Diet and breast cancer



This booklet is about healthy eating during and after breast cancer treatment. It looks at how your diet and weight may change and how to manage these changes. It also looks at special 'cancer' diets, and whether diet and lifestyle can affect the risk of cancer coming back.

This information is by Breast Cancer Care.

We are the only specialist UK-wide charity that supports people affected by breast cancer. We've been supporting them, their family and friends and campaigning on their behalf since 1973.

Today, we continue to offer reliable information and personal support, over the phone and online, from nurses and people who've been there. We also offer local support across the UK.

From the moment you notice something isn't right, through to treatment and beyond, we're here to help you feel more in control.

For breast cancer care, support and information, call us free on 0808 800 6000 or visit breastcancercare.org.uk



Introduction

Knowing what to eat during and after treatment for breast cancer can be difficult. You may have a loss or increase of appetite, your tastes may change, or you may put on or lose weight. In this booklet we look at how to manage these changes and eat a healthy, balanced diet.

Even though we've included a lot of information about following a healthy lifestyle, it's important to not feel guilty if you don't stick to it all the time – especially while you're coping with the other physical and emotional effects of breast cancer and its treatment. It's just about getting the balance right.

You might hear lots of different theories and news stories about diet and cancer. This can be confusing, particularly when you're trying to understand all sorts of other information about breast cancer and its treatment. In the second part of the booklet we explain the evidence behind some of these theories, and discuss whether diet and lifestyle can affect the risk of breast cancer coming back (recurrence).

You can discuss any concerns with your doctor or breast care nurse, or ask to be referred to a dietitian (a healthcare professional who assesses and treats dietary and nutritional problems).

What is a healthy diet?

Eating healthily is important for everyone, but when you've had breast cancer you may become even more aware of what you eat and drink. A balanced diet has been shown to have a range of health benefits.

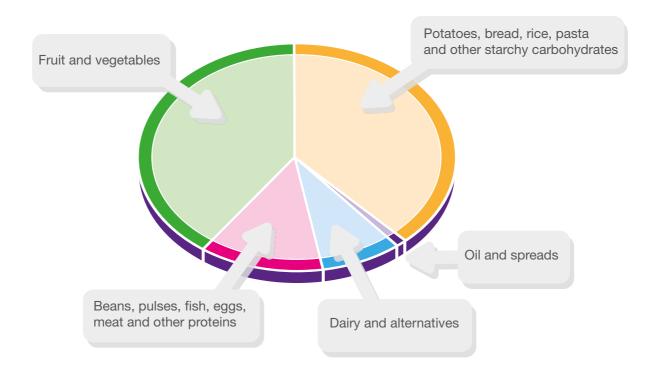
The Eatwell Guide

To eat healthily, try to eat a variety of foods from each of the four main food groups every day. The Eatwell Guide shows the different types of foods you should eat and in what proportions. It recommends you:

- · eat at least five portions of a variety of fruit and vegetables a day
- base meals on potatoes, bread, rice, pasta or other starchy carbohydrates – choose wholegrain where possible
- have some dairy or dairy alternatives (such as soya drinks and yoghurts) – choose lower-fat and lower-sugar options
- eat some beans, pulses, fish, eggs, meat and other protein aim for at least two portions of fish every week, one of which should be oily, such as salmon or mackerel

In addition to this, you should:

- eat foods that are high in sugar less often and in small amounts
- choose unsaturated oils and spreads and use in small amounts
- avoid eating foods that are high in salt or fat too often
- try to limit alcohol as much as possible have no more than 14 units of alcohol per week and spread your drinking over at least three days if you drink as much as this in a week



Eating healthily doesn't mean you can't have any of the foods or drinks you enjoy that might not be considered healthy, such as those high in fat, salt and sugar. If you follow the advice on the Eatwell Guide you can still enjoy these from time to time, it's just about making sure you get the balance right.

Mediterranean diet

You may have heard of the Mediterranean diet. It's a good way of getting a balanced diet and has been associated with many health benefits, including a healthier heart.

The Mediterranean diet is based on typical foods and recipes of Mediterranean-style cooking, and consists mainly of vegetables, fruits, nuts, beans, cereal grains, olive oil and fish.

Diet during treatment

Breast cancer treatments can have a range of side effects, some of which may affect what you want to eat and drink. Your usual routine may be disrupted, which can affect your eating pattern. You may also find that going through a stressful and anxious time affects your appetite, causing you to eat more or less than normal.

Eating after surgery

Most people feel ready to eat again the day after surgery and find their appetite returns to normal as the days go on. Eating well will help your body recover and heal.

Effects of chemotherapy

It's hard to tell how your body will react to chemotherapy. You may be able to eat normally throughout your treatment or the side effects may cause your eating habits to change.

For more general information about chemotherapy and its side effects, see our **Chemotherapy for breast cancer** booklet.

Changes to your appetite

If your appetite is small, eating little and often can be better than facing a large meal. It may help to:

- eat five to six small meals or snacks each day instead of three big meals
- drink milkshakes, smoothies, juice or soup if you don't feel like eating solid food
- do something active, if you feel able to, as exercise can help increase your appetite – for instance, you might have more of an appetite if you take a short walk before lunch
- be careful not to reduce your appetite by drinking too much liquid before or during meals

Some of the drugs given alongside chemotherapy, such as steroids, can stimulate your appetite. If you're worried about gaining weight:

- choose low-fat foods and drinks
- eat plenty of fresh fruit and vegetables
- watch out for the sugar content of food including some 'diet' foods
- avoid sugary drinks

Nausea and vomiting

Nausea (feeling sick) and vomiting (being sick) can be a problem for some people during and after their chemotherapy treatments. Anti-sickness drugs can help with nausea and vomiting. Your chemotherapy team can help you find one that works for you.

Drink plenty of fluids, such as water or herbal teas. Taking frequent sips is better than trying to drink large amounts in one go.

Eating little and often is a good way to combat nausea. Herbal teas such as mint or ginger can also help settle the stomach.

Sore mouth

Chemotherapy can make your mouth sore or dry, making it uncomfortable to eat.

You might find it helpful to:

- clean your teeth or dentures with a soft brush after eating, and floss gently
- choose soft or liquid foods such as soups, stews, smoothies and desserts
- soothe your mouth and gums with ice cubes and sugar-free ice lollies
- drink sugar-free fizzy drinks to freshen your mouth
- use a straw to drink
- avoid crunchy, salty, very spicy, acidic or hot foods

Taste changes

Your taste may change during chemotherapy, making foods taste bland or different. You may prefer to eat strongly flavoured foods, and using herbs and spices in cooking may help. Try a variety of foods to find the ones you like the best. As well as going off your usual foods, you may find that you like foods that you previously did not like.

Some types of chemotherapy can give you a metal taste in your mouth. Using plastic cutlery, instead of metal, can help reduce the metal taste. Using glass pots and pans to cook with can also help.

Constipation

Eating and drinking less than usual, being less active and taking certain medications can all lead to constipation. Consuming high-fibre foods can help if you're constipated. These include:

- wholemeal bread
- high-fibre breakfast cereal
- beans and lentils
- vegetables (fresh or frozen)
- fresh and dried fruit

You should also drink plenty of fluids and do some regular, gentle exercise such as walking. If you're still having problems with constipation, ask your specialist or GP (local doctor) for advice.

Diarrhoea

Occasionally, some chemotherapy drugs can cause diarrhoea. Your GP or specialist can prescribe medication for diarrhoea if necessary.

Contact your chemotherapy team if you have four or more episodes of diarrhoea within a 24-hour period.

Risk of infection

Chemotherapy can cause a drop in white blood cells, which can increase the risk of getting an infection. You'll have regular blood tests throughout your treatment to check your blood count. If you're at an increased risk of infection, you may be advised to follow a specific diet, avoiding foods that contain higher levels of harmful bacteria. Your chemotherapy team will explain more about this if necessary.

We should all follow food hygiene guidelines when storing, preparing and cooking food. This is particularly important if you're at increased risk of infection. You can find the NHS food hygiene guidelines on their website nhs.uk/livewell/homehygiene

Effects of radiotherapy

Having radiotherapy should not cause any dietary problems but it's still good to eat a balanced diet and drink plenty of fluids.

If you have to travel for your treatment, take a drink and snack with you and plan meals that are easy to prepare for when you get home. See 'Shopping and cooking during treatment' opposite.

Effects of hormone therapy

Weight gain

Some people who are having hormone therapy as part of their breast cancer treatment find their weight increases. More research is needed to understand why this is.

High cholesterol

Hormone therapy drugs such as anastrozole and letrozole can increase the level of non-high density lipoprotein (also known as 'bad cholesterol') in the blood.

If you have too much 'bad cholesterol' it can build up in the artery walls, leading to artery disease or other health conditions.

Following a healthy diet and maintaining a body weight in the normal range can help to reduce your levels of 'bad cholesterol'. Your doctor will be able to tell you more about how cholesterol levels are measured and what dietary changes you may need to make.

Shopping and cooking during treatment

Simple tasks like shopping and cooking can seem exhausting during your treatment and as you recover. Try to accept any offers of help, even if you're used to coping on your own. You can also take advantage of online shopping or ask local shops if they have a telephone ordering and delivery service.

It's important to have fresh food in your diet, but if you can't shop regularly, frozen and tinned fruit and vegetables are full of nutrients and can be eaten every day. Choose tinned fruit in juice rather than syrup and tinned vegetables that have less salt.

See our website for more information on coping with fatigue during and after treatment.

Diets for other medical conditions

If you're already following a specific diet because you have a medical condition – such as diabetes, Crohn's disease or irritable bowel syndrome (IBS) – having breast cancer doesn't mean your diet has to change. However, if you're concerned about how your breast cancer treatment may affect your diet or any existing condition, talk to your breast care nurse or cancer specialist team. They can talk to a dietitian or other medical staff to ensure any existing condition remains under control during your treatment.

Healthy eating after treatment

After treatment for breast cancer, you may find you've gained or lost weight, or you may simply want to know if diet can play a role in your recovery and future health.

It can be helpful to speak with your GP or practice nurse. They can assess if your current weight is healthy. To do this they will measure your weight and height to calculate your body mass index (BMI). If your BMI is too high or low, they can help you put a plan together. They may refer you to a dietitian if they think this would be helpful. They can also let you know about any local schemes aimed at helping people manage their weight and be more active.

If you've put on weight

We usually put on weight when the amount of calories we eat is more than the amount of calories we burn through normal everyday activities and exercise.

Some people put on weight during and after treatment, which can be upsetting. This may be due to:

- the side effects of some drugs, which can increase appetite
- the body retaining fluid
- being less active than usual
- overeating when you're anxious or because your usual routine has changed
- the menopause (as a result of your treatment)

How to lose weight

If you need to lose weight after treatment, aim for a realistic weight loss of about 0.5–1kg (1–2 pounds) a week.

The only way to lose weight healthily and keep it off is to make some permanent changes to the way you eat and exercise. Try to:

- reduce your portion sizes
- eat at least five portions of fruit and vegetables a day
- choose wholegrain varieties of bread, pasta and cereals
- use lower-fat dairy foods, such as skimmed or semi-skimmed milk or lower-fat cheese such as feta, reduced-fat cheddar or cottage cheese
- go for lean cuts of meat and trim off as much fat as possible
- include beans and pulses in your diet
- limit the amount of alcohol you drink
- limit the amount of biscuits, cakes, chocolate and crisps
- choose healthier options when eating out and remember that takeaways can be high in fat and calories

Some people find the support from a local weight loss scheme or club helpful.

As well as eating a healthy diet, you should also try to do some regular moderate-intensity exercise. See the 'Physical activity during and after breast cancer' section of our website for more information.

The NHS has developed a 12-week weight loss programme in association with the British Dietetic Association. Your GP can tell you more about this or you can download the guide from the website at nhs.uk/livewell/weight-loss-guide

If you've lost weight

If you've lost weight during your treatment, some simple changes to your diet can help. To put on weight in a healthy way, you need to eat more calories and more protein. Aim to eat three meals and some snacks throughout the day, based on the Eatwell Guide (page 4). Have more of the protein-rich foods like lean cuts of meat, fish, eggs, nuts, seeds and pulses (such as lentils and beans), and include healthy fats such as avocados, olive or rapeseed oil, and unsalted peanut butter.

Your GP can prescribe high-protein or high-energy drinks and soups if you need extra help to gain weight, or they may refer you to a dietitian.

Bone health

For some people, treatments such as chemotherapy or hormone therapy can affect bone health and increase the risk of osteopenia or osteoporosis, conditions that affect the bones. This may depend on factors such as whether or not you've gone through the menopause when you started treatment.

It's important to get enough calcium from your diet as calcium is vital for healthy bones.

Good sources of calcium include:

- milk and dairy products (including low-fat varieties) such as yoghurt, fromage frais and cheese
- calcium-fortified breakfast cereals
- dried fruit such as apricots and figs
- fish with edible bones such as anchovies, sardines, pilchards and whitebait
- green leafy vegetables like broccoli, watercress and curly kale
- pulses, beans and seeds such as kidney beans, green beans, baked beans and tofu (a vegetable protein made from soya beans)
- nuts and seeds such as almonds, brazil nuts, hazelnuts and sesame seeds
- okra

Vitamin D is needed to help your body absorb calcium. The main source of vitamin D is sunlight. You can also get vitamin D from some foods. Good food sources of vitamin D include:

- margarine
- low-fat spreads
- egg yolks
- oily fish such as herrings and sardines
- cod liver oil
- vitamin D-fortified breakfast cereals

Your GP may recommend a calcium or vitamin D supplement (see 'Supplements' opposite).

For more information on looking after your bones during and after treatment, see our Osteoporosis and breast cancer treatment booklet.

Supplements

If you're finding it difficult to get key nutrients or vitamins from your diet alone during or after treatment, your GP may prescribe a dietary supplement. For example, if your bone health has been affected they may prescribe a calcium or vitamin D supplement.

However, unless you're having problems recovering from treatment, supplements are not needed.

Some people wonder whether certain herbal products might help, for example with the side effects of treatment. However, there's conflicting evidence about the safety or effectiveness of some herbal products, and some may affect how certain cancer treatments work. Talk to your specialist, GP or a dietitian before taking them.

For more information on herbal medicines and homeopathy, see our Complementary therapies booklet.

Can diet and lifestyle affect the risk of cancer coming back?

You may have heard that diet and lifestyle can affect the risk of breast cancer coming back (recurrence).

The World Cancer Research Fund recommends that women who have had breast cancer follow advice to reduce their risk of cancer coming back (see 'Useful organisations' for details). This includes eating a healthy diet that is high in fibre and low in saturated fats, being physically active, maintaining a healthy weight and limiting alcohol (if consumed at all).

Diet

High-fibre foods

High-fibre foods tend to be lower in calories and can help you feel full up for longer. Experts think fibre has many health benefits including improving digestive health and helping to prevent heart disease and some cancers.

There is some evidence that fibre may reduce the risk of breast cancer recurrence but further research is needed to find out more.

- wholegrain foods such as brown rice, oats, wholewheat couscous and quinoa
- pulses such as lentils and beans
- starchy foods such as potatoes and sweet potatoes, preferably with their skins on
- · vegetables and fruits

Saturated fats

It's a good idea to limit the amount of fat you eat, particularly saturated fat, because it increases the risk of conditions such as heart disease. As with fibre, there is some evidence that saturated fat may affect the risk of recurrence, but again further research is needed to find out more.

Foods that are high in saturated fat include:

- butter
- fatty cuts of meat
- processed meats such as sausages
- full-fat dairy products, including whole milk, cream and hard cheese
- · chocolate, biscuits and cakes

Try to replace these with healthier unsaturated fats found in foods such as:

- olive oil, rapeseed oil and spreads made from these oils
- oily fish such as salmon and mackerel
- avocados
- nuts and seeds

If you're having foods that contain saturated fats, try to choose ones with lower saturated fats. For example, choose lower-fat dairy products such as skimmed milk, low-fat yoghurts and low-fat feta cheese, and leaner meats such as chicken and turkey.

Soy and foods that contain phytoestrogens

Soy foods such as soy milk and tofu contain natural compounds called phytoestrogens. Foods like chickpeas and linseeds also contain phytoestrogens.

Phytoestrogens have a chemical structure that is similar to the female hormone oestrogen. As the hormone oestrogen can stimulate some breast cancers to grow, some people worry whether foods or

supplements containing phytoestrogens might have the same effect as oestrogen and increase the risk of recurrence.

Current evidence suggests that a diet containing naturally occurring phytoestrogens is safe if you've had breast cancer and may be beneficial.

Phytoestrogens are also found in supplements like black cohosh, red clover and sage, which are sometimes taken to relieve hot flushes and other menopausal symptoms. However, these are not recommended because the evidence on their effectiveness and safety is limited and conflicting.

Organic foods

Some people choose to eat organic foods as a way of reducing pesticides in their diet. However, no association has been found between eating an organic diet (before or after diagnosis) and the risk of breast cancer recurrence.

Superfoods

The term 'superfood' has been used to describe foods that are apparently beneficial for preventing or treating a range of health conditions. This includes things like blueberries, raspberries, green tea and broccoli.

There is no evidence that any single food can reduce the risk of breast cancer developing or coming back in someone who has been diagnosed. The EU has banned food companies from making these health claims on their packaging unless they are supported by scientific evidence.

Special 'cancer' diets

Some people who have had breast cancer consider following a special diet. This may be because they believe it could reduce the risk of recurrence. These diets often encourage eating or avoiding certain types of food. There's no conclusive evidence to show that they reduce the risk of breast cancer recurrence.

Special diets can often be very restricting, expensive and can sometimes lead to a lack of nutrients. This may result in other conditions such as anaemia (too few red blood cells in the body), or bone conditions such as osteopenia or osteoporosis (see page 12).

If you're thinking about changing your diet or want to find out more about different diets, you may find it helpful to talk to your specialist team or a dietitian. You might also want to contact some of the organisations listed at the end of this booklet for more information.

You may hear about some of the diets below.

The Bristol Whole Life Approach to healthy eating

The Bristol Whole Life Approach to healthy eating is a set of dietary guidelines for people living with and beyond cancer. The guidelines mainly focus on eating foods that are in their natural state and have not been altered. For example, they suggest wholegrain brown rice instead of refined white rice. They also recommend including a range of different colour vegetables and fruit in your diet. Animal products are permitted in small amounts.

The Bristol Whole Life Approach to healthy eating aims to help people eat healthily and cope better with the physical and emotional impact of cancer. However, there is no evidence that following these recommendations will reduce the risk of breast cancer recurrence.

The recommendations were developed by Penny Brohn UK. See 'Useful organisations' for more information.

Dairy-free diet

Some people with breast cancer are concerned about eating dairy foods and believe that following a dairy-free diet will reduce their risk of recurrence.

In a dairy-free diet, dairy foods are avoided altogether and are replaced with non-dairy alternatives such as soy products, and almond and rice milks.

There's no conclusive evidence that following a dairy-free diet will reduce the risk of recurrence. As dairy foods are one of the main sources of calcium it's still important to include non-dairy foods that contain the calcium the body needs. See 'Bone health' on page 12 for examples of foods that are high in calcium.

Macrobiotic diet

A macrobiotic diet is high in wholegrains and low in fat and protein. There are different types of macrobiotic diets and some are stricter than others. They may also include guidelines on how food is prepared, your lifestyle and environment.

This diet can be strict and is often low in calories, calcium, iron. B vitamins and other nutrients, so may not be suitable and could possibly be harmful. Speak to your dietitian or specialist team for advice.

Alcohol

Studies have shown an association between drinking alcohol and breast cancer risk, and some have shown an association between breast cancer and survival rates.

People who've had breast cancer are recommended to stay within the NHS guidelines for alcohol intake. These state women and men should drink no more than 14 units of alcohol per week and spread their drinking over three days or more if they drink as much as this a week.

You can find out how many units are in your drinks by using an online unit calculator. As a general guide, half a pint of average-strength (4%) beer has 1 unit, a 175ml glass of wine (12.5%) has 2 units, and a single 25ml measure of spirits (40%) has 1 unit.

It's worth bearing in mind that alcohol is also high in calories.

Smoking

We know smoking causes a range of health conditions. There is emerging evidence that smoking may also affect the risk of breast cancer recurrence but further research is needed to find out more. If you want to stop smoking there are a range of programmes to help. Speak to your GP or practice nurse for advice.

Physical activity

Physical activity can help improve your long-term health, and has been shown to reduce the risk of health conditions such as heart attacks, strokes and some cancers. It may reduce the risk of recurrence but further research is needed to find out more. See our website for more information on physical activity after breast cancer treatment.

Useful organisations

British Association for Applied Nutrition & Nutritional Therapy (BANT)

27 Old Gloucester Street, London WC1N 3XX

Website: bant.org.uk

Email: theadministrator@bant.org.uk

Telephone: 0870 606 1284

Provides a national register of nutritional therapy practitioners.

British Dietetic Association (BDA)

5th Floor, Charles House, 148/149 Great Charles Street, Queensway, Birmingham B3 3HT

Website: bda.uk.com Email: info@bda.uk.com Telephone: 0121 200 8080

Advice on finding a dietitian who is appropriately trained

and qualified.

British Nutrition Foundation

Imperial House 6th Floor, 15–19 Kingsway, London WC2B 6UN

Website: nutrition.org.uk

Email: postbox@nutrition.org.uk

Telephone: 020 7557 7930

Provides impartial, evidence-based information on food

and nutrition.

Change4Life

Website: nhs.uk/Change4Life

A public health website that provides advice and information on healthy eating, alcohol and exercise.

National Osteoporosis Society

Camerton, Bath BA2 0PJ

Website: nos.org.uk Email: info@nos.org.uk Helpline: 0845 450 0230

Provides a range of booklets and online information about osteoporosis. They also have a Helpline staffed by nurses with specialist knowledge of osteoporosis.

NHS behind the headlines

Website: nhs.uk/news

Provides an unbiased and evidence-based analysis of health stories that make the news.

NHS Livewell

Website: nhs.uk/livewell

Offers tips on eating healthily, losing weight and physical activity.

Penny Brohn UK

Chapel Pill Lane, Pill, Bristol BS20 0HH

Website: pennybrohncancercare.org

Email: info@pennybrohn.org Helpline: 0845 123 2310

Offers courses and information for people with cancer as part of their 'Bristol Whole Life Approach' programme. They provide practical tips on healthy eating and exercise, and managing uncertainty and anxiety.

Smokefree NHS

Website: nhs.uk/smokefree

Smokefree is a campaign launched by Public Health England to help people to quit smoking. They offer support through their Smokefree app, Quit Kit, email, SMS and face-to-face guidance.

Walking for Health

Website: walkingforhealth.org.uk

Run in partnership by the Ramblers and Macmillan Cancer Support, Walking for Health offer free, short, local health walks across England to help more people, including those affected by cancer, discover the joys and health benefits of walking.

World Cancer Research Fund

Website: wcrf-uk.org/uk

Includes information for people living with and beyond cancer on reducing the risk of their cancer coming back.



4 ways to get support

We hope this information was helpful, but if you have questions, want to talk to someone who knows what it's like or want to read more about breast cancer, here's how you can.



Speak to trained experts, nurses or someone who's had breast cancer and been in your shoes. Call free on 0808 800 6000 (Monday to Friday 9am-5pm, Wednesdays til 7pm and Saturday 9am-1pm).



Chat to other women who understand what you're going through in our friendly community, for support day and night. Look around, share, ask a question or support others at forum.breastcancercare.org.uk



Find trusted information you might need to understand your situation and take control of your diagnosis or order information booklets at breastcancercare.org.uk



See what support we have in your local area. We'll give you the chance to find out more about treatments and side effects as well as meet other people like you.

Visit breastcancercare.org.uk/in-your-area

We're here for you: help us to be there for other people too

If you found this booklet helpful, please use this form to send us a donation. Our information resources and other services are only free because of support from people such as you.

We want to be there for every person facing the emotional and physical trauma of a breast cancer diagnosis. Donate today and together we can ensure that everyone affected by breast cancer has someone to turn to.

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We might occasionally want to send you more information about our services and activities			
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We won't pass on your details to any other organisation or third parties.

Please return this form to Breast Cancer Care, Freepost RRKZ-ARZY-YCKG, Chester House, 1–3 Brixton Road, London SW9 6DE



About this booklet

Diet and breast cancer was written by Breast Cancer Care's clinical specialists, and reviewed by healthcare professionals and people affected by breast cancer.



For a full list of the sources we used to research it:

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When you have breast cancer, everything changes. At Breast Cancer Care, we understand the emotions, challenges and decisions you face every day, and we know that everyone's experience is different.

For breast cancer care, support and information, call us free on 0808 800 6000 or visit breastcancercare.org.uk

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