HOW TO GET TO BREAST CANCER FOUNDATION

Bus 11

CC6 Stadium MRT (Exit B)

BREAST CANCER FOUNDATION

5 Stadium Walk, Kallang Leisure Park
#04-03/08, Singapore 397693
Tel (65) 6352 6560
Fax (65) 6352 5808
E-mail enquiries@bcf.org.sg
Website www.bcf.org.sg

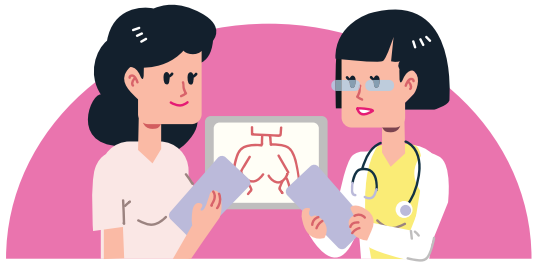
THE BREAST BOOK

WHAT YOU NEED TO KNOW ABOUT BREAST CANCER

BREAST CANCER FOUNDATION

CONTENTS

EARLY DETECTION SAVES LIVES, SAVES BREASTS!



PUBLISHER

Breast Cancer Foundation (BCF)
5 Stadium Walk
#04-03/08 Kallang Leisure Park
Singapore 397693
Tel: 6352 6560 | Fax: 6352 5808
Email: enquiries@bcf.org.sg
Website: www.bcf.org.sg

bcf.pink
bcfsg
Breast Cancer Foundation
BCF Singapore

SHOULD I BE CONCERNED?

Breast cancer is the **most common cancer among women** in Singapore.

Breast cancer accounts for **1 in every 3** cancers diagnosed in women.

1 in 14 women will develop breast cancer before the age of 75.

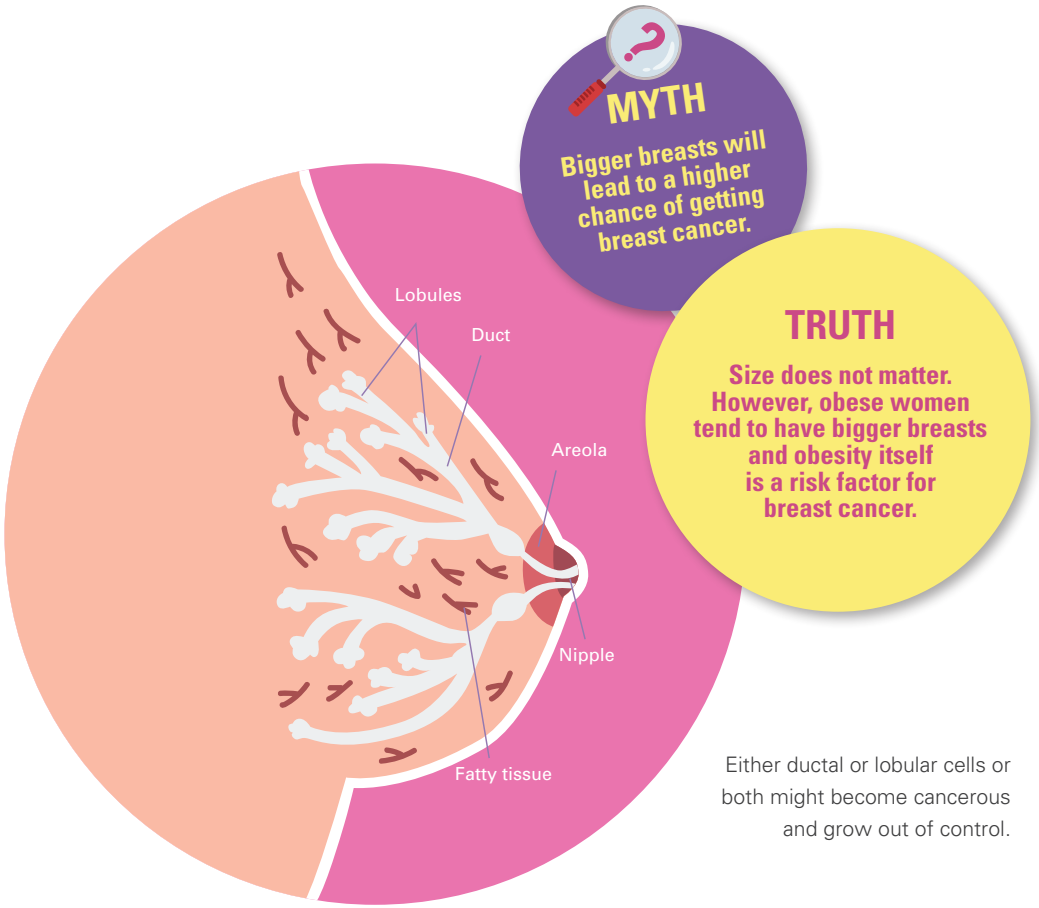
Breast cancer **need not result in death.** The 5-year survival rate for breast cancer **exceeds 90%*** when detected and treated early.

There are **over 1,900 newly diagnosed cases** each year.

Over **400 women die from breast cancer each year**.

Source: Singapore Cancer Registry Annual Registry Report 2015, National Registry of Diseases Office.

BASIC BREAST ANATOMY

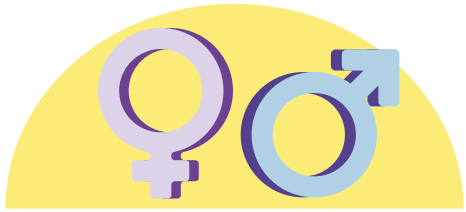


Either ductal or lobular cells or both might become cancerous and grow out of control.

The breast is largely made up of fat and breast tissue. Breast tissue comprises of lobes containing lobules that produce milk, as well as linking ducts that carry the milk to the nipple during breastfeeding. There are 5 to 10 ductal systems in each breast, with its own opening at the nipple.

The breast also contains nerves, blood vessels and lymph ducts (that carry lymph, a colourless fluid), and connective tissue that helps hold everything in place. The lymph ducts lead to bean-shaped lymph nodes found around the armpit, above the collarbone and in the chest.

RISK FACTORS



GENDER

Being female is the highest risk factor for developing breast cancer. Breast cancer in males is rare and accounts for about 1% of all breast cancer incidences.

AGE

A woman's risk of getting breast cancer increases with age. As people get older, it is more likely that abnormal changes will take place in their cells.

FAMILY HISTORY

If your mother, sister or daughter has or had breast cancer, you are at a higher risk of developing it. Family history of breast cancer can be due to various factors such as lifestyle or associated with specific genetic mutations. Researchers have found two genes - BRCA1 and BRCA2 - that, if defective, can increase susceptibility to breast cancer.

PREVIOUS HISTORY OF BREAST CANCER AND BENIGN BREAST DISEASE

Women who have had breast cancer or benign breast diseases such as hyperplasia have a higher risk of contracting breast cancer.

HORMONES

If you started menstruation early (before the age of 12) or experienced late menopause (after the age of 55), had your first child after the age of 30 or no children at all, you are at a higher risk of developing breast cancer. These factors are believed to be linked to the female hormone oestrogen. Breast cancer has also been associated with the prolonged use (5 years or more) of hormone replacement therapy after menopause.

DIET

Several studies have suggested that a diet high in fat may increase the risk of breast cancer. As such, it is best to limit fat intake as a high-fat diet can result in other cancers and heart diseases. It is important to include plenty of fruits and vegetables in your diet as phytoestrogens (plant hormones), found in a variety of vegetables and soya, may reduce the risk of developing breast cancer.

MYTH

Deodorants, antiperspirants or wearing bras can cause breast cancer.

TRUTH

There is no scientific data to support this statement.

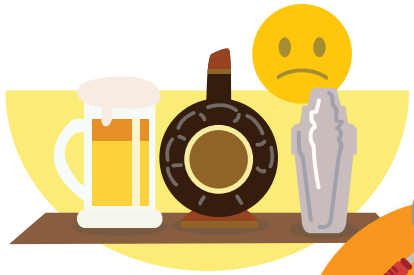
ALCOHOL

Several studies have shown a link between excessive alcohol intake and an increased risk of contracting breast cancer. Alcohol may increase risk by altering the way a woman's body metabolises oestrogen. This may cause blood oestrogen levels to rise, which may in turn increase the risk of breast cancer.

LACK OF PHYSICAL ACTIVITY

Exercise and regular activity may help to lower breast cancer risk by delaying the onset of menstruation and helping to maintain a healthy weight. Each of these can help decrease the total amount of oestrogen a woman is exposed to in her lifetime.

Low to moderate levels of physical activity may enhance the function of the immune system to suppress cancer change.



MYTH

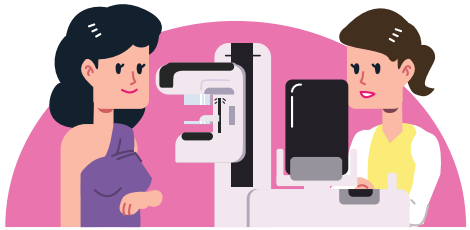
Breast cancer is contagious.

TRUTH

Breast cancer cannot be transmitted by physical contact (touching someone or sharing objects such as utensils).

SCREENING & DETECTION

Detection of breast cancer in its earliest stage offers the best chance of cure with less complicated treatments. However, during the early stages, there may not be symptoms like pain or a lump, but abnormalities can show up on a mammogram or an ultrasound screening.



MAMMOGRAM SCREENING

Mammogram screening is a low-dose X-ray examination of the breast that can pick up very small breast cancer cells. During mammogram screening, the breast is gently compressed between two plates of the X-ray machine for a few seconds to spread the tissue apart and get a good image of the breast. Images of the breast are taken and developed by a radiographer (a technician) who then hands the X-ray films to a radiologist (a doctor) to check for abnormalities.

BREAST SELF-EXAMINATION (BSE)

The best time to do the BSE is 7 - 10 days after the start of menses, when the breasts are least tender. If you no longer menstruate, do BSE on a fixed date every month, for example the first day of each month. This is to enable you to become familiar with the normal feel and look of your breast tissue so that you can recognise any abnormal changes.

CLINICAL BREAST EXAMINATION

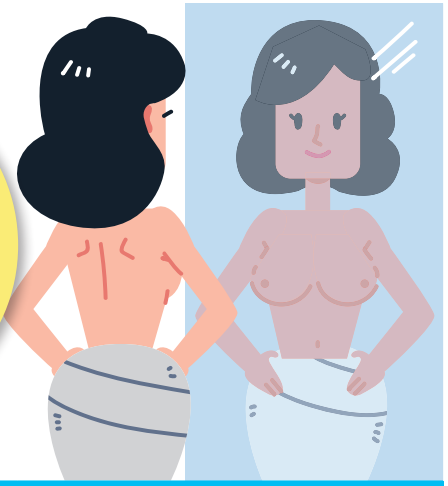
Clinical Breast Examinations can be done at a GP clinic, polyclinic, Gynaecological clinic or breast specialist clinic. The healthcare professional, usually a doctor, will palpate (feel) both your breasts and do a visual examination. If he/she finds anything suspicious, you will be referred for further testing (such as a mammogram/ultrasound/biopsy) or be given a follow-up appointment.

MYTH

If my mammogram results did not show abnormalities, I am safe from breast cancer.

TRUTH

Cancer can occur at any time. Hence, it is important to go for regular breast screenings, along with monthly breast self-examinations and annual clinical breast examinations so that any changes or abnormalities can be picked up early and checked by a doctor.



DEPENDING ON YOUR AGE, THE FOLLOWING IS RECOMMENDED:

	20 - 39 years old	40 - 49 years old	50 years & above
Mammogram Screening		● Once a year	● Once every two years* (unless otherwise recommended by a doctor)
Monthly Breast Self-examination	●	●	●
Annual clinical breast examination by healthcare professional		●	●

Note: Age recommendations are only guidelines and may differ for those with a family history of breast cancer or those who have other risk factors. Consult your doctor for a screening schedule.

MYTH

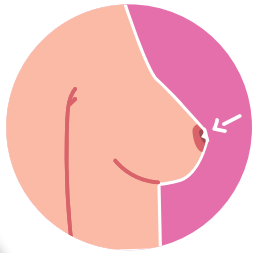
Breast cancer lumps are painful.

TRUTH

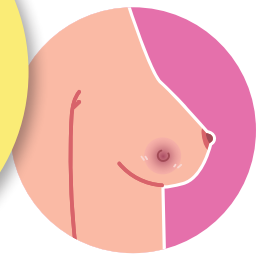
In the early stages of breast cancer, it is common to not experience any pain or symptoms.

LOOK OUT FOR THE SIGNS OF BREAST CANCER WHICH INCLUDE:

A persistent lump or thickening in the breast or armpit area

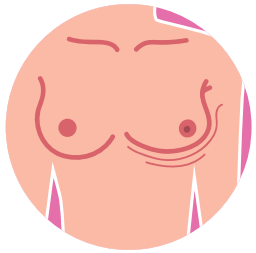


A newly retracted (pulled in) nipple



Changes in the colour or skin of the breast, areola or nipple (for example, dimpling, puckering or scaling)

Blood or discharge from the nipple



A change in the size or shape of the breast

MYTH

All breast lumps are cancerous.

TRUTH

9 out of 10 breast lumps are not cancerous.*

CONSULT A DOCTOR IF YOU NOTICE ANY OF THESE CHANGES.

*Source: Health Promotion Board. (2017, Nov 27). 5 Ways to Psych Yourself for a Mammogram [Website]. Retrieved September 2018 from https://www.healthhub.sg/live-healthy/1839/5-ways-to-psych-yourself-for-a-mammogram

DO NOT PANIC!

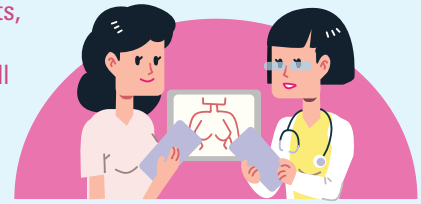
MYTH

Radiation from mammogram screening is dangerous.

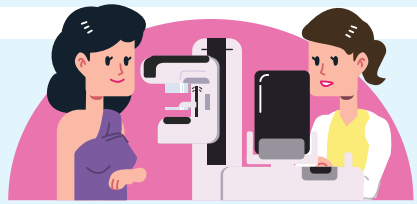
TRUTH

Radiation exposure from mammogram screening is very low. The benefits of detecting an early stage breast cancer far outweigh the risk.

1. See a doctor who will examine your breasts, ask questions about the changes and find out any medical and family history. This will help the doctor determine if the change in your breast is normal or if further reviews and tests are required.



2. You may be referred to go for a mammogram and/or ultrasound, which will be reviewed by a radiologist.



3. If abnormalities are detected by the mammogram or ultrasound, a biopsy may be recommended. A fine needle may be used to obtain some cells or a larger needle to remove tissue from the affected area for examination under a microscope by a pathologist.

4. If cancer is detected, you will be referred to a breast surgeon for treatment.

DIAGNOSIS

WHAT IS A BIOPSY?

A biopsy is a procedure where a sample of tissue is extracted from an abnormality in the breast, and then tested. There are many methods of obtaining the sample, and your doctor can recommend the best method. A biopsy is a safe procedure and is the most accurate way to check if cancer is present.

UNDERSTANDING YOUR BIOPSY REPORT

Your biopsy report can answer many questions. Results of a biopsy can determine if an abnormality is cancerous and describe what cells are found.

BENIGN CANCER CELLS

The abnormality may be **benign**, which means it is non-cancerous. Most abnormalities are nothing more than an overgrowth of normal breast cells. Your doctor will let you know if it is best to just leave it alone, or remove the abnormality.

ATYPICAL CELLS

There are also **atypical** cells. They are abnormal cells that have a tendency towards cancer change but not yet cancerous. Removal of these cells is usually recommended.

CANCEROUS CELLS

Cancerous cells are different. They grow out of control and can invade normal tissue nearby. Eventually, they can spread to other parts of the body.

- Some cancerous cells are non-invasive and do not spread outside the breast. These can usually be treated quite easily.

- Invasive cancer refers to cancerous cells that have invaded into its adjacent structures and possibly gained access to its surrounding micro-circulation. Its capability of spread depends on the nature of the cells (slow or fast-growing) and the severity of cancer (which suggests how long it has been left growing till the point of detection).

TYPES OF BREAST CANCER

There are five main types of breast cancer. These categories help guide treatment and predict how the cancer will progress and respod to treatment. These predictions are called a "prognosis".

- **Luminal A** breast cancer is strongly hormone-receptor positive (estrogen-receptor and/or progesterone-receptor positive), HER2 negative, and has low levels of the protein Ki-67, which helps control how fast cancer cells grow. Luminal A cancers grow slowly and spread much later. Patients diagnosed with Luminal A are considered to have the best prognosis and survival rates.

- **Luminal B** breast cancer is less strongly hormone-receptor positive (estrogen-receptor and/or progesterone-receptor positive), and either HER2 positive or HER2 negative with high levels of Ki-67. Luminal B cancers generally grow faster than Luminal A cancers and are usually more aggressive.

- **Triple-negative/basal-like** breast cancer is hormone-receptor negative (estrogen-receptor and progesterone-receptor negative) and HER2 negative. This type of cancer is very aggressive and is more common in women with BRCA1 genetic mutations.

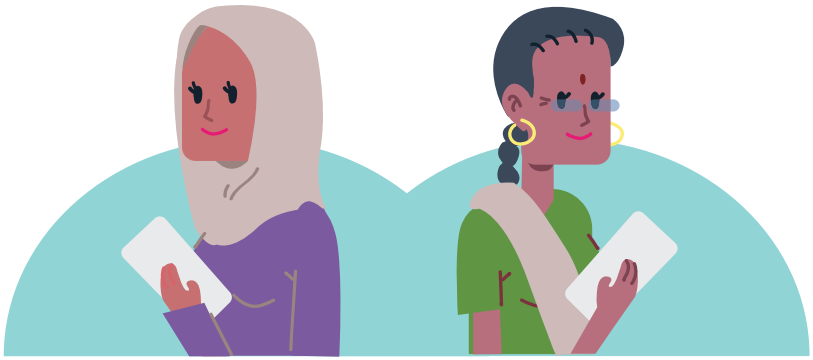
- **HER2-enriched** breast cancer is hormone-receptor negative (estrogen-receptor and progesterone-receptor negative), and HER2 positive. HER2-enriched cancers tend to grow faster than luminal cancers and are more aggressive. However, they are now successfully treated with targeted therapies aimed at the HER2 protein, such as Herceptin (trastuzumab), Perjeta (pertuzumab), Tykerb (lapatinib), and Kadcyla (T-DM1 or ado-trastuzumab emtansine).

- **Normal-like** breast cancer is similar to Luminal A disease: hormone-receptor positive (estrogen-receptor and/or progesterone-receptor positive), HER2 negative, and has low levels of the protein Ki-67, which helps control how fast cancer cells grow. The prognosis of normal-like breast cancer is between that of Luminal A and Luminal B subtypes.

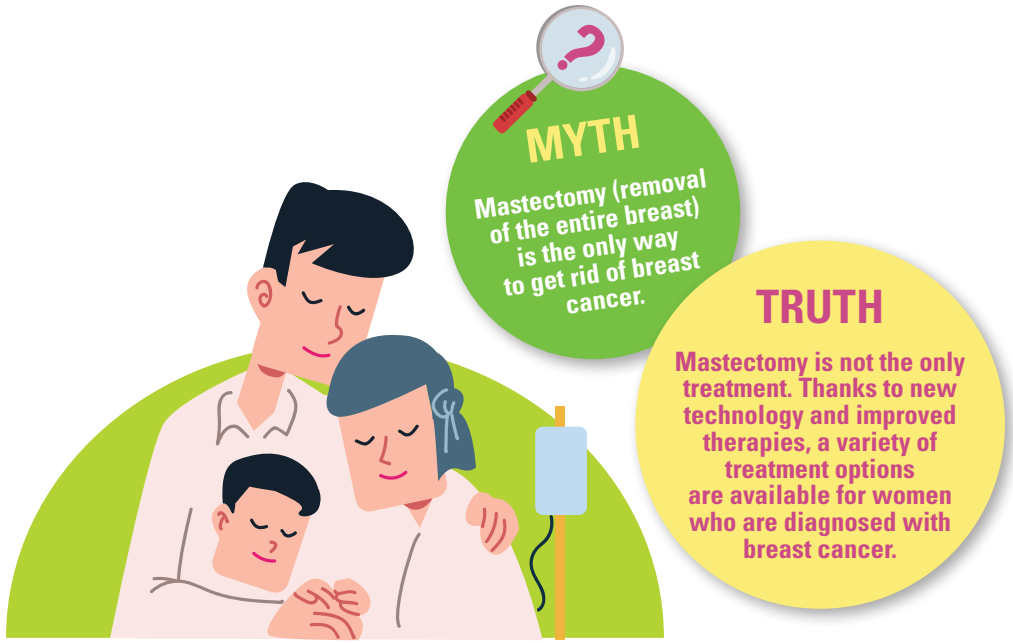
Please refer to the table on Page 14 for more information.

UNDERSTANDING YOUR BIOPSY REPORT

Molecular subtype	Hormone receptors (proteins on cell surface that respond to stimulation by circulating hormones)		HER2 or cerb-B2 gene over-expression (causes the cancer cell to divide and grow uncontrollably)	Growth rate	Treatments	
	Oestrogen receptor	Progesterone receptor			Anti-hormone or endocrine therapy	Chemotherapy
Luminal A	+	+	-	Slow	Yes	Usually no
Luminal B	+	+/-	+/-	Moderate	Yes	May be required
Normal-like	+	+/-	-	Slow	Yes	
HER2-enriched	-	-	+	Fast	No	Yes; with targeted therapy
Basal-like	-	-	-	Fast	No	Yes



TREATMENT



To help doctors decide on the best treatment, the stage of cancer needs to be determined. Following the diagnosis of breast cancer, further staging tests are done to determine if the cancer has spread. Your doctor will then discuss with you the best treatment based on the stage and the type of cancer.

SURGERY AND REHABILITATION

Lumpectomy and oncoplastic surgery

The breast cancer with a surrounding margin of healthy tissue is removed. The remaining breast tissue may be reshaped through oncoplastic techniques to restore its natural shape. Some lymph nodes may be removed as well. Usually only performed for early beast cancer.

Mastectomy with or without reconstruction

Removal of the entire breast, often including the lymph nodes in the armpit and sometimes the chest wall muscles. This is required when cancer is found in numerous parts of the breast or if the cancerous area is large.

RADIATION THERAPY OR RADIOTHERAPY

High-energy X-rays are directed at the breast, to kill any remaining cancer cells or to stop them from growing. Radiotherapy is almost always recommended with lumpectomy but not always with mastectomy. Temporary side effects are mostly limited to the skin.

CHEMOTHERAPY

Drugs, usually in a combination, are given orally or by injection to kill the cancer cells. The drugs enter the bloodstream and travel through the body. They may cause temporary side-effects, which can be reduced with appropriate steps. Chemotherapy is given in cycles: a treatment period followed by recovery, then treatment and recovery again, and so on.

HORMONAL THERAPY

This is used to deprive cancer cells of the hormones they need to grow. Hormonal therapy might involve drugs to change the way hormones work or surgery to remove the ovaries that produce female hormones, which can affect cancer cells.

TARGETED THERAPY

This is designed to specifically target cancer cells and not attack normal cells, thereby reducing unwanted side effects. This therapy blocks the growth and spread of cancer cells by acting on proteins that are important to cancer cell growth. In combination with other treatments, targeted therapy can improve response rate.

IMMUNOTHERAPY

This treatment stimulates your immune system to work more efficiently and specifically to fight cancer cells. It uses substances either made naturally by your body or made in a lab to boost the immune system to help it recognise and attack cancer cells. Immunotherapy may be used together with other therapies and drugs for better response.

ABOUT BREAST CANCER FOUNDATION

Breast Cancer Foundation (BCF) is a non-profit organisation with the mission to eradicate breast cancer as a life-threatening disease. Set up in 1997, BCF is committed to raising awareness about breast cancer through talks, events and publications that advocate early detection through regular screening, as well as supporting survivors and their families through a series of programmes and activities during their recovery journey. As one of the few advocacy groups in the world with a Men's Support League that was integrated with Caregiver Support Group in 2017, BCF aims to encourage greater male participation in society's fight against this affliction.

JOIN US

Call BCF at **6352 6560** for more information on:

- Funding assistance for mammogram screening
- Enabling onsite mammogram screening in your community
- Available support for women and families who are affected by breast cancer

Visit **www.bcf.org.sg** or follow us on Facebook and Instagram for upcoming events and campaigns.

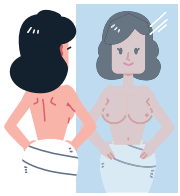
CHECK YOUR BREASTS ON THE ( )* DAY OF EACH MONTH

*If you are still menstruating, do breast self-examination 7 to 10 days after the start of your menstruation

*If you have stopped menstruating, do breast self-examination on the same day of each month, e.g. first day of the month

HOW TO DO IT - TOUCH, LOOK, CHECK

Feel for changes in the shower



Look for changes in the mirror

Feel for changes while lying down

Use the fingerpads of your middle three fingers. Press firmly and gently in circular movements across the entire breasts and armpits to feel for lumps.

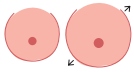
WHAT TO LOOK OUT FOR

A persistent lump or thickening in the breast or armpit area

Changes in the colour or skin of the breast, areola or nipple (for example, dimpling, puckering, scaling)

A newly retracted nipple

Blood or discharge from the nipple



A change in the size or shape of the breast

Be familiar with how your breasts look and feel so that you can notice any changes. Keep calm and consult your doctor if you discover changes in your breasts.

For more information on Breast Self-Examination, scan the code or visit **www.bcf.org.sg**

BREAST CANCER FOUNDATION