health information and support is available at [www.nhs.uk](http://www.nhs.uk)  
or call 111 for non-emergency medical advice**

Visit [www.leicestershospitals.nhs.uk](http://www.leicestershospitals.nhs.uk) for maps and information about visiting Leicester's Hospitals  
To give feedback about this information sheet, contact [InformationForPatients@uhl-tr.nhs.uk](mailto:InformationForPatients@uhl-tr.nhs.uk)

## Types of food

### Carbohydrates:

Carbohydrate foods are our main source of energy. They also give us fibre, iron and B vitamins. These include bread, pasta, potatoes, rice and cereals.

**These foods should make up about half of your plate at each meal.**

### Fruits and vegetables:

Fruits and vegetables are full of fibre, vitamins and minerals which are key to our diets.

**You should aim to have 5 portions of fruit or vegetables each day.**

### Protein:

Protein is important to help build and repair body tissues. The main sources of protein are meat, poultry, fish, eggs, milk, cheese, yoghurt, pulses (peas, beans and lentils), tofu, Quorn and nuts.

**Try to have 2 or 3 helpings of these foods each day.**

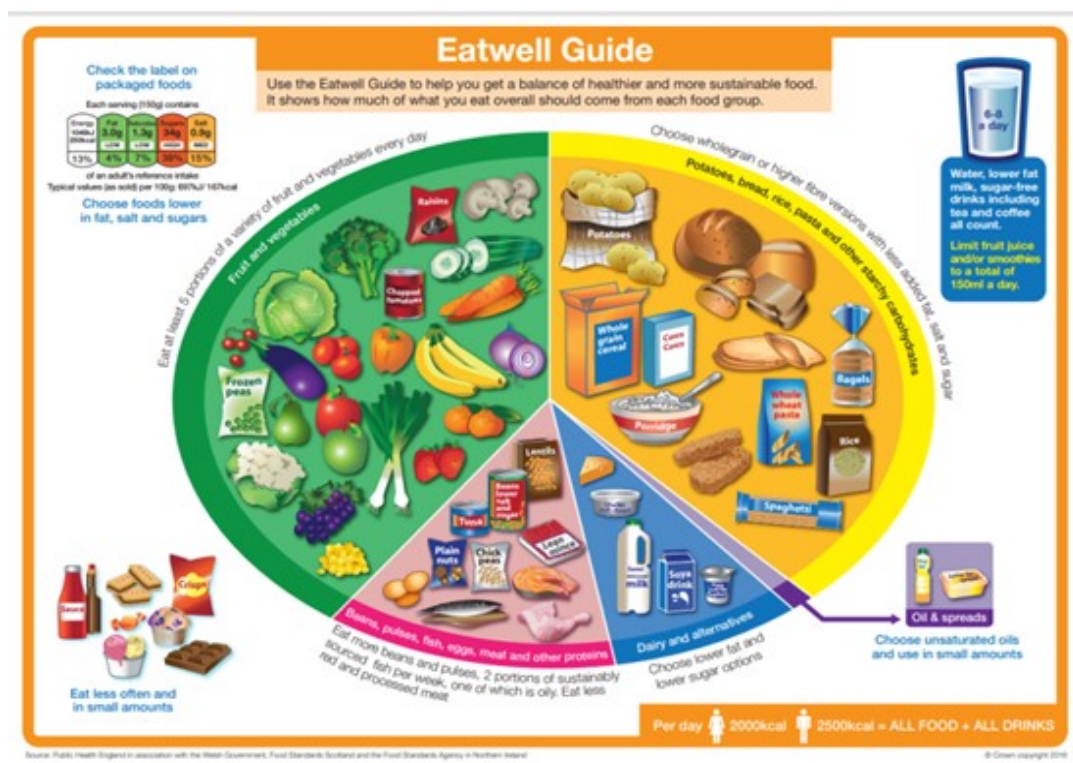
### Milk and dairy:

These foods are a great source of protein and calcium. Dairy alternatives which have added calcium, make good alternatives if you are avoiding dairy.

**Aim for 2 or 3 portions of these foods each day.**

### Fats:

Fats are very concentrated energy foods. If you are losing weight, choose full fat options wherever possible for example milk and yoghurts.



## Nausea and vomiting

Nausea is the feeling of wanting to be sick. This feeling can put you off wanting to eat or drink. You may feel nauseous at certain times of the day or at the thought of, or smell of food. The nausea may only be for a few days after treatment or in some cases it can be constant.

If you have not opened your bowels recently, this may also be causing you to feel sick.

Discuss any nausea with your medical team. They may give you anti-sickness medication to help with this. You can also try the suggestions below:

- Aim to have small snacks every 2 to 3 hours in the day, so you don't feel full.
- For high calorie snack options, see 'Snack ideas' on page 8.
- Eat and drink slowly. Try to separate drinking and eating, so you don't fill up on liquids.
- You may find cold foods easier to eat as the smell of cooking food may put you off. If you are cooking, try to cook in a well ventilated room, or ask someone else to cook where possible.
- Sometimes ginger can help – ginger ale, Ginger Nut biscuits, ginger tea or crystallised ginger.
- Neutral flavours such as plain or salty foods might be better.

**If you are being sick, it is very important to make sure you stay hydrated.** Try to have 10 to 12 glasses of fluid every 24 hours. This includes water, milk, tea, coffee, fruit juice and soup.

**If you are worried about being sick, contact your GP, cancer nurse specialist (keyworker), or the oncology helpline.**

## Fatigue

Fatigue is the feeling of tiredness or exhaustion, and is very common among people with cancer.

Fatigue can be caused by the treatment, coming into hospital for lots of appointments, low iron levels (anaemia), eating less, and the mental and emotional effects of having cancer.

If fatigue is affecting your ability to eat, there are different ways of making things easier:

- Use ready meals such as, pre-packed or frozen meals already prepared. This is so that you are not spending time cooking and getting tired.
- Ready portioned snacks. Something quick and easy to grab.
- Nourishing drinks such as, pre-made milkshake drinks from the supermarket, fortified milk, smoothies or oral nutritional supplements. They might be easier to tolerate.
- Asking for help. Friends, family and neighbours may ask for ways to help you through your treatment. Getting help with shopping or meal prep can make a big difference to your fatigue.

A good way to think of things is, you cannot drive a car without fuel.

**Food is fuel for our bodies and we need to make sure the tank is full!**

## Diarrhoea

Diarrhoea is when you;

- have to open your bowels more often than you normally would, or
- cannot control your bowel movements. Your poo (stool) will often be looser.

Different treatments can cause diarrhoea. Pelvic radiotherapy can cause diarrhoea due to the irritation to the bowel. Some may find that chemotherapy or certain medications like antibiotics cause diarrhoea.

If you get diarrhoea it is very important to stay hydrated, as you will be losing water each time you go to the toilet. It is important to try and have 10 to 12 glasses of fluid per day.

Some people find that reducing the amount of fibre (roughage) they eat can help:

High fibre food	Low fibre alternative
<ul style="list-style-type: none"> <li>• Wholemeal bread</li> <li>• Wholegrain cereals (Weetabix, muesli, shredded wheat, whole oat porridge)</li> <li>• Oat biscuits, digestive biscuits</li> <li>• Nuts and pulses (beans and lentils)</li> <li>• Fruits and vegetables</li> </ul>	<ul style="list-style-type: none"> <li>• White bread</li> <li>• Rice Krispies, Ready Break, cornflakes</li> <li>• Rich Tea, Ginger Nuts, short bread biscuits</li> <li>• Smooth nut butter</li> <li>• Tinned spaghetti</li> <li>• Root vegetables (carrots, parsnips peeled) or stewed fruit with skin and seeds removed.</li> </ul>

Low fibre diets can be restrictive and so an A to Z multivitamin may be recommended.

You may find liquids travel through your gut faster than solid foods. This includes prescribed oral nutritional supplements. If you have previously been tolerating these well, and the diarrhoea is a new problem, continue to take the oral supplements as these will give you extra nutrition at a time when you are likely struggling to eat.

Fibre alterations may often not stop the diarrhoea, but may make you more comfortable.

It is important to tell your medical team about your diarrhoea too, as they may prescribe anti-diarrhoea medication such as loperamide (Imodium).

## Constipation and wind

Constipation is when you are not opening your bowels as often as you normally would. This can make it uncomfortable or painful when you do open your bowels. It can also make you feel sick.

Increasing the amount of fibre you eat can help. High fibre foods include wholegrain breakfast cereals, wholemeal bread, pasta and rice, as well as fresh and dried fruits and vegetables.

Make sure you drink plenty of fluids as this will help to soften your poo (stool).

Walking and gentle exercise can help to stimulate the bowel.

If your constipation is caused by medication, then increasing the fibre in your diet may not help and you may need to try laxatives. Different laxatives work in different ways; your medical team can prescribe the right laxative for you:

[\(https://www.nhs.uk/conditions/laxatives/\)](https://www.nhs.uk/conditions/laxatives/)

If you having problems with wind you may find the following tips helpful:

- Eat slowly, and chew your food well.
- Avoid fizzy drinks.
- Avoid 'windy foods' – e.g. brassica vegetables (sprouts, cauliflower, cabbage, kale, broccoli, turnips), beans and lentils.
- Peppermint tea, or oil can also help.

<p><b>Osmotic laxatives:</b></p> <p>Osmotic laxatives draw water from the rest of the body into your bowel to soften the stool and make it easier to pass.</p> <p>They take 2 or 3 days to work. They include:</p> <ul style="list-style-type: none"> <li>• Lactulose (brand names Duphalac and Lactugal)</li> <li>• Polyethylene glycol</li> <li>• Macrogol</li> </ul> <p>Make sure you drink plenty of fluids with these.</p>	<p><b>Bulk-forming laxatives:</b></p> <p>Bulk-forming laxatives work by increasing the "bulk" or weight of the stool, which in turn stimulates your bowel.</p> <p>They take 2 or 3 days to work. They include:</p> <ul style="list-style-type: none"> <li>• Fybogel (ispaghula husk)</li> <li>• Methylcellulose</li> </ul>
<p><b>Stimulant laxatives:</b></p> <p>These stimulate the muscles that line your gut, helping them to move the stool along to your back passage.</p> <p>They take 6 to 12 hours to work. They include:</p> <ul style="list-style-type: none"> <li>• Dulcolax</li> <li>• Senna (brand name Senokot)</li> <li>• Sodium picosulphate</li> </ul>	<p><b>Stool-softener laxatives:</b></p> <p>This type of laxative works by letting water into the stool to soften it, and make it easier to pass.</p> <p>They include:</p> <ul style="list-style-type: none"> <li>• Arachis oil</li> <li>• Docusate sodium</li> </ul>

## Changes to your taste

Your taste can change after treatment. Foods you once liked may no longer taste right or you can be left with an unpleasant taste in your mouth.

### Metallic taste:

- Swap to plastic or wooden cutlery.
- Avoid tinned foods.
- Have a mint to clear the metallic taste.

### Bland or cardboard taste:

- Try marinating food in fruit juice or wine, or cook it in a strong sauce.
- Use herbs and spices to add flavour to foods.
- Sharp flavours or carbonated/fizzy drinks can help to stimulate taste buds.
- Choose foods that are not naturally bland e.g., ginger, lemon, mint

**Unpleasant taste** (make sure this is not caused by a problem with your mouth, teeth or gums as it could be oral thrush):

- Use regular mouth care.
- Try sucking sweets or mints.
- Pineapple can help to cleanse your mouth (but not if you have sores in your mouth) or melon can be soothing.
- Sipping drinks through a straw can help.
- Rinse your mouth with diluted salt water.

## Sore or dry mouth

Along with taste changes your mouth can dry out during treatment. It is important to keep your mouth healthy during this time.

- A mouthwash can be soothing; speak with your local pharmacist for advise on an appropriate mouthwash (avoid those which contain alcohol).
- Use a soft toothbrush that is not too hard (children's toothbrushes are soft).
- Use a gentle toothpaste; speak to your dentist for further advise.
- Treat mouth ulcers. Talk to your dentist or medical team if these become an issue.
- Try sucking on ice cubes or lollies to keep your mouth moist and refreshed.
- Keep your food soft and moist e.g. add sauces and gravy.
- Try foods you can squash with the back of your fork.
- Avoid sticky foods or dry foods that take a lot of chewing.
- Avoid spicy, acidic or very hot foods.

If none of the above helps, artificial saliva products or pastilles for a dry mouth may be of benefit.

## Low appetite

With all of the issues talked about that can be a side effect from treatment, it is no surprise that appetite is often lower during cancer treatment.

Treating the side effects of treatment can help with your appetite. While these are being managed, you need to make sure that you are eating enough to prevent weight loss.

### When your appetite is low you may want to focus on the following:

- Aim to have small snacks every 2 to 3 hours in the day so that you do not feel full.
- Setting a timer to remind you to have something to eat every 2 to 3 hours can help.
- Use smaller plates to serve food. Side plate portions may be more manageable.
- Make sure the foods you do eat are as nourishing as possible. High calorie, high protein foods (see snack ideas on page 8 for some high calorie options).

### Add extra nourishment to foods where possible:

- 1 tablespoon butter = 100kcal
- 25g cheese = 100kcal
- 2 tablespoons double cream = 100kcal
- 2 teaspoons jam or honey = 100kcal
- Add 2 to 4 heaped tablespoons of skimmed milk powder to a pint of milk to add an extra 100 to 200kcal and 10 to 20g of protein.

### Other tips that may help improve your appetite:

- Try not to fill up on low energy foods like salad.
- Avoid having too much fluid at meal times (unless nourishing fluid).
- A small alcoholic drink can stimulate your appetite (check with your medical team first that you are allowed alcohol).
- Get some fresh air before meals.
- Eat with other people so your focus is not on the food, but the people you are with.

**If you do feel hungry. Make the most of it!**

## Snack ideas

Savoury snacks		Sweet snacks		Nourishing drinks	
Snack	Calories	Snack	Calories	Snack	Calories
Sausage roll	60g = 200kcal	Cereal bar	100 - 300kcal	Full-fat milk	200ml = 124kcal
Cheese straws / biscuits	1 straw = 40kcal	Energy ball	60kcal	Weetabix drink	250ml = 207kcal
Mixed nuts	25g = 160kcal	Chocolate bar	190kcal	Nesquik	150kcal
Peanut butter	2 tbsp = 200kcal	Trail mix	50g = 160kcal	Complan	244kcal
Bombay mix	25g = 130kcal	Flapjack	50g = 250kcal	Meritine	250kcal
Samosa	50g = 150kcal	Biscuit	2 x biscuits = 100kcal	Aymes	388kcal
Mini cheese	25g = 100kcal	Trifle	150g = 200kcal	Latte	160kcal
Crisps	1 packet = 100kcal	Rice pudding	200g = 200kcal	Cappuccino	160kcal
Avocado	½ medium = 120kcal	Thick and creamy yoghurt	125g = 120kcal	Hot chocolate and whipped cream	240kcal
Cheese (25g) and crackers	1 = 115kcal	Custard pot	125g = 150kcal	Mango lassi	250ml = 220kcal
Hummus	50g = 115kcal	Ice-cream	1 scoop = 125kcal	Ovaltine	106kcal
		Croissant	1 = 250kcal	Skimmed milk powder	100g = 346kcal
		Muffin	1 = 250kcal		
		Tea cake	1 = 160kcal		

Please note that calorie values will vary. You can always check the label.

## Nutritional supplements

After having extra snacks and nourishing drinks, you may still find it difficult to slow down or prevent weight loss. If this is the case, there are additional prescription nutritional supplements that can help you. A dietitian can check your need for nutritional supplements and talk to you about the most suitable product for you. There are various different types:

- Milk based
- Juice based
- Yoghurt and mousse style
- Ready made or powdered



## Food hygiene

Some cancer treatments can lower your bodies ability to fight infection. During this time you may be advised to avoid foods that carry a high risk of infection.

### Make sure you follow the advice below:

- Check 'use by' and 'best before' dates on foods.
- Do not buy food from deli counters or salad bars. Buy pre-packed and individually packed foods.
- Avoid pre-packed sandwiches; especially those with salad in them.
- Separate raw and cooked foods in your shopping bags and when storing.
- Don't overload your fridge or freezer.
- Check your fridge temperature is between 0 to 5°C and your freezer temperature is below -18°C.
- Always wash your hands before and after preparing food and eating.
- Disinfect surfaces using disposable kitchen cloths which are changed daily.
- Thaw meat and poultry in the fridge.
- Check food is cooked through before eating. The temperature of the middle of your food should be above 75°C.

### Foods to avoid:

- Unpasteurised dairy foods.
- Soft ripened cheese made with unpasteurised milk, mould ripened cheese and blue veined cheese.
- Raw or lightly cooked shellfish.
- Sushi, smoked meats or fish e.g. salmon.
- Raw honey
- Raw or undercooked eggs - homemade versions of mayo, ice-cream, mousse, meringue or hollandaise or dressings containing raw egg.
- Probiotic or bio food products e.g. yoghurts.
- Meat or vegetable pate.

Depending on your blood results, you may be asked by your doctor, nurse or dietitian to follow a diet that cuts out foods that are more likely to contain infection-causing bacteria (neutropenic diet). If you are advised to follow a neutropenic diet more information will be given to you about this.

## Frequently asked questions

### **I am not struggling with my eating; in fact I am gaining weight through treatment.**

This booklet is aimed at patients struggling with eating and drinking during treatment. If you are eating well and feel that your weight is stable, continue to follow a healthy balanced diet. Look for healthy eating and cancer diet booklets produced by Macmillan for further advice.

If your weight is increasing through treatment and this is of concern to you, talk to your medical team. Weight gain may be linked to your treatment and they can refer you to a dietitian for further assessment and advice if needed.

### **Should I be following a special diet for my cancer?**

The media often discuss 'special' diets or foods that can be used to cure or control cancers. Research into these diets have shown **no clinical evidence** that they can impact the cancer.

Diets such as the ketogenic diet (low sugar), alkaline diet and rainbow diets are often very restrictive and low in calories. At a time when eating can be difficult these diets can result in more weight loss.

There are no specific foods we would advise you to avoid during treatment. Just make sure you follow food hygiene advice and check your weight remains as stable as possible through treatment.

### **What do I do if I am diabetic?**

If you are diabetic you will most likely have been advised previously to follow a diet high in fruits and vegetables, and low in fat and sugar. If you are eating well through treatment and your weight is stable, it will likely be best to remain on this diet.

However, if you are not eating well or you are losing weight, you will be encouraged to follow the advice in this booklet to make sure you eat enough to keep your weight stable through treatment. A referral to a dietitian may be needed to help you with this, and help manage your diabetes along with treatment.

Please note, your blood sugar levels may be increased by other factors such as steroids, infections or chemotherapy. It isn't always related to what you are eating.

### **Should I be taking extra supplements?**

If you are eating a wide variety of foods from different food groups you probably don't need to take any additional vitamin or mineral supplements.

Taking supplements in large doses when they are not needed can be harmful.

If you are following a restricted diet for whatever reason, your medical team or dietitian may recommend an over-the-counter multivitamin or mineral.

During chemotherapy treatment your blood will be tested regularly.

If there are any concerns your medical team will advise on supplements as needed.

If you have any questions about vitamin or mineral supplements, as well as herbal supplements, you can talk about these with your medical team.

Always let your doctors know what you are taking, even if it's a 'natural' supplement, as these may interact with your current treatment.

### **What if I am already following a prescribed diet?**

If you are already following a prescribed diet such as a gluten-free diet or texture modified diet, you should continue to follow these closely.

Please also request a referral to a dietitian for further assessment.

### **Should I be following this advice forever?**

The advice in this booklet is designed to help you through your treatment phase and with any side effects from treatment that may affect your eating. Once treatment has been completed and you are feeling better, you will be encouraged to return to a healthy balanced diet.

**If you have concerns about your weight loss or struggles with eating, please discuss these with your cancer nurse specialist (keyworker), treatment or medical team, to arrange for a referral to a dietitian for further support.**

### **Further information**

- The Building-Up Diet - booklet available in the Macmillan Information Centre, or on the Macmillan website.
- Eating Problems and Cancer - booklet available in the Macmillan Information Centre, or on the Macmillan website.
- Malnutrition food fact sheet - available on the British Dietetic Association website.

## Weight tracker

Use the table below to record your weight, so you can keep an eye on this in clinic. If you are worried your weight is going down, please speak with your medical team.

Date	Weight	Date	Weight

## Contact details

Oncology Emergency Number: 0808 1782212  
 Macmillan Information Centre: 0116 258 6189  
 National Macmillan number 0808 808 00 00

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔  
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