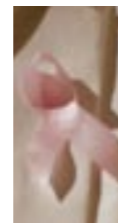


Introduction

Breast cancer is the most common cancer to affect women in the UK. One in nine women in this country will develop the disease during their lifetime; 80 per cent of these will be women over the age of 50. If breast cancer is diagnosed early, the outlook is good, and yet each year as many as 12,000 women lose their lives to this disease.

The good news is that scientific research tells us that we can reduce our risk of breast cancer by eating and living healthily.

This leaflet guides you through the steps you can take to help reduce your risk of cancer.



What is cancer?

Cancer is a broad term used to describe over 200 diseases that affect specific organs or tissues of the body. Simply speaking, it is a disease of cells, and every type of cancer starts in the same way. It begins when the genetic information in a single cell becomes damaged and causes the cell to divide at an uncontrolled rate. The resulting group of cells often forms a lump or swelling, which is usually referred to as a tumour. The tumour may then grow and go on to damage surrounding healthy tissues or organs, or cancer cells may break away from the original tumour and spread through the bloodstream or the lymphatic system to other parts of the body – a process known as metastasis.

What causes cancer?

The development of cancer is a complex biological process which is still not well understood. Thanks to scientific research, we do, however, have an increasing understanding of the factors which are involved in the cancer process. Hormones, immune conditions and inherited alterations in the genetic material of a cell can all play a part in cancer development. But we now know that environmental factors – particularly diet and lifestyle – have a significant influence on the development of cancer. Environmental factors include exposure to ‘toxins’ – such as tobacco and alcohol – unhealthy food choices, infectious agents – like bacteria and viruses – chemical agents and radiation. All of these can damage the programming and health of cells in the body and so encourage cancer growth.

Some aspects of our daily lifestyle choices can encourage the cancer process while others help protect against it. The aspects of lifestyle most likely to increase our risk include: unhealthy food choices, not being physically active, being overweight, drinking heavily and smoking tobacco.

What is breast cancer?

Breasts consist mainly of milk-producing glands and the channels, or ducts, that carry milk to the nipples. Cancer can develop in either the glands or ducts, and is usually first noticed as a lump or thickening. It is important to remember that not all breast lumps are cancer – in fact 9 out of 10 are harmless. However, to be on the safe side, all breast changes should be checked by a doctor.

Who is at risk?

While women over 50 years of age are statistically more likely to develop breast cancer, it can develop at any time during adult life. Men can also be affected, although the incidence is extremely low.

Scientists have identified a number of factors that may be linked to the development of breast cancer, some more strongly than others. Many of the risk factors for breast cancer are associated with a prolonged exposure to the hormone oestrogen, which some tumours need to grow. Risk factors include:

- age (over 50)
- no pregnancies
- never having breast-fed
- early first menstrual period, late menopause
- weight gain during adulthood
- overweight after the menopause
- a sister, mother or daughter with breast cancer
- high intake of alcohol
- a diet high in fat and red meat.

Rarely, some families carry a particular genetic alteration that markedly increases the likelihood of developing breast cancer. Although this accounts for less than 1 in 20 cases, women who have a strong family history of breast cancer may be tested for the gene.

Helping to prevent breast cancer

Just as a healthy diet and lifestyle help protect against several other cancers, these can help to reduce breast cancer risk. In fact, scientific research suggests that whatever a person’s age, genetic background or reproductive history, their diet and lifestyle play a key role in determining whether or not they develop



Steps to help lower breast cancer risk



STEP ONE:

Maintain a healthy weight

Try to avoid being underweight or overweight, and limit the amount of weight you gain during adulthood.



STEP TWO:

Eat plenty of vegetables and fruits

Try to eat at least five portions a day of a variety of vegetables and fruits, all year round.



STEP THREE:

Drink alcohol only in moderation, if at all

For drinkers: men should drink less than two alcoholic drinks a day, women less than one.



STEP FOUR:

Be physically active

Although any amount of activity is good for health, try to be physically active for an hour a day in total, and exercise more vigorously for one hour, once a week.



STEP FIVE:

Choose a diet rich in a variety of plant-based foods

Eat plenty of starchy or protein rich plant foods and opt for wholegrain varieties where possible.



STEP SIX:

Select foods low in fat

Opt for low fat versions of foods and drinks. Cut down on meat products and red meat – choose the leanest cuts and trim off visible fat. Eat fewer cakes, biscuits and pastries.

AND REMEMBER:

Select foods low in salt, prepare and store food safely, and do not smoke or use tobacco in any form



breast cancer.

We know that diets high in vegetables and fruit probably lower breast cancer risk as these foods contain numerous antioxidants and other chemicals that may help to prevent the development of tumours. Scientists have also established links between several other lifestyle factors and an increased risk of breast cancer. It seems that women who eat a diet high in fat and who are overweight, particularly after the menopause, are increasing their risk. Low levels of physical activity and a high alcohol intake have also been identified as risk factors. With this evidence to hand, it seems logical to take positive steps to improve our diet and lifestyle.

Detecting breast cancer

Generally speaking, treatment is most effective if a cancer is found while it is small and has not spread beyond the breast tissue. This is why early detection is so important. Most lumps are not discovered in the doctor's surgery, but at home by women themselves.

By being 'breast aware', you can keep on top of your health. Breast awareness simply means that you should be familiar with the normal look and feel of your breasts (at all times during your monthly menstrual cycle) so that you would spot any abnormalities early on. Breast changes may include the following:

Many breast lumps are not cancerous, but

- A change in the size or shape of a breast
- A change in skin texture, such as puckering or dimpling
- A discharge from the nipple
- A new lump or thickening in the breast or armpit. Bear in mind that breasts can be naturally quite lumpy, especially just before a period.



it is always best to make an appointment with your GP. If s/he is concerned, you will be referred to hospital for further checks.

Diagnosing breast cancer

A mammogram is an x-ray of the breast that can identify changes in breast tissue before they can be felt. (The NHS Breast Screening Programme currently offers 3-yearly mammograms to all women between the ages of 50-70).

You may also have other tests including:

- Ultrasound – a painless test that uses sound waves to create an image of the breast tissue
- Fine-needle aspiration (FNA) – a needle is inserted into the lump and cells are withdrawn into a syringe
- Core biopsy – a larger specimen of tissue is taken using local anaesthetic.

The cells from the FNA and the biopsy specimen are sent for laboratory analysis and any malignant cells will be seen under the microscope.

Treating breast cancer

The type of treatment chosen for an individual with breast cancer will depend on a number of factors including a person's age and medical history, the stage of cancer development and the type of cancer.

Surgery, in the form of a lumpectomy (removal of the lump) or mastectomy (removal of the breast), radiotherapy (using high-intensity x-rays to destroy cancer cells) and chemotherapy (using drugs to destroy cancer cells) remain the three standard treatments for breast cancer. However, many new therapies are currently being researched and developed. These include new endocrine treatments and monoclonal antibody therapies.

The important fact to remember is that breast cancer can be successfully prevented and treated.

Where to go next

World Cancer Research Fund
19 Harley Street, London
W1G 9QJ. Tel: 020 7343 4205
www.wcrf-uk.org

For further information on healthy diets and lifestyles to lower your risk of cancer.

Breast Cancer Care
www.breastcancercare.org.uk
Helpline: 0808 800 6000
For free information and

support for everyone affected by breast cancer.

CancerBACUP
www.cancerbacup.org.uk
Helpline: 0808 800 1234
Provides information and practical advice and support to people affected by cancer and their family and friends.



Work of World Cancer Research Fund (WCRF UK)

WCRF UK is the only major UK registered charity dedicated to the prevention of cancer through healthy diets and lifestyles. WCRF UK is committed to providing cancer research and education programmes which expand our understanding of the importance of our food and lifestyle choices in the cancer process. By spreading the good news that cancer can be prevented, WCRF UK hopes that many thousands of lives will be saved. The education and research programmes of WCRF UK are funded by donations from the public.

This leaflet gives information on the WCRF UK Diet and Health Guidelines for Cancer Prevention. These guidelines were developed from WCRF/AICR's landmark report: *Food, Nutrition and the Prevention of Cancer: a global perspective* (1997). This report reviewed thousands of leading research studies from around the world and led to a set of clear guidelines for members of the public to follow. Since then, a great deal of new evidence has accumulated and WCRF/AICR are working on the production of a second report, due to be published in 2007.

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"Stopping cancer before it starts"

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REDUCING YOUR RISK OF BREAST CANCER

