



**INFORMATION LEAFLET FOR
GENERAL PRACTITIONERS**

**PREVENTION AND EARLY DETECTION
OF BREAST CANCER**

Prevention and early detection of breast cancer

Prevention of breast cancer A risk factor for breast cancer is something about an individual or a lifestyle of the individual that increases the individual's chances of developing a cancer. Example "not breast feeding" is one of the risk factors for breast cancer. It means that more women who do not breast feed develop breast cancer than women who breast feed their children.

Factors that can be influenced and controlled by the individual These include the risk factors that an individual can modify if she or he has an understanding of the risk factor and also learns about the ways of modifying those risk factors. By making these lifestyle changes one can potentially lower ones risk of developing breast cancer.

Risk factors

Overweight/obesity is one of the most important preventable risk factor for breast cancer. It is therefore essential to prevent obesity. Other than ovaries, fat in the periphery of the body increases the production of oestrogen and adds to the overall level of oestrogen in the body which increases the risk of breast cancer more so in women after menopause.

Recommendations for cancer prevention from the World Cancer Research Fund Report 'Food, Nutrition, Physical Activity and the Prevention of Cancer: a Global Perspective'

- Be as lean as possible within the normal range of body weight.
- Be physically active as part of everyday life;
- Limit consumption of energy-dense foods;

- Avoid sugary drinks;
- Eat mostly foods of plant origin;
- Limit intake of red meat and avoid processed meat;
- Limit alcoholic drinks;

Walking to work, taking a walk at lunch break, avoiding a sedentary lifestyle, using stairs and avoiding lifts are all ways of avoiding being obese.

High fat intake in the diet No study has demonstrated a link between high fat intake and higher risk of breast cancer. However avoiding high fat intake lowers cholesterol (low-density lipoproteins). It helps keep body weight under control.

Alcohol Having more than two alcoholic drinks per week, can limit liver's ability to regulate blood oestrogen levels and thereby increase the risk of breast cancer. The Department of Health recommends that women drink no more

than 2-3 units of alcohol per day. Drink in moderation.

Smoking is associated with a small increase in breast cancer risk. The Department of Health runs highly effective stop smoking campaigns to motivate and support smokers to stop smoking. You can use The Smoking Helpline, www.gosmokefree.co.uk website to ask for support to stop smoking.

Not breastfeeding long term Breast feeding for about a year reduces the risk of breast cancer slightly. Breast feeding delays the restarting of menstrual periods after the birth of child. This means that the levels of oestrogen in the body low which thereby reduces the risk of breast cancer. The longer a woman breast feeds her children, the more she lowers her risk. The Department of Health recommends women to

breastfeed for the first six months as it provides all the nutrients a baby needs as well as antibodies to help fight illness and infection.

Having the first child after 30 years of age can increase the risk of breast cancer. This is because the body is exposed to more years of oestrogen without break from regular cycles. One can potentially reduce the risk by having a full term pregnancy before age 30.

Hormone Replacement therapy Long term use of HRT can increase the risk of breast cancer. Million Women Study (2003, UK trial) and the Women's Health Initiative (2002, US trial) both have shown long term HRT use as a risk factor for developing breast cancer. Five years after stopping HRT the risk is the same as those who were not on HRT. HRT can be used as a short-term treatment to help women who have

menopausal symptoms and should be used for the shortest possible time at the lowest effective dose, with annual review of treatment with the GP. The relative risk of breast cancer for different types of HRT is shown in table.

Type of HRT	Relative risk
Oestrogen only HRT	1.30
Oestrogen-Progestogen HRT	2.00
Tibolone	1.45

Factsheets or any further information about breast cancer risk factors please contact the Breakthrough Information Line on 08080 100 200, or visit www.breakthrough.org.uk

Factors that cannot be controlled by the individual

Prolonged exposure to oestrogens

Early menarche (starting periods/cycles

at a young age) leads to more years of the body being exposed to oestrogen. Late menopause again leads to more years of the body being exposed to oestrogen. Not having had a full-term pregnancy.

Factors in the breast If a person has had previous breast biopsies which showed either of the condition below their risks of developing breast cancer is increased.

Atypical ductal hyperplasia—an overactive growth of cells lining the breast ducts

Lobular carcinoma in situ—an uncontrolled growth of lobular cells, the cells that make breast milk

Previous history of breast cancer In women who have had breast cancer before, the risk of developing a recurrence or a new breast cancer is

greater than the normal population. The risk is about 1% per year (over a 10-year period, the risk would be about 10%). The treatment given for breast cancer will reduce the risk of developing recurrence or a new breast cancer.

Family history of breast cancer If there is a family history of breast cancer then the risk of developing breast cancer is increased. Having one family member over the age of 50 diagnosed with breast cancer does not count as family history. Family history includes having a mother, sister, or daughter with breast cancer

- having multiple generations of family members affected by breast or ovarian cancer
- having relatives who were diagnosed with breast cancer at a young age (under 50 years old)
- having relatives who had both breasts affected by cancer

One can inherit breast cancer gene (BRCA 1 or BRCA 2) abnormality from either of the parents. There is a 50% chance of inheriting breast cancer gene abnormality if one of the parents has a gene abnormality. The risk of breast cancer in these families ranges greatly from 40–80% over the course of a lifetime. Breast cancer caused by an inherited gene abnormality is not necessarily any more severe or less treatable than other types of breast cancer. In fact only around 5% of all breast cancers are due to inherited gene abnormalities. Certain types of breast cancer gene abnormalities are also associated with a higher risk of ovarian cancer (from 20–60%).

For more information about hereditary breast cancer please visit Breakthrough's website at

www.breakthrough.org.uk/genetics

Age Risk increases with age as the wear and tear, increases the risk of a genetic abnormality, or "mistake" that is not identified and fixed. Breast cancer is rare in women under 40. The incidence of breast cancer increases with age doubling every 10 years until menopause and flattening of age incidence curve after menopause. All women after 50 should use the NHS breast screening service and be breast aware.

Estimated risk of developing breast cancer by age

Risk up to age 25	1/15,000
Risk up to age 30:	1 in 1900
Risk up to age 40:	1 in 200
Risk up to age 50:	1 in 50
Risk up to age 60:	1 in 23
Risk up to age 70:	1 in 15
Risk up to age 80:	1 in 11
Risk up to age 85:	1 in 10
Lifetime risk (all ages):	1 in 9

Early detection of Breast cancer

Breast awareness is important. Women should be encouraged to be familiar with their own breasts and should also be encouraged to have knowledge of the signs and symptoms of breast cancer. They should be encouraged to look and feel their breasts. To be familiar with their breast they should touch and feel their breasts when in a bath or shower, standing or sitting. They should be aware of the shape, size and texture of their breasts and look at their breasts when in front of a mirror. When they see a change or feel something which is not normal to them, they should be encouraged to check them out with GP.

Breast self examination can also be performed by the patient regularly. The problems with breast self examination is that it has to be taught by a health professional. When women are invited to be taught breast self examination only

30 - 50 % attend and there is not much information about consistency and compliancy with breast self examination. Regular breast self examination can increase anxiety in women who practice it and it is difficult to detect small tumours. Breast self examinations can result in increased referrals to hospitals and also an increase in detection of benign lumps. However women should be encouraged to be breast aware and be familiar with the look and feel of their breasts.

The breast awareness 5-point code:

- Know what is normal for you
- Know what changes to look and feel for
- Look and feel
- Report any changes to your GP without delay
- Attend routine breast screening if you are aged 50 or over

Changes to look out for

Size or shape one breast might become larger or lower than the other.



Appearance/direction of nipple nipple

might become inverted or pulled in



Skin texture such as puckering or dimpling of skin



Discharge one or both nipples might discharge a blood-stained liquid



Rash or crusting of the nipple or surrounding area



Lump in the breast or armpit

Lumpy area or unusual thickening of breast tissue that doesn't go away after a period

Pain in a part of the breast or armpit that is unrelated to periods

Breast Screening Women between the ages of 50 and 70 are invited to attend a screening unit or a mobile screening unit to have a mammogram (an X-ray of the breasts), every three years. Women aged 70 or over may make an

appointment at the screening clinic without an invitation. Women less than 50 years of age are currently not offered routine screening as breast cancer is commoner in older women and relatively rare in younger women. It is hard to interpret mammograms of younger women as the breast tissue is dense.

The purpose of the breast screening programme is early detection of breast cancer. The chances of survival are better. In women aged 50-69 years breast screening reduces the risk of dying of breast cancer by 35% as per report of World Health Organisation's (WHO) International Agency for Research on Cancer (IARC).

A small proportion of cancers can appear between two screening episodes and a small proportion of cancers can be missed. Hence it is important for the women to be breast aware and report to

the GP if they are concerned about a change in the breast.

For more information visit the <http://www.cancerscreening.nhs.uk/breastscreen>.

Achievements in breast screening (Cancer Reform Strategy, Department of Health, www.dh.gov.uk/publications)

- The NHS Breast Screening Programme in England saves an estimated 1,400 lives per year.
- Screening now accounts for a third of all breast cancers detected
- There has been a 62% increase in breast cancers detected through screening in the past five years;
- Over 13,500 cancers were detected in 2005/06, of which 41% were small cancers less than 15mm which could not have been detected by hand;

- 1.63 million women were screened in 2005/06.

Booklets and leaflets available on the NHS screening web page

Breast Screening - The Facts Designed to ensure that women are told what screening can and cannot achieve.

OVER 70? You are still entitled to breast screening: This leaflet tells women over 70 that they are entitled to request breast screening every three years.

Breast Implants and Breast Screening: This leaflet is designed to give women information about how breast implants affect mammography.

Be Breast Aware: A leaflet produced by the NHS Breast Screening Programme and the Cancer Research UK, setting out a five-point plan for women to

encourage them to get to know their own breasts.

Understanding Breast Screening: A booklet produced by Cancerbackup in association with the NHS Breast Screening Programme to complement the leaflet [Breast Screening - The facts](#).

Women can assess their risk of developing breast cancer using the breast cancer risk assessment tool provided by the National Cancer Institute. [“Breast Cancer Risk Assessment Tool.”](#)
<http://www.cancer.gov/bcrisktool/>,
www.cancer.gov