

THE
UNDERSTANDING
AND
SELF EXAMINATION
OF
BREAST
CANCER

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Causes of cancer, ways to arrest cancer,
examination by doctors, post operative period
and SELF EXAMINATION with charts.

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CONTENTS:

1 LP
1 text (8 p.)

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THE UNDERSTANDING AND SELF EXAMINATION OF BREAST CANCER

SIDE 1

1. Introduction
2. Explanation of various body cancer
3. Cause of cancer
4. Breast cancer

SIDE 2

1. Examination of the breast
2. Three ways to arrest or stop cancer
in some cases
3. Examination by a doctor
4. The threat and post operative period
5. Self-examination

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THE UNDERSTANDING and SELF-EXAMINATION OF BREAST CANCER

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The volume of papers on cancer has become a despair to scientists, teachers and doctors, and communications between scientists and the public are also becoming increasingly complex. An important role in such communications, is that of the trained science writer and narrator, who edits, translates difficult research data into a language that is understood by us all.

It is impossible these days not to be aware of cancer. The diagnosis and critical cause of prominent people are carefully detailed in the newspapers. At the level of all systems there are few families in the world particularly in the United States who have not had personal experience with this disease. This of course, is almost inevitable because now cancer is the number two scourge of America.

At the end of this presentation there follows guidelines on the step by step self-examination of the breasts that can be administered in the privacy of a bedroom or bathroom in front of a well lighted mirror. A self examination program that is saving and prolonging lives throughout the world.

Cells make tissues. Tissues make organs and organs, like the heart and the liver added together, make up the body.

Although cancer has always been a threat to man it did not become a major cause of death until some infectious diseases were brought under control. This control was made possible by the use of anti-biotics, improved sanitation and vaccines.

Cancer is a disease in which the cells divide abnormally in an uncontrolled pattern of growth.

As the cells increase in number they push and crowd out normal cells-- and cancer cells intercept, cancer cells invade and damage tissues, cancer cells get in the way of normal body processes, and cancer cells may become detached from the center or the origin of the disease and travel in the blood or lymph to other parts of the body. Here according to Israeli cancer specialists conditions arise that make it difficult to arrest or cure the spreading cancer.

Each of the billions of cells that make up the body has a special function or job to do. Some cells multiply. Some make up blood tissue. For example, the cells that multiply do so rapidly during gestation (which we know is a period of time during pregnancy) and later also during childhood. But after maturity these normal cells divide and reproduce only to replace worn cells or tissue or to repair wounds.

Band 2

Some medical scientists feel that cancer cells appear to represent anarchy. They seem to go berserk or run wild in the body.

Speaking in London before an audience at The Royal Institution of Great Britain, the distinguished Director of Virus Research for the British Medical Research Council had something to say about all this. Dr. Kingsley Sanders told his audience that cancer consists of cells, which somehow escaped the normal restraints of the body in which they reside, and are cells which divide abnormally. He added that this abnormality, may have its origin in a change, perhaps in a single cell. This change, this alteration, being inherited, is passed on to all the descendants of the first mutant or abnormal cell. Some cells he added lose the ability to divide.

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During development they may even alter their chromosome number, retaining only those part of the chromosomes needed for specialized function. But even in adults, some cells retain the full set of chromosomes, and divide as said earlier, to replace worn-out cells or to repair injuries. Something mysterious to science, something unknown limits their normal division to just the amount a normal body needs. But here science is in trouble. Cancer cells have lost this discipline, this body discipline, this limitation, this discipline imposed by the body.

Medical science in practice and research throughout the world is attempting to find answers to the crucial questions raised by Dr. Kingsley Sanders. Such as what is the nature of this abnormal change which produces the cells whose descendants are destined to be a cancer. We know, Dr. Sanders pointed out, that cells can acquire a new genetic make-up in several ways. One is the introduction of new genetic materials from outside, as in fertilization. Another way is by reshuffling those chromosomes we mentioned before, so that its genetic parts become structured in a new way.

Band 3.

Medical councils tell that all sorts of agents can cause cancer - from chemicals to viruses, that is alter the hereditary structure referred to earlier. Actually, according to London and New York, medical science still does not know how this alteration from the normal to cancer cells takes place. But teachers, doctors and scientists produce important information about the different forms of cancer. For example,

cigarette smoking has been identified as the major cause of lung cancer and premature death. But there are other dangers. Among these are long exposure to sunlight, X-rays, exposure to fumes of certain industries, exposure to chemicals, polluted air, and of course, certain foods containing dubious or harmful additives.

A London specialist states that these suspect causes of cancer, called by the medical profession with the name of carcinogens, if unchecked can cause a cancer epidemic throughout the world. And he has pointed out that lung cancer among men for example, who smoke is at epidemic proportions - and each day according to The New York Times, scientists uncover damaging evidence about chemicals and physical substances to which you and I are exposed.

The Canadians for example, have rejected American beef because they claim, and proved it in their laboratories, that a growth hormone used by American beef producers was carcinogens or a cancer causing agent. And according to The London Times many substances are introduced untested into our environment.

The British Cancer Society repeats that there is now an epidemic of lung cancer because societies refused to recognize the danger of cigarettes.

A Paris newspaper asks Pere A Vien - it wants to know when are the governments of the world going to protect the public against the curse of cigarette smoking.

Cancer, which some associate with the northern constellation of the zodiac, invariably causes fear and anger when it strikes, but society has done little to control the substances in the environment, that are thought to cause from 50 to 80% of the several hundred thousand new cases of cancer that occur in the United States and Canada each year.

Lung cancer in the United States and in Europe has shown the greatest increase of any cancer site during the past 30 years. It was formerly considered to be a rare disease. But now there are over one million deaths of all cancers per year in the United States from this cause.

And it has become the leading killer of men over 40 years of age. According to our research if the present trends continue, about one million young people who are now school children, will die eventually of lung cancer through smoking. This lung cancer epidemic is related to two factors. The major one we know accounting for over 50% of the increase in the United States is smoking. Cigarette smoking now also related to breast cancer with other forms of tobacco having an equal damaging role. The second factor is air pollution caused by industrial wastes, automobile exhausts and household sources. City dwellers have up to three times more lung cancer than rural inhabitants, who are non-smokers. And we know now, tobacco is an individual form of air pollution. The identification of cigarette smoke as a major cause of lung disease ranks as one of the major scientific discoveries of this century, and equivalent to the 19th century discovery of water pollution as a cause of many diseases, such as typhoid. The discovery that cigarette smoking causes a variety of cancers matches the magnitude, says The London Times, of such events in history as the invention of the Printing Press.

In 1900 cancer took the lives of one person in 25. Today it is one in four. In the United States in 12 months three thousand people died of this disease, while approximately one million are under treatment, and each year over 780 thousand new cases are diagnosed in the United States and Canada.

Band 4

Our major concern in this work is breast cancer. Now, among women breast cancer occurs more frequently and causes more deaths than any other form of disease. In North America alone over 80 thousand deaths in 12 months, while nearly 82 thousand new cases of breast cancer are reported each year.

According to medical experts, in some cases death will be avoided because careful self-examination of the breasts was administered, followed of course, by adequate medical treatment. But according to the West German Medical Society, in the majority of cases medical science simply does not know enough to save the life. A death in the United States and Canada every four minutes including, sadly, some young mothers.

The British Cancer Society states that there are no emphatic known causes of breast cancer. And according to prominent research scientists combined with statistics, some patients mention a blow on the breast and believe that it is related to the subsequent development of a tumor. Medical science tells, that a single injury such as a blow, has never produced a breast cancer. It could be they claim, that such a blow only attracted a patient's attention to her breasts, where possibly she discovered a tumor that had not been noticed before. And there appears some evidence in medical circles here and in Britain, and related medical journals that daughters and sisters of breast cancer patients appear to run a somewhat greater risk of developing the disease, than women who do not have a history of the problem.

The British Cancer Council however, warns that research does not confirm this. And that scientists do not yet really know to what extent this is true or not true. But medical scientists throughout the world do indicate that the incidence or frequency of breast cancer is lower with women who breast feed their children. Breast cancer incidentally, is lower among women in Japan. Their culture encourages the practice of breast feeding according to the Tokyo Cancer Society. A prominent American physician and cancer specialist recently stated that it appears to take eight years for a tumor to develop before it is noticed and that there are approximately 3 billion cells in a walnut sized lump as compared to 125 million cells in a peanut sized lump. Clearly the chances for spreading which is the point here is greater for the largest cancer, or tumor.

Women, by being alert, and consistently resorting to self-examination can detect a lump in the breast before it grows to alarming proportions. Breast examination as we have said earlier has saved countless thousands of lives. One British cancer specialist hinted that women might do well to discontinue wearing tight-fitting brassieres. Telling further that the abnormal pressure on the breast tissue could prevent normal cell division when necessary, a function known to students in Biology as mitosis. Mitosis means cell division. In the self-examination procedure the woman is often the first to discover a lump in her breast. If she makes such a discovery it is important for her to go to a doctor immediately. Only after a special examination of a sample tissue can the doctor decide whether the lump is malignant -(cancerous-dangerous) or benign (innocent-harmless). This special examination performed by a specialist known as a biopsy, requires the removal of a small piece of living tissue. The discovery of this lump if cancerous (dangerous) before it spreads to other parts of the body increases the chances of the patient's recovery. Therefore the whole purpose of this presentation written by a distinguished professor of medicine is to urge women to administer a self-examination of the breasts as prescribed in this work and in the accompanying simple sketches.

Unfortunately, however, most women fail to conduct self-examination of the breasts. Now there are several reasons, among which are being afraid, too modest, too blasé, too superior, or just simply ignorant -- **in fact**, live in a society in Britain and Canada and in the United States populated by millions of women who do not even bother about a monthly general medical check-up. This sadly too often means that the tumor on the breast may not be discovered until the cancer has spread to other parts of the body.

The breasts are easy to examine. It is therefore a simple matter to detect tumors by feeling for them. The United Kingdom Cancer Society and the West German Cancer Society urges every woman to examine her breasts regularly at the end of each menstrual period.

The first sign of breast cancer is a lump which according to medical societies is painless -- but it is a warning signal -- and there is no sure way a woman can tell whether the lump is harmless or a threat to her life. Only a doctor can. To wait for signs of cancer is to invite disaster. So we repeat, a lump in the breast is only one sign of what could be cancer. Women who examine their breasts should be on the alert for any irregular contour or shape of the skin -- or surface shape of the breasts and to watch for an obvious dimpling of the skin or for an orange peeling of the nipples. Also a flattening of the nipples.

Now doctors tell that some women are born with inverted nipples and in them this is not a sign of any disease. Women should also watch for a red, raw, moist condition of the nipple, or for a bloody discharge from the nipple. Any of these signs according to medical societies all over the world, could mean cancer, and a threat to a life. A doctor should be seen immediately, yet millions of women in our affluent society delay. Medical science again emphasizes early discovery. This is essential and in many breast cancers this is possible through self-examination as we present later in this work. But it is not always the women's fault that is if she discovers a suspicious lump in the breast that she cannot get proper attention. Our medical facilities in Britain and Canada and the United States are strained to breaking point.

Band 2

Half of all cancers start in parts of the body that can be easily examined by the doctor during an ordinary visit. The best weapon science knows is the over-worked phrase -- self-examination and early diagnosis followed by immediate follow-up which includes related treatment administered by a qualified physician. There are no quack cures. Yet throughout the world and particularly the affluent world, many thousands of women, if not millions, withdraw from the task of self-examination or examination by a physician. Are they frightened?

Careless? Ignorant? Or don't they care? Or perhaps they are too modest. Should a husband do this - administer a self-examination of his wife's breasts to find out if there's a suspicious lump? The Cancer Societies in the Netherlands and Italy and Paris claim that husbands should help in the self-examination of the breast. Whatever the reason, too often does one or a combination of the given reasons for delay cost them their lives - and prematurely. The world of cancer research and advice gives great precision or concentration or emphasis to the statement that there is no substitute for a regular diagnosis and early treatment. And the Italians come back with this: there is no substitute says the Italian Cancer Society, for a monthly self-examination of the breasts.

Science knows three ways to arrest or stop cancer in some cases. Radiation from X-rays and radioactive elements is one way to destroy cancer cells. A second - chemotherapy, is treatment by the use of certain drugs and medicines. These steps sometimes completely, though temporarily, shrink some cancer growths and tumors. In fact, one distinguished American cancer specialist said in 1974, that perhaps in this century, it may be possible to reduce breast cancer deaths by fifty per cent. Then another way to arrest cancer is by the use and application of surgery.

Band 3

There are four surgical procedures, the main difference among these operations being the amount of body tissue removed by the surgeon. The most extreme procedure commonly performed is what the surgeon calls a radical mastectomy. Something we've heard about quite a bit about recently. Here the surgeon removes not only the breast but also all the fatty or adipose tissue in the axilla, which is the armpit and surrounding lymph nodes. Now lymph nodes are part of the lymphatic system and in a way these lymph vessels resemble veins since they are equipped with one-way valves, discovered in veins by the distinguished Italian scientist, Fabricius in 1543.

Lymph nodes are found in various parts of the body. The point here is that when cancer strikes the first victim to be caught in the drama when breast cancer spreads in the lymph node.

So we come back to the center of our anxiety. It is this, that regular self-examination checks guarantee the greatest possible chance of survival in the fight against cancer. Early diagnosis therefore is crucial.

In West Germany, Siemens has developed a special instrument for mammography. Mammography is the radiological examination of the breasts. This instrument called a mammomat is now available throughout most of the civilized world. It simplifies and speeds up the examination procedure and is therefore suitable for mass radiology. This new equipment supplies first class X-rays on which the extrafine structure of the breast can be measured to one tenth of a millimetre.

Medical science stresses that individuals should know about the first signs of cancer. These we have repeatedly talked about. And every woman should have a complete physical examination each year before 30, and twice a year after 30 and a monthly self-imposed self-administered breast examination, which according to the British Cancer Council should begin when a girl starts her first menstrual period in her mid-teens. However, those women who have experienced menopause should self-examine even more frequently, since the threat of breast cancer increases as women grow older. One medical journal hinted that perhaps women should have their breasts removed after having had their children, whether the breasts are cancerous or not, and so avoid the gnawing anxiety of breast cancer.

The idea of artificial breasts is not new to modern society. To review, sensible people will avoid habits that might lead to the developing of cancer - cigarette smoking we know is the number one killer

and it causes a variety of cancers, mainly lung cancers, and we say again, that the British and the West German, and the American Cancer Society indicate that there is a relationship between smoking and breast cancer. Excessive exposure to sunlight should be avoided. Sunbathing for example, too frequent and too long, we know now shows poor judgement.

If an abnormality is discovered what sort of treatment will the doctor advise. The general practitioner arranges for an examination by a specialist which means that through this kind of action a diagnosis can be established. The breast may be X-rayed, but ultimately the lump will no doubt be biopsied. That is the lump we discussed earlier in this work. In this procedure all or part of the lump is removed for examination under a powerful microscope.

There is no other way to learn whether the growth is, or is not, a threat to life. The vast majority of lumps removed from the breast medicine tells us are found to be noncancerous - that is benign or innocent, and according to The New York Times two out of ten tumors found in the breast are found to be dangerous or malignant. However, the Japanese and Italian Cancer Societies warn that breast cancer is a serious and indeed fatal disease. The hard facts are that the operation, if necessary, saves lives by the removal of the breast says the Chinese Cancer Council.

Whatever the treatment, surgery alone or surgery combined with post-operative radio-therapy, the vast majority of breast cancers appear to be arrested. But women must face the facts that losing a breast is not as serious as losing a life.

Now why do so many women delay seeking treatment? Modesty? Fear? There is this terrible feeling among some women of all age groups, according to a French specialist in cancer, that they seem to think that if it is cancer I have it anyway so why worry? But a London specialist calls this outlook by women, nonsense. Breast cancer we know now is only fatal in the sense of late diagnosis and delayed treatment.

In 12 months in Britain, almost 20 thousand women died of advanced breast cancer. What happened to early detection? And prompt treatment? And the British Cancer Council of England stated without a doubt that these 20 thousand women might be alive today had their symptoms been detected earlier, and had they performed that five to ten minute monthly examination of their breasts.

So breast cancer is not the killer in many cases. What is the threat? We can sum it up in these words supplied by cancer societies all over the world. What is the threat? Delay after self-discovery. Research throughout the world indicates further that there are two other reasons why women cannot bear the thought of suffering breast removal when needed. First, there is the killer aspect of the disease and, secondly, there is the fear of losing one aspect of their femininity. This, in research circles and in the medical profession is fully understood. But not an adequate reason for delay!

This fear has increased in recent years as a result of the over-emphasis and open display of the female body. That is to say that the beauty aspect is playing a more more important role in breast operations. For example, women suffering from the disease invariably implore surgeons, they tell us, not to cut away the breast. This is also confirmed by cancer societies in different parts of the world including the Soviet Union. There used to be a tendency to follow the old motto; do no damage. But damage can also be caused when the radical surgery leads to the lymphatic edema of the arm. The Dutch Cancer Society warns that the health of the patient can also be seriously jeopardized, when too much attention is paid to the beauty and modesty factor in women, and not enough to the problem of survival.

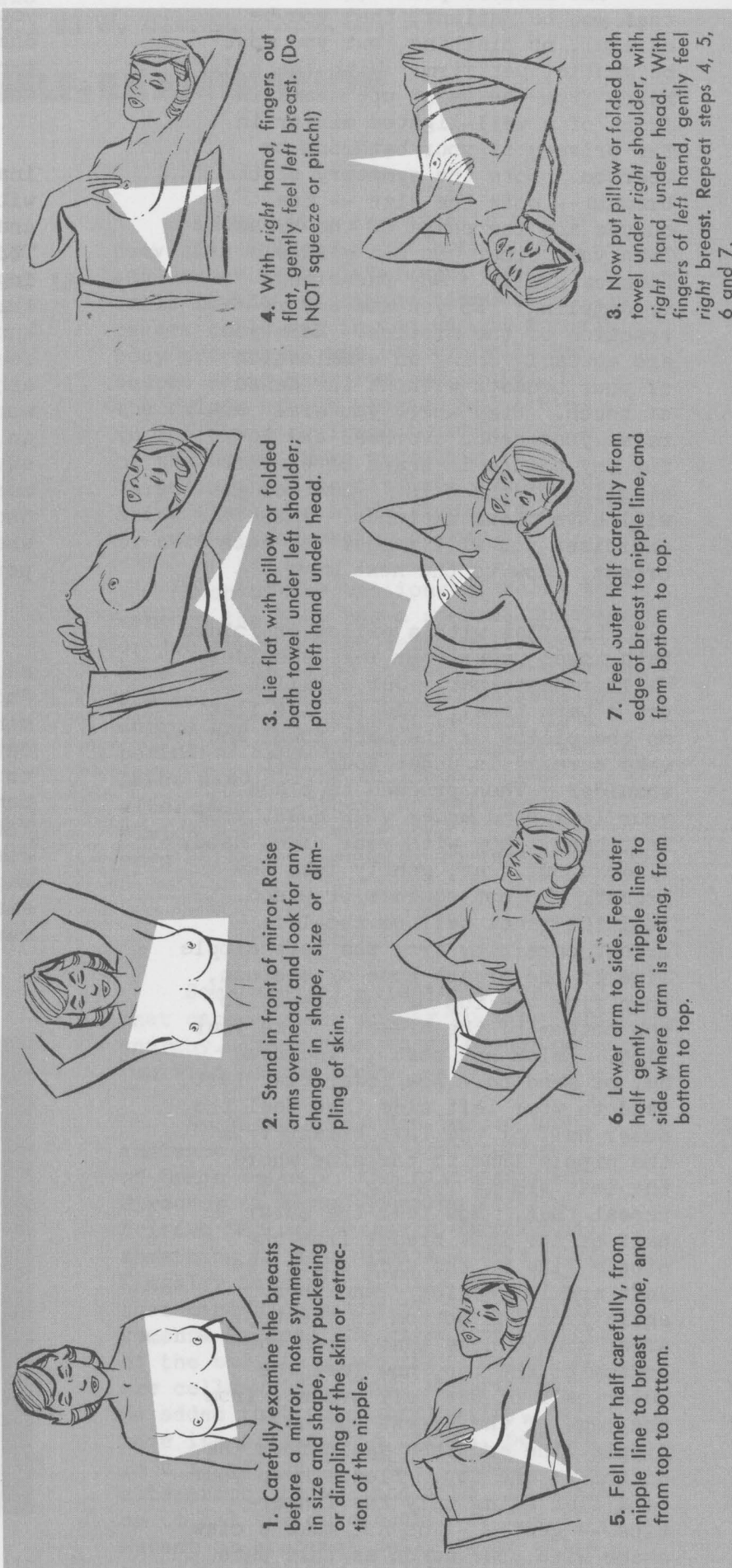
Now what about the post-operative period? The time after the surgery? There is not in existence what medical science calls a Reach-to-Recovery Kit, which can be obtained from The American Cancer Society and from the British Cancer Society. Other information distributed by the society advise patients to do deep breathing exercises with a hand over the center of the chest, to ease the tight skin feeling or pressure on the chest. Post-operative patients are also advised to clasp their hands together and raise them to the top of the head, to ease tension in the neck and shoulders.

Now to the self-examination procedures developed by leading cancer specialists throughout the world. These exercises are completely straightforward and should be practiced by all women of all ages and ought not to take more than five to ten minutes every 30 days.

A prominent physician in New York State said that it might be wise to encourage high school and college students (girls) to start now with self-examination of the breasts. Particularly high school girls. We want to add that there seems to be general agreement also that thermography which picks up heat and radiation from the breast is the least accurate type of screening. We want to repeat that. That thermography, which picks up heat radiation from the breast is the least accurate type of screening and that self-examination, every month, is essential for women of all ages.

Band 5

Now to the self-examination procedures developed by leading cancer specialists throughout the world. These exercises are completely straightforward and should be practiced by all women of all ages and ought not to take more than five to ten minutes every 30 days.



The medical profession advises that you be patient, that you be careful, no pinching, but you must be gentle, yet firm. With the body naked from the waist up, stand in front of a well-lighted mirror in the privacy of your bathroom or bedroom. Note the symmetry of the breasts -- note the size -- the curves and the shape of the breasts. Take your time. Do not glance. Look carefully. Any puckering? Or dimpling? Do you see any retraction of the nipples. Here you are actually doing an examination of your breasts without the sense of touch. Stay where you are. Now raise your hands overhead and look for any change in shape or size or dimpling of the skin. Remember you will have these sketches. These exercises you will repeat for each breast. Now to the next move.

Lie flat with a pillow or folded bath towel under your left shoulder. We'll repeat that. Get a pillow or get a bath towel, fold it, lie flat on the pillow or the bath towel and make sure it is under your left shoulder. Then proceed to place your left hand under your head, your left hand. Now with your right hand, fingers out flat, gently feel the breast. Do not squeeze or pinch. Feel the inner half of the left breast carefully from the left nipple line to the breast bone or sternum, then from the top of the breast to the bottom of the breast. Take your time. Relax and rest if you need be, or need to. Now lower that left hand to your left side then feel the outer half of the left breast from the nipple line to the side where the left arm is resting. We'll repeat that. Now feel the outer half of the left breast from the nipple line to the side where the left arm is resting. And then again from the bottom to the top. After you've done that, from the bottom to the top, now feel the outer half of the left breast, from the edge of the breast to the nipple line and then again from the bottom to the top. Please keep your hand flat using only the fingertips -- gently -- do not make a claw shape with your hands as this puts unnecessary pressure on the breast

which can squash the flesh and make you think that you feel a lump that does not exist. Now repeat the procedure for the right breast, using the left hand for examination.

By this kind of regular examination you will become familiar with the exact intimate precise anatomical features of your breasts. This is absolutely essential, according to eight medical cancer societies throughout the world. For, without knowing what to look for, and to feel for, how can you detect an abnormality? With this method, women can feel the most minor changes in their breasts and seek immediate advice -- and live longer. And it must be done regularly -- at least once every 30 days, remembering what we said about your menstrual period.

We have here a message from the medical societies all over the world. And we quote: "Invest five to ten minutes in your life every thirty days." End of quote. We put it to the ladies -- is this five to ten minutes a month worth it? But medical science has something else to say about this: That the magnitude and importance of self-examination, have yet to be fully realized by modern women.

