



Ovarian cancer, diet and nutrition

When you have ovarian cancer you might find that your appetite (the amount you want to eat) and the types of food you want to eat are different from before. You might also be wondering if there is anything you can change about your diet (including eating or not eating specific foods) that might impact on how your cancer acts or how effective your treatment is. This booklet aims to give you an overview of the evidence for diet and nutrition in relation to ovarian cancer so that you can make choices that are right for you.



This information has been written based on current evidence and guidance but things are always changing. You should discuss any changes in your diet with your clinical team or dietitian. For the most up-to-date information about diet and nutrition in relation to ovarian cancer, please call our Support Line on **020 7923 5475** or contact the organisations listed in the **Where can I find out more?** section.

The Eatwell Guide



The Eatwell Guide shows how much of what you eat overall should come from each food group to achieve a healthy, balanced diet. It is the UK's current healthy eating model for most adults and is a good model to base your diet on.



Potatoes, bread, rice, pasta and other starchy carbohydrates

(in general, choose wholegrain or higher fibre options with less added fat, salt and sugar)



Fruit and vegetables (eat a variety each day)



Beans, pulses, fish, eggs, meat and other proteins



Dairy and alternatives (in general, choose lower fat and sugar options)



Oil and spreads (in general, choose unsaturated oils and use in small amounts)



Foods high in fat, salt and sugars such as cakes, sweets, crisps and chocolate are not needed in our diet so should be eaten less often and in smaller amounts



Water, lower-fat milk, fruit juice, smoothies and sugar-free drinks including tea and coffee all count towards the fluid (liquid) you drink (in general, aim for six to eight cups each day)

What should I be eating?

The most important thing for you is being as well-nourished as possible. This means eating foods that are made up of things to help your body to maintain and repair itself and to give you the energy you need. Depending on your particular circumstances (for example your individual treatment plan or your usual diet) this may mean eating more or less of specific foods or food groups (such as carbohydrates or proteins). But in general there is no right or wrong thing to eat after an ovarian cancer diagnosis – as long as you are maintaining a healthy weight and eating a balanced diet.

During and after treatment for ovarian cancer some people find it particularly difficult to maintain a healthy weight. You may find that you weigh more or less than you would like to and this can affect your self-esteem (how you feel about yourself) and be difficult to cope with. If this is how you feel please don't be afraid to ask for help. Your Clinical Nurse Specialist (CNS) or a dietitian can give you lots of different ideas about how to get the nourishment you need. You might also find it helpful to contact the organisations listed in the **Where can I find out more?** section at the end of this guide.

I feel full after a few mouthfuls. What can I do?

It's normal for people diagnosed with ovarian cancer to feel full after eating small amounts of food. This could be because of changes to how the chemicals in your body work because of the cancer, or perhaps because the cancer or excess fluid in your tummy (ascites) is squashing your stomach. If you can't eat very much it's important to make every mouthful count.

- Try to eat foods that are nutritious and can give you lots of protein and energy, even if you don't eat big portions. Things like fish, eggs, yoghurt and nuts are ideal.
- You could also try eating foods that you particularly enjoy. Maybe you have favourite foods from childhood or something that you always eat to mark special occasions. Try eating that.
- It can be daunting to put lots of food on your plate at once. Eating little and often is just as good as eating two or three large meals. If you start with a small amount of food you can always go back for more if you want to.
- Add some extra energy to your food by using full-fat products rather than low-fat alternatives. You can also add things like butter, olive oil, cream, peanut butter, pesto or honey.
- Keep a selection of nutritious snacks close at hand to graze on. Things like yoghurts, fruit loaf or cheese and biscuits can give you a burst of energy and are not overwhelming to prepare.

Remember that there are also no rules about what to eat when: if you want to have cereal in the evening or custard in the morning then feel free!

I have little or no appetite. What can I do?

Lots of people who are diagnosed with ovarian cancer find that they don't want to eat as much as they used to. When you feel like this it can be helpful to remember that food doesn't have to be cooked or eaten in large portions or meals. How about eating little and often during the day? You could have six or seven snacks if two or three meals is off-putting. Things like houmous or taramasalata on pitta bread, slices of quiche, rice pots or cheese cubes are all good sources of protein and energy and are easy to prepare.

Sometimes doing a bit of gentle exercise can also help you to feel more like eating. If you feel able to, take a gentle walk to the end of your road or around your garden; this might help.

Drinking milkshakes and smoothies can help you to get some extra calories when you are really struggling to eat. Smoothies can help you get some extra energy when you are really struggling to eat. Try to choose yoghurt-based rather than low-fat alternatives as this will help keep your energy levels up.

"The dietitian I spoke to encouraged me to do something called 'food fortification' – adding cream or full-fat milk to my food. This was really helpful because most women are always thinking how not to put on weight and are almost conditioned to avoid full-fat anything! It was really important for me to know how to put on weight to gain strength and be ready for my operation and chemotherapy."

Christine



Should I avoid sugar?

Some people think that not eating sugar is a good idea as it means that cancer cells don't get the energy they need to grow. But there is no strong evidence to suggest that following a sugar-free diet has any impact on how cancer grows or behaves. Cutting out sugar altogether is not a good idea because our bodies need sugar (glucose) to work. If you don't eat enough sugar then your cells will start making glucose from protein and fat as a last resort. This can mean that you lose weight which can make it harder to cope with treatment and take longer for you to get well.

Lots of foods that are good for us (like fruit, cereal and wholemeal biscuits and bread) contain natural sugar so eating these things is a good way for us to get energy from sugar. But some foods and drinks (like full-fat fizzy drinks, sweets and cakes) have lots of sugar added to them – like you would add sugar to tea and coffee to make it taste sweeter. This added sugar is less good for you than natural sugar so it's best to eat and drink it in smaller quantities. Take a look at the nutrition information labels on food packaging to help you make balanced choices. You can still have high-sugar food but it's important to balance your sugar intake with other sources of energy so that your body gets all of the nutrients it needs.



Should I cut out dairy products?

Some people think that dairy products affect the growth and development of ovarian cancer and that it is better not to eat them at all. But if you normally eat dairy products there is no reason that an ovarian cancer diagnosis should change this. Unless you have been specifically told not to eat things like cheese or milk (or other dairy products) these can be a good source of calcium and protein which are part of a balanced diet.

Some people are worried about hormones being used to help produce more milk and choose to avoid dairy because of this. But this is not allowed in the UK and the rest of Europe. There is no clear evidence for a link between ovarian cancer and dairy products so there is no reason to avoid these foods for reasons related to your diagnosis.

Should I avoid red meat?

People with a cancer diagnosis often report that red meat tastes very different during and after their treatment. Many people choose to avoid red meat as a result of this. If this is a decision that you make (or if you choose to avoid red meat for any other reason) then it is important to replace it with other excellent sources of protein such as chicken, turkey, fish, eggs, cheese, beans, pulses, soya or Quorn.

Red meat also has a high iron content which is important for keeping your red blood cells working well. Red blood cells move oxygen around your body so if you don't get enough iron this function can be slowed down and make you feel very tired. Chemotherapy can also slow this down so it's important to make sure you have enough other sources of iron in your diet if you choose not to eat red meat. Foods that are high in iron include eggs, sesame seeds, nuts (cashews, almonds and hazelnuts) and green leafy vegetables such as spinach and curly kale.



What are superfoods and should I be eating them?

'Superfoods' are foods that some people think are especially good for our health. There is no scientific evidence for the existence of superfoods but foods often dubbed 'superfoods' like blueberries and broccoli are rich in vitamins and minerals so you can eat them as part of a balanced diet (alongside lots of other types of fruit and vegetables).

Some women with ovarian cancer might eat more of these kinds of foods because they contain lots of nutrients and antioxidants (which people believe can stop or delay some types of cell damage). But there is no conclusive evidence for the effect of so-called superfoods on ovarian cancer development or growth in humans. Antioxidants in very high doses (such as through supplements) are also not recommended for people who are having chemotherapy for their ovarian cancer (or other anti-cancer treatments) as they may stop the cancer cells from breaking down.

"After my treatment a few people recommended an online television series about how to cure my cancer through food and diet. I think these people really believed that there was some potential cure and felt obliged to let me know. I was already a sceptic so I checked the source of the series and found it came from an American clinic which sold supplements (and where all the doctors and nurses were very attractive!) – it was not true at all! I was annoyed because that series could cause serious worry and distress."

Christine

Is organic food better?

Some people think that eating organic food is better for them because it is usually grown without the use of pesticides (chemicals that are used to kill pests that damage crops). This is because some people think that pesticides can cause cancer in humans. But there is no evidence that the levels of pesticides found in non-organic foods are harmful to human health. You should always wash fruit and vegetables (both organic and non-organic) before use as this will help to remove any bacteria or pesticide that is present.

For some people organic food may be more expensive than non-organic food and there may be fewer organic fruit and vegetable options to choose from. Choosing to eat organic food should not mean that you have to restrict the type or amount of fruit and vegetables you eat. Whether you eat organic food or not is entirely up to you. What is important is eating a wide range of foods that you find enjoyable.



"I remember being told to aim for a colourful plate as there are different benefits from different fruit and vegetables."

Christine

Should I be taking turmeric?

Some people with ovarian cancer think that taking turmeric is helpful because it contains something called curcumin. Curcumin has been shown to have some anti-cancer effects when tested in laboratory experiments. Despite this there is no clear evidence to suggest that turmeric is helpful in stopping or treating cancer in humans.

It is perfectly fine to use turmeric in cooking (it is a main ingredient of curry powder) but you should speak to your medical team if you want to use it for more medical reasons. It is understandable that you might want to try things that people claim could treat or cure your ovarian cancer but some turmeric supplements can be expensive and actually cause harm.



"I was lucky in many ways. The main hospital where I was treated referred me to a dietitian who sent me a booklet, gave me telephone advice and came to chat with me before I was discharged. I really appreciated the support and reassurance she gave me."

Christine

Would taking a vitamin and mineral supplement help?

Some people with ovarian cancer worry that they are not getting enough vitamins and minerals, particularly if they are not able to eat well. There are some simple ways to increase your intake of vitamins and minerals that don't involve taking a supplement.

- Branded cereals often have added vitamins and minerals so eating this kind of food (softened with warm milk) can be helpful.
- Fruit juice and squash often contain extra vitamins and smoothies are a great way of getting additional portions of fruit and vegetables. You could try drinking a glass of one of these drinks every day.
- Frozen fruit and vegetables can be easier to store and use than fresh varieties and contain good amounts of vitamins and minerals.

If you are struggling to eat a range of foods that contain lots of nutrients then a supplement may be helpful for a short while. You should speak to your Clinical Nurse Specialist (CNS) or a dietitian about what might be right for you as some supplements can interact with cancer treatments and taking some supplements for a long period of time may be harmful.

Some people with ovarian cancer use natural (herbal) supplements to support their diet because they believe that if something is natural it is safe. There is not enough evidence that this is true of all herbal medicines and supplements. Some supplements (such as fish oil or St John's Wort) can interact with chemotherapies, and others (such as cannabis or cannabis oil) do not have any proven medical effectiveness. It's important to talk to your CNS or a dietitian about any changes you want to make to your diet if it involves taking a supplement.



Can I eat grapefruit?

Some people avoid eating grapefruit while they are having cancer treatment because there is some evidence to suggest it can affect how medicines work in our bodies. This is because grapefruit contains an ingredient that can affect how some people absorb (take in) certain drugs through their digestive system (the system we use to break down food). This means that the digestion of some medicines may be changed. It is always best to check with your clinical team whether you are taking any drugs which will have this interaction with grapefruit. There is no strong evidence to suggest that eating grapefruit will affect medicines taken in other ways (for example through a drip into your vein) such as chemotherapy drugs for ovarian cancer.

Other foods (such as pomegranate and star fruit) along with some medicines (including certain antibiotics and steroids) and herbal supplements also contain ingredients that may affect how some drugs are absorbed by some people. Your Clinical Nurse Specialist (CNS) will be able to tell you if your cancer treatment could be affected by any of these things. You will also be monitored (checked) very closely when you are having cancer treatment to make sure that nothing is affecting how the treatment is expected to work.

I am having problems with swallowing food. What should I do?

Whatever the reason might be, if you are having problems with swallowing food it can make eating really difficult. It might mean that you don't want to eat and this means that your body won't be getting all of the energy and nutrients it needs. It might also mean that you are losing weight. All of this can make going through treatment and coping with your ovarian cancer even harder.

- If you are finding it difficult to swallow solid food you could consider smaller portions of nutrient-rich foods and fluids such as smoothies and soups. Eating or drinking these will mean you are getting the energy your body needs but making every mouthful count.
- You may also want to consider liquidising your food. This doesn't have to mean all of your food tastes and looks the same: try liquidising each element of the meal separately so you can still notice and enjoy the different tastes and colours.
- You can add extra liquids to food to make the texture easier to swallow. Things like milk or tinned soups can help with this and add more flavour and nourishment than water.



My food tastes different or I can't taste anything at all. What can I do?

Some people experience changes in how things taste as a result of their ovarian cancer treatment. This can be very frustrating and disappointing. This is something that often happens during chemotherapy. For some people this might mean that food tastes different – metallic or chemical – and for others this might mean food tastes stronger than before – saltier or sweeter. Some people find their sense of taste disappears entirely. All of this can make eating feel like a chore.

- Sometimes simple changes such as eating food at different temperatures (cold or warm rather than hot) can help improve their taste. If you pick the right things, cold foods are just as nutritious as hot foods.
- You might also want to consider using stronger or smoked versions of foods (strong cheese or smoked ham or salmon) to improve flavour.
- Adding fresh or dried herbs and spices to homemade dishes can give them an extra boost of flavour.
- You can also try adding sauces to food to give a different flavour: red and brown sauce, mustard, mint or sweet sauces including apple sauce and cranberry sauce can all help.
- Having a dry mouth can also affect how food tastes. Keeping your mouth as moist as possible and having a drink while eating can help.

It's helpful to keep in mind that taste changes can come and go during and after your treatment. This means that the same foods can taste different at different points. Do keep re-trying foods that taste different – the taste might change again.

"I enjoyed cornflakes, or a baked potato with melted butter when I was feeling sick."

Christine

"I found water – which I loved – pretty tasteless so I added cordial. I managed fruit teas at first, then herbal teas, then more perfumed tea like Earl Grey."

Christine



I feel sick all the time. What can I do?

Many people going through ovarian cancer treatment experience nausea (feeling sick) or being sick as a result. This can make cooking and eating particularly difficult, as even the smells of food can make you feel unwell. There are lots of different anti-sickness medicines that may help with this so it is worth speaking to your Clinical Nurse Specialist (CNS) or doctor to find one that works for you.

- Some people with ovarian cancer have recommended eating foods containing ginger as a natural way to help reduce nausea. You could try dunking a ginger biscuit in a hot drink to soften it, or try drinking ginger beer or ginger tea.
- Plain biscuits might also help to settle your stomach first thing in the morning – either by themselves or dunked in a hot drink.
- You might also want to try eating cold foods to reduce the smell of cooking or cooked food.
- Some people drink fizzy drinks such as lemonade or cola or even sparkling water. You could add a scoop of ice cream into your drink to make it more of a treat!
- Sucking on boiled sweets can provide a bit of a distraction from feeling unwell and they provide a quick burst of energy too.

Often feeling sick can mean that you don't want to eat or drink anything but having an empty stomach can make this feeling worse. Try to eat or drink something small: it might help.

Is there anything that can help to ease constipation?

Constipation is very common and affects people of all ages. It means you are not able to poo as often as normal and this can mean it is difficult or painful for you to poo. It can be a problem for people with ovarian cancer as some chemotherapy drugs, anti-sickness medicines and painkillers can cause constipation or make it worse.

If you have constipation there are some simple changes that might help:

- Drinking plenty of water and other fluids (but not alcohol) should help to make your poo softer and easier to pass.
- Adding some more fibre to your diet might also make it easier to poo. Speak to your Clinical Nurse Specialist (CNS) or dietitian about whether this might help. Wholemeal bread or pasta and wholegrain cereals like Weetabix and porridge all contain lots of fibre. Remember to keep drinking plenty of water as eating fibre without drinking enough can make constipation worse.
- Some people find that eating more prunes or dried apricots is a natural way to avoid or ease constipation.
- Doing some exercise (such as a walk or run) every day can help you to poo more often.
- If you are finding it hard to poo it may also help to give yourself plenty of time to use the toilet. You could also try resting your feet on a low stool when you are sitting on the toilet.
- If you are constipated because of the medicines you are taking it is important to speak to your clinical team as there may be some changes you can make. You may find that taking a laxative for a short time may make it easier or more comfortable to poo.



I have a stoma. Are there any changes I should make?

Having a stoma (whether it is temporary or permanent) should not drastically affect the food and drink that you can have.

- Some women with a stoma find that they want to eat less of the types of food that cause wind or bloating (for example onion and garlic) but you will soon get to know if this is a problem for you.
- Chewing your food really well before swallowing can help you to digest it more easily.
- It's important to drink lots to support your bowel movements (pooping). This can include squash, fruit juice, smoothies, milkshakes, tea and coffee but make sure that you drink plenty of water too.

You might also find it helpful to read our booklet, *Ovarian cancer and stomas*, available at targetovariancancer.org.uk/guides or by calling **020 7923 5475**.

Where can I find out more?

There are lots of different books, articles and websites with information about ovarian cancer and diet and it can be confusing to know where to start. Some of the resources listed below might be helpful if you want to find out more about this topic:

- Our nurse-led Support Line offers confidential information, support and signposting for anyone affected by ovarian cancer. Get in touch on **020 7923 5475** or targetovariancancer.org.uk/supportline
- Macmillan Cancer Support has comprehensive information about diet and cancer and healthy eating including lots of helpful videos – macmillan.org.uk
- There are lots of excellent cookbooks full of recipes to support you through your treatment, including *The Royal Marsden Cancer Cookbook*, available in lots of high street bookshops and at shop.royalmarsden.org

Where can I find out more?

- Maggie's offers free practical support for people affected by cancer and many centres have a dietitian you can speak to for guidance – **maggiescentres.org**
- Cancer Research UK has excellent information about myths related to cancer and nutrition – **cancerresearchuk.org**
- The World Cancer Research Fund is the leading authority on the links between diet and cancer and produces a report called *Diet, Nutrition, Physical Activity and Cancer: a Global Perspective*. You can also download their booklet *Eat Well During Cancer* for recipe ideas and tips to manage side-effects of treatment – **wcrf-uk.org**
- You may also want to seek support from a specialist dietitian to help with your individual needs. The Association of UK Dietitians can help you find out more about this path and their website has hundreds of free recipe ideas – **bda.uk.com**

"I found it difficult to know where to look for answers about ovarian cancer and diet. It was hit and miss and so time consuming. I feared just googling but often couldn't find information on a wide range of information. Where could I have found this? I really wish this booklet had existed when I first knew I had ovarian cancer. It would have saved me a lot of time and anxiety."

Christine



Find out more

Get in touch for more information, support and signposting for anyone affected by ovarian cancer.



Support Line: 020 7923 5475



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