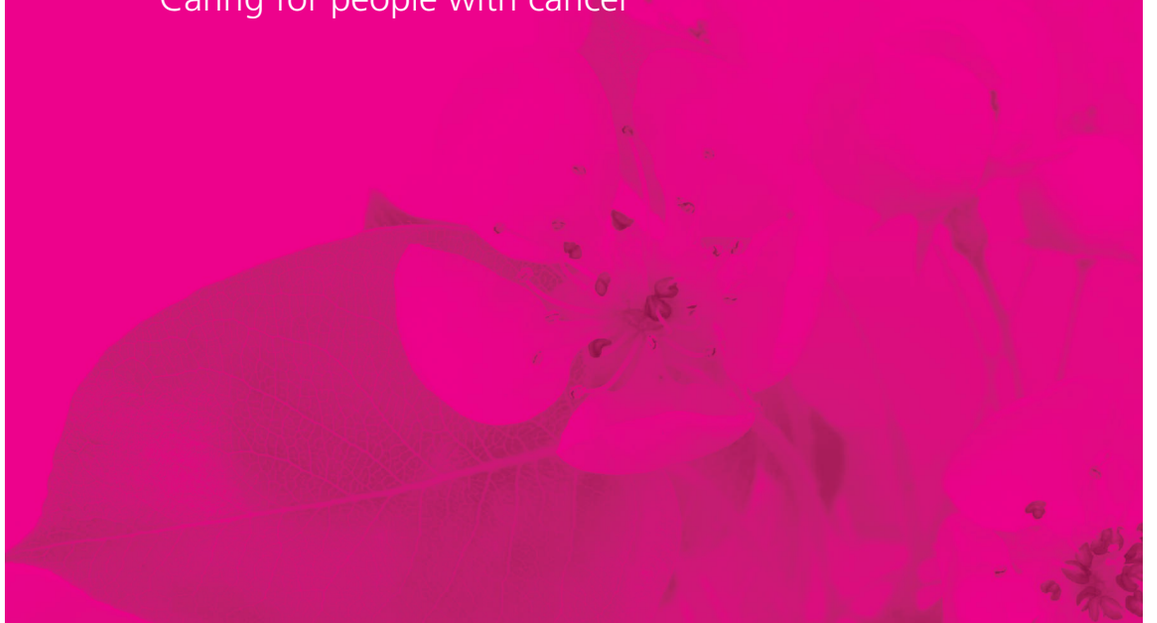
Irish Cancer Society

Understanding

Breast reconstruction

Caring for people with cancer



Understanding

Breast reconstruction

This booklet has information on:

- Deciding about breast reconstruction
- Types of reconstruction surgery
- Preparing for surgery
- Aftercare
- Support services and practical matters

Useful numbers

Specialist nurse

Family doctor (GP)

Breast surgeon

Plastic surgeon

Medical oncologist

Radiation oncologist

Radiation therapist

Medical social worker

Emergency

Hospital records number (MRN)

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Breast reconstruction surgery is used mainly for women who have had their breast(s) removed (mastectomy) but it may be suitable for patients having other types of breast surgery.

How do I decide about having breast reconstruction? Page 15

There are pros and cons to having breast reconstruction. If you decide not to have the surgery, you can change your mind at a later date.

What are the types of reconstruction? Page 31

Implant only, which uses a breast implant to create a new breast shape

Reconstruction using a flap of tissue from another part of your body, which is used with or without an implant

You may be offered a choice of surgery, or you may decide breast reconstruction is not for you.

When can I have reconstruction surgery? Page 25

You can have it either at the time of your mastectomy or delay it for months, or even years.

How do I prepare for surgery? Page 55

If you decide to have surgery, one of the best ways to prepare for breast reconstruction is to become informed about it. Talk to your breast care nurse and discuss your surgery options and your expectations with your breast surgeon or plastic surgeon.

We're here for you Page 92

If you or your family have any questions or worries, want to know where to get support, or if you just need to talk, you can talk to one of our cancer nurses.

Ways to get in touch

- Call our Support Line on 1800 200 700
- Drop in to a Daffodil Centre.
  Email **daffodilcentreinfo@irishcancer.ie** to find your local Daffodil Centre.
- Email us: supportline@irishcancer.ie

See page 92 for more about our services.

Reading this booklet

This booklet is to help you if you are having breast reconstruction and afterwards. You will probably find different sections useful at different times, so keep it for reference.

If you need more information or don't understand something, ask your doctor or nurse. You can also ask one of our cancer nurses:

- Call our Support Line on Freephone 1800 200 700
- Visit a Daffodil Centre
- Email the nurses at **supportline@irishcancer.ie**

We cannot give advice about the best treatment for you. Talk to your hospital team about your treatment and care – they know your medical history and your individual circumstances.

Helplines Partnership MEMBER

Support Line Freephone 1800 200 700

About breast reconstruction

What is breast reconstruction?

Breast reconstruction means making a new breast shape for you after breast cancer surgery.

It can be done at the same time as your breast surgery or at a later stage.

Breast reconstruction can help improve your body image and boost your confidence and self-esteem.

While it's not possible to make an exact copy of your own breast, your surgeon will make every effort to give you the best possible result.

Who is suitable for breast reconstruction?

Breast reconstruction is used mainly for women after a mastectomy, but some women may have reconstruction after breast-conserving surgery. Some women will have a choice of operations while the choice for others may be limited.

Not every woman will want breast reconstruction. Or it may not be an option for you if, for example, you have other medical conditions that might cause problems during and after surgery. These can include high blood pressure and diabetes. Breast reconstruction might also not be suitable if you are a heavy smoker or are overweight.

Other reasons for having breast reconstruction

If you need risk-reducing surgery

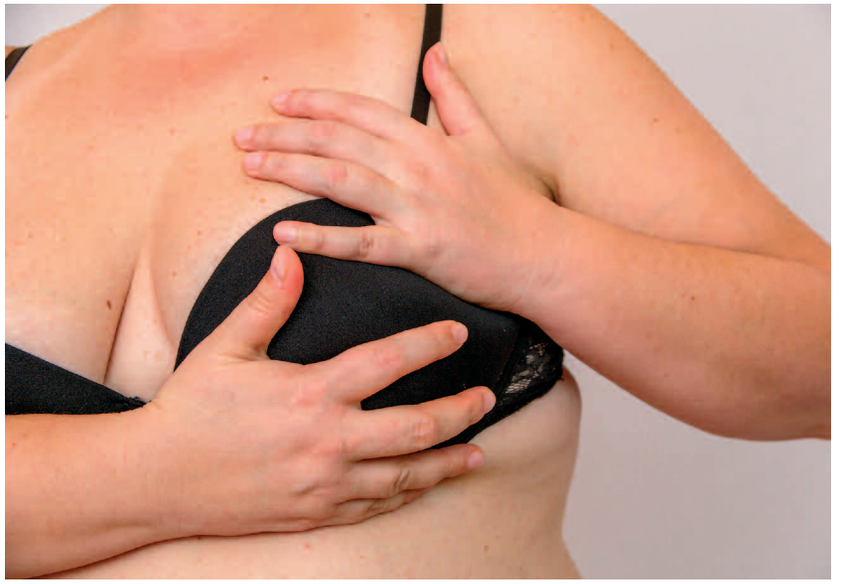
A small number of women have a particularly high risk of developing breast cancer. These women carry the breast cancer genes BRCA1, BRCA2 or TP53. If you have tested positive for these genes, you will be counselled about your future risk and your options will be discussed. Your options may include having one or both breasts removed (risk-reducing surgery).

Risk-reducing surgery may then be followed by breast reconstruction. For more information, call our Support Line on 1800 200 700 and speak with one of our cancer nurses.

If you had breast-conserving surgery

Usually if you have surgery to remove only part of your breast, there's no need for reconstruction. For example, a wide local excision, a lumpectomy, segmentectomy or partial mastectomy. But breast reconstruction can be useful in some cases. For example, if a large amount of breast tissue is removed or if your breast size is reduced after radiotherapy, leaving the untreated breast much bigger than the treated breast.

Or your surgeon may use other techniques like reducing your opposite breast to match your reconstructed breast. This is called therapeutic mammoplasty and is useful if you are happy to have smaller breasts. Other techniques that can be used involve implants or lipofilling to increase the size of your breast. See page 73.



When will I have breast reconstruction?

Deciding when to have breast reconstruction may be one of the first decisions you have to make. You can have reconstruction either at the time of your mastectomy (immediate reconstruction) or after some time (delayed reconstruction). For example, after your other cancer treatments are finished. The delay could be months or years in some cases. For more about immediate and delayed reconstruction, see page 27.

What are the types of breast reconstruction surgery?

The two main types of breast reconstruction are:

Implant-only reconstruction: Using a breast implant to recreate the shape of your breast. This may be a silicone implant (one stage) or an expander implant (two stage). See page 33 for more information on implant surgery.

Flap surgery: Using a flap of your own tissues – muscle, skin, fat and blood vessels – from elsewhere in your body, with or without an implant. See page 40 for more information on flap surgery.

There are different types of implant and flap surgeries. Your surgeon will talk to you about your options and what might be best for you. You may have a combination of techniques. See page 31 for more information.

Who carries out breast reconstruction?

A specialist oncoplastic breast surgeon

This is a breast cancer surgeon who has also received training in some breast reconstruction techniques. They are usually involved if you are having breast reconstruction at the same time as removing your breast cancer (immediate breast reconstruction). In general, they carry out implant surgery and some flap operations.

A plastic surgeon trained in breast reconstruction

Depending on their experience, a plastic surgeon with a special interest in breast reconstruction can offer a wider range of options.

Surgeons trained in microsurgery

These surgeons have specialist training to carry out surgeries where tiny blood vessels need to be reconnected.

In many cases, both the breast surgeon and the plastic surgeon work together to do more complex surgeries. This team approach broadens the range of reconstruction surgery available to you.

You might decide to have a second opinion and discuss your options with more than one specialist. This might happen if your surgeon can only offer you limited options. There may be different options available in different hospitals.

Where is breast reconstruction done?

In Ireland, there are a number of designated public and private centres that provide services for breast cancer patients. The centres have a team of experts, which include oncoplastic breast surgeons and some have plastic surgeons specialising in reconstruction.

If you are interested in discussing reconstruction and to find out where it might take place, talk to your surgeon, your breast care nurse or your GP. You can also call our Support Line on 1800 200 700 and speak to a cancer nurse in confidence.

Breast reconstruction should be discussed and considered by every woman who is having surgery for breast cancer.

Is breast reconstruction available to public patients?

Breast reconstruction is an important part of your care as a breast cancer patient. It is free to public patients. Health insurers also cover breast reconstruction.

Email: supportline@irishcancer.ie

Deciding about breast reconstruction

How do you feel about breast reconstruction?

Every woman will have her own feelings and wishes about breast reconstruction. Because breast reconstruction can be done at the time of your mastectomy you may be asked to consider breast reconstruction quite soon after your diagnosis.

There are a lot of emotional, physical and practical issues in making a decision about breast reconstruction. You might feel overwhelmed, confused or under pressure trying to think about your options when you have so much else on your mind, but you are not alone. Your surgeon and breast care nurse can advise and support you. You can also talk to our cancer nurses by calling 1800 200 700 or by visiting a Daffodil Centre.

Thinking about reconstruction

- Read the information about the options that are available to you.
- Talk to your breast care nurse and consultant.
- Ask your breast care nurse to put you in touch with someone who has been through similar surgery. Or contact our Support Line on 1800 200 700 to ask about peer-to-peer support and Survivor Support. See page 94 for more on these services.
- Take some time to weigh up the pros and cons and think about what you want.
- Be realistic in your expectations of breast reconstruction.
- Make the decision for yourself and not for anyone else.

Where to get information about breast reconstruction

Your breast care nurse and surgeon

You breast care nurse can give you general information about breast reconstruction and the different types – for example immediate reconstruction and delayed reconstruction and implant and flap surgeries.

When you meet your surgeon, you will find out if reconstruction is an option for you. If so, they can tell you your options for surgery, the benefits and disadvantages of different surgeries and when you might have surgery.

This booklet

This section has some pros and cons of breast reconstruction. You can also read more about when to have breast surgery (page 27), different types of surgery (page 31) and recovering from breast reconstruction (page 61).

Someone who has had breast reconstruction

It may help to talk to other women who have been in a similar situation. Your breast care nurse may be able to organise this for you. There may be some aspects you had not considered before. You can then discuss them in more detail with your surgical team.

Questions to ask your doctor

Never be shy about asking questions. It is always better to ask than to worry.

Here is a list of questions that you might like to ask. There's some space at the back of this booklet to write answers and any other questions you might have.

Are there different types of surgery I could have?

What is the best type of surgery for me and why?

Can I still have breast reconstruction if I need radiotherapy?

Would it be better to wait until after my treatment to have breast reconstruction?

What will the scars look like?

How long do I have to stay in hospital?

What are the possible risks / complications of the surgery?

Are there any lifestyle changes I can make to help me prepare for my surgery?

Can you show me any photos of breast reconstructions you have done?

What can be done afterwards if I am not happy with my result?

Do I need to have mammograms on my reconstructed breast?

Can an implant hide a new cancer growing beneath it?

Breast reconstruction — pros and cons

PROS	CONS
It aims to restore your breast shape and match your opposite breast as much as possible	Some surgeries are long and complicated with a long recovery. For example, techniques that involve using your own tissues, which may give your new breast a more natural shape
Recovery from some breast reconstruction surgery can be fairly quick	Your new breast will not feel like your other breast, as there will be very little, if any, sensation
It can improve your body image by restoring your original shape in clothes	You might be disappointed with the result. The breast size, shape, or scarring may not be what you expected
It can boost your confidence and self-esteem. It can also reduce anxiety and make you feel more sexually attractive	Implants may need replacing at some stage
	If any complications of surgery arise, your recovery time may be longer and further treatments could be delayed
	More than one operation may be needed to get the best result
	Breastfeeding will not be possible after any type of breast reconstruction

If you think you would like breast reconstruction

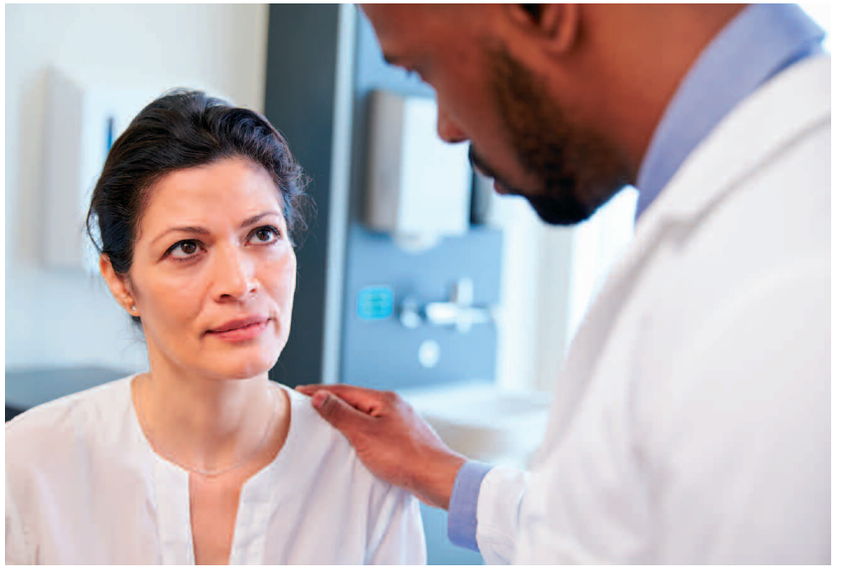
When can you have surgery?

If you are interested in having breast reconstruction you may need to think about when is the best time to have surgery. See pages 27–29 for information on immediate and delayed reconstruction.

What are the types of surgery?

Your surgeon will tell you what your options are and what they recommend for you. You may have a choice of surgery or they may recommend just one type. For example, it may be either implant surgery, or surgery that uses a flap of your own tissue to build your new breast shape. Flap surgeries generally take longer and are more complicated than implant surgeries. You can read about implant surgery on pages 36-39 and flap surgery on pages 40-52.

You can also talk to a nurse on our Support Line 1800 200 700, or at your local Daffodil Centre.



What affects my surgery options?

Your general health

Your age, fitness for surgery and if you have any other medical conditions, for example, high blood pressure or diabetes, could increase your risk of complications.

Do you smoke?

If you smoke, you may be at higher risk of complications after surgery, as smoking has a negative effect on your blood circulation and how your wounds heal.

If you are considering breast reconstruction, it is strongly advised that you quit smoking (see page 58). For information and support on how to quit smoking, call the HSE Quit Team on Freefone 1800 201 203 or visit Quit.ie

How much breast skin and volume needs to be replaced after cancer surgery?

If a large amount of skin is removed during the mastectomy, your remaining skin will have to be stretched with an expander before you can have an implant.

Once the skin has stretched sufficiently, an implant will be put in and the expander can be removed. Stretching of the skin is a slow process and the whole process can take a number of months.

How much spare tissue do you have on your body?

Your surgeon will assess your body to see how much spare tissue can be taken from other areas and if flap surgery is an option for you.

Other factors to consider

These can include your body shape, if you are underweight or overweight or if you have stretch marks or surgical scars on your body.

If you need more treatment after surgery

You may need to have further treatments after your surgery. For example, chemotherapy or radiotherapy. Radiotherapy in particular can be of concern if you are having surgery involving implants, as radiation increases the risk of capsular contracture. Capsular contracture is where the tissue around an implant tightens. This squeezes the implant and can distort of the shape of the breast. This can cause discomfort and you may need to have the implant removed.

How long will it take to recover?

It can be stressful and challenging when considering your options for breast reconstruction. For many women, recovery is an important aspect. You might need to consider your circumstances – such as whether you have young children to care for, have a demanding job or active or strenuous hobbies. The personal impact of the surgery can vary between women. As a result, the length of time it takes to recover can vary too. See the table on page 65 for an overview of recovery times.

What are the possible complications of breast reconstruction?

Breast reconstruction techniques are continuously improving. However, there can be problems after surgery. Complications, such as rejection or infection, are more common with, for example, mesh and implant surgeries.

Some problems after surgery may cause your recovery time to be longer and further treatments could be delayed. For example, wound infection is a risk after any surgery and may need antibiotics to clear it up, thereby delaying chemotherapy.

See page 67 for more about possible complications.

For more information, talk to your breast care nurse. You can also call our Support Line on 1800 200 700 or visit a Daffodil Centre.

Will I need other surgeries / procedures to get the best result?

Depending on the technique used, you may need one or more steps to achieve your best result. See page 73 for more about other procedures.

If breast reconstruction is not for you

You may feel comfortable accepting the change in your breasts or you may decide you don't want to have more surgery.

You may like to use a breast prosthesis (a breast-shaped form) in your bra to regain some evenness or balance in the size of your breasts. If you would like more information on breast prostheses, call our Support Line on 1800 200 700 or see our website **www.cancer.ie**.

If you change your mind later on, don't worry. Many women change their mind and go on to have delayed reconstruction (see page 28). If you do change your mind, contact your breast care nurse and ask for an appointment to discuss it.

Email: supportline@irishcancer.ie

When can I have breast reconstruction?

When can I have breast reconstruction?

The timing of breast reconstruction can vary from person to person. You can have it either at the time of your mastectomy or delay it for some time. For example, after your other cancer treatments are finished. In practice, the delay could be months or years in some cases. This may be one of the first decisions you have to make.

Immediate reconstruction

The benefits of having reconstruction at the same time as your breast cancer surgery are:

- The cosmetic results can sometimes be slightly better.
- More of your breast skin can be preserved. This can give a more natural-looking shape and appearance.
- There may be less scarring on the breast itself.
- You may need only one anaesthetic and recovery period.
- You may need only one stay in hospital.
- You will not be without a breast at any time.

Sometimes immediate reconstruction is not advised. This is usually because of the type of tumour or the need for further treatments, such as radiotherapy. There is a risk that radiotherapy could shrink or harden the tissue used to make your new breast. It could also affect the overall result of your breast reconstruction. However, certain forms of breast reconstruction tolerate radiotherapy better than others.

If immediate reconstruction is an option for you, your surgeon and breast care nurse will give you information and advice to help you make your decision.

Delayed reconstruction

Breast reconstruction can be delayed for months or indeed years. The benefits of delayed reconstruction are:

- Your surgery can be carried out in stages, depending on your reconstruction choice. This might make your recovery easier and shorter each time.
- You have more time to consider if reconstruction is right for you.
- It may be less stressful if you are taking it just one step at a time.

The disadvantages of delayed reconstruction are:

- Not having a breast might affect your self-esteem and body image.
- It is often major surgery and there is a risk of complications in some types of delayed reconstruction.
- You will need more than one hospital stay.
- The cosmetic result may not satisfy you entirely. For example, your skin after a mastectomy will be scarred and may be thin. Radiotherapy to your breast can also affect the quality of your breast skin. For example, it can often cause contracted or tight skin.

No reconstruction

If you decide not to have reconstruction, you can always consider delayed reconstruction later if you change your mind.

When should I have reconstruction?

Will you be having radiation therapy after your mastectomy?

YES Radiation therapy after mastectomy can cause delays with reconstruction surgery because of the risk of complications, particularly with regard to implants. Talk to your doctor about delayed reconstruction.

NO It is usually recommended that women start reconstruction at the same time as their mastectomy. However, it can be done some time afterwards.

Delaying reconstruction may mean that you'll have a few operations over a long period of time. Can you cope with multiple surgeries and recovery times – over a period of a year, for example?

YES Talk to your doctor about delayed reconstruction.

NO Talk to your doctor about immediate reconstruction.

Do you think you are emotionally and physically prepared for two types of major surgery (mastectomy and reconstruction) at the same time?

YES Talk to your doctor about immediate reconstruction.

NO Talk to your doctor about delayed reconstruction.

Would you like to try out a breast prosthesis?

YES A breast prosthesis is an artificial breast form that can be worn with a bra and can provide volume where it has been lost after breast cancer surgery. Some women try these out before deciding about having reconstruction surgery.

NO If you have no interest in a breast prosthesis, talk to your doctor about the possibility of immediate breast reconstruction.

Are your general health and lifestyle compatible with breast reconstruction? For example, your doctor may not recommend surgery if you smoke or are significantly overweight

YES Talk to your doctor about immediate reconstruction.

NO Your doctor may advise you to stop smoking or lose weight to lower the risk of complications from surgery. Talk with your doctor about any lifestyle factors that may be an issue.

Types of reconstruction surgery

Implant-only reconstruction

This type of reconstruction uses an artificial breast implant. It is usually the simplest type of reconstruction. It may be most suitable if you are having immediate breast reconstruction or if you are having bilateral reconstruction. If you are having implant reconstruction some time after a mastectomy, you may need to have your skin stretched to accommodate the implant, as in the two-stage expander implant (see page 37).

What do I need to know about implants?

Breast implants are bags filled with silicone gel or saline (salt water). The outer shell is made of silicone elastomer, which is like soft rubber. The surface can be textured or smooth (see the next page). Implants come in different shapes and sizes.

- **An implant can last a long time** − 10 or more years − but it may need to be replaced if it is causing problems such as capsular contracture (see below). It may also need to be replaced if it no longer matches the natural droop of the tissue in the other breast. No one can predict if or when you may need additional surgeries.
- **A capsule of scar tissue can form around the implant.** This is quite normal. But if this scar tissue hardens and tightens, it can cause breast discomfort. This is called capsular contracture. This scar tissue can lead to a change in breast shape. You might need more surgery in this case.
- **Implants can split (rupture).** This occurs when there is a tear to the silicone shell surrounding the implant. It is caused by the natural ageing of the implant or by trauma. Saline implants will deflate quite quickly and the leaked saline is reabsorbed by the body. Silicone gel is thicker and leaks much more slowly. This kind of implant rupture may present as pain, redness or swelling of the breast, or there may be no noticeable symptoms.
- **Implants don't limit your everyday activities** – you can still take part in sport, air travel or other leisure activities.

- **If you had a mastectomy and reconstruction with an implant, you will not need a mammogram on that breast.** But if you had an implant after a lumpectomy, you will need mammograms in the future. Tell the radiographer that you have an implant.
- **Implant-only reconstruction (one or two stage) is often not advised if you need radiotherapy after a mastectomy.** But it can be done and your reconstructed breast will be carefully monitored while you are having radiotherapy.

Implant textures

Breast implants come in two main types of surfaces: textured and smooth

A **textured implant** has a rough surface which allows it to stick to the tissue that surrounds it and prevents it from moving around. It can be round or teardrop shaped.

A **smooth implant** is round and has a smooth surface. It is softer than the textured implant and tends to move around more freely during activity.

Implant-associated lymphoma

Breast implant-associated anaplastic large cell lymphoma (BIA-ALCL) is a rare form of non-Hodgkin lymphoma that can sometimes affect the reconstructed breast.

The lymphoma occurs in the scar tissue (capsule) that forms around the implant. In more advanced cases, it may spread to nearby lymph nodes.

The incidence of BIA-ALCL is low. It is associated with textured implants. Whether the implants are filled with silicone or saline does not seem to make a difference.

It takes 8 years, on average, after implant surgery for symptoms of BIA-ALCL to emerge. Symptoms can include redness, swelling in the breast or around an implant, and changes in the shape or size of the breast.

BIA-ALCL progresses slowly and when diagnosed and treated early it has a very good recovery rate.

It is important to talk to your reconstructive surgeon about this before deciding on implant surgery. Or call our Support Line on 1800 200 700 for more information.

Email: supportline@irishcancer.ie

Types of implant surgeries

Silicone implant (one stage)

Your breast may be reconstructed using a silicone implant on its own. This can be placed under the skin and muscle of your chest. It replaces the missing breast tissue removed at the time of your mastectomy. It is often called a one-stage reconstruction.

Silicone and saline implants

It's a fairly simple operation and does not involve scars elsewhere on your body. It's more suitable for immediate reconstruction and if you have smaller breasts. It can be used if the type of mastectomy you had did not take all the skin away (skin-sparing mastectomy).

Natural tissue meshes (acellular dermal matrix)

A natural tissue mesh or matrix, which acts like a sling to support the implant, can help to give a more natural breast shape. Meshes may also reduce any visible creasing or rippling, which can sometimes happen with an implant, especially if you are very slim.

The mesh is natural tissue and is called acellular dermal matrix (ADM). It looks like skin and can be either white or skin-coloured. A piece of this tissue is stitched to the muscle beneath your chest wall. This creates a sling or an internal bra to help support the implant.

There are many different types of meshes available. Two examples are donated human tissue or pigskin. Both are specially treated to reduce the risk of rejection or infection.

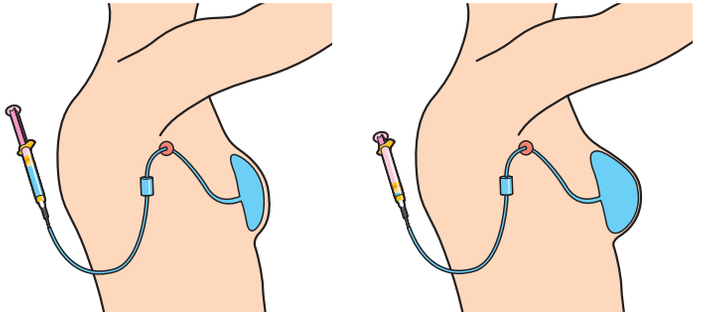
There is less risk of complications such as capsular contracture (tight scarring) with the meshes. The mesh can be used to lengthen your tissue and can sometimes avoid the need for an expander implant, if you are having a skin-sparing mastectomy. Your surgeon will discuss if it is suitable for you or not.

Expander implant (two stage)

With an expander implant (tissue expander), the reconstruction is done in 2 stages. First an implant, like a balloon with an outer shell of silicone, is placed beneath the muscle of your chest wall during an operation.

Expander implant

When your wound has fully healed, your surgeon will inflate the implant every 2 to 3 weeks by injecting saline (salt water) into it through a valve or port in the implant. This is done in the outpatient clinic – you shouldn't need to stay overnight in hospital. You may feel some tightness or discomfort in the breast area after the expander is inflated. This usually lasts 1 to 2 days.

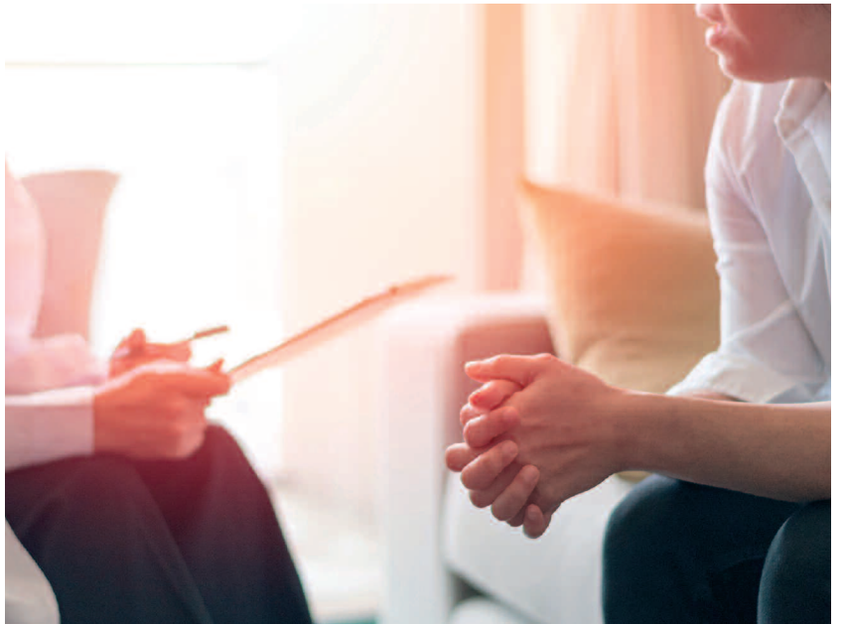


Inflating the implant means your skin and muscle can stretch gradually until you are happy with the size. You may need to use a temporary prosthesis (breast form) in your bra while you are being expanded to improve symmetry (balance).

Usually, another operation is needed to remove the expander, which is replaced with a permanent implant. Sometimes, if you want, the expander can be left in place.

The advantage of an expander implant is that it generally involves a smaller operation, but may only be suitable if you have smaller breasts. The disadvantage is that there is little or no shape at first because the expansion cannot start until healing has taken place. Also, the implant may make your breast look overly pert once inflated.

For more information about implants, talk to your doctor or breast care nurse. You can also call our Support Line on 1800 200 700 or visit a Daffodil Centre to talk to one of our cancer nurses.



Implant-only reconstruction — pros and cons

PROS	CONS
It is less complicated than flap surgery with a shorter recovery time.	It may only be suitable if you have small breasts.
If an implant is used without a flap, you will have only one breast scar and none elsewhere on your body.	With an expander, you have limited shape at first, as healing must occur before expansion.
Implants can be an option if you are not suitable for reconstruction using your own tissues. For example, if you have no spare body tissue.	There is a less natural look. Your breast can look pert after expansion.
It is suitable if you are not fit for longer more complicated surgery.	There are possible risks linked to implants. They can cause tight scarring (capsular contracture). Radiotherapy may cause problems with the implant.
It is a good option if you have small breasts. Note, women with large breasts could have their other breast reduced.	Implants might need to be replaced at some stage, or the other breast lifted due to natural ageing.
It avoids scarring and possible muscle weakness in another part of your body, as no tissue is transferred.	It takes time to achieve the right size with an expander implant.
It is suitable for immediate reconstruction and when the skin on your breast can be preserved.	You may need further surgery if you lose or gain weight, as the implant size remains the same.
	Having a synthetic implant in your body might not appeal to you.

Flap surgery reconstruction

Flap surgeries have the advantage of giving a more natural-looking result. They use tissue such as muscle, fat and skin or just fat and skin taken from elsewhere in your body to reconstruct your breast. For example:

- Flap from your back – with or without an implant
- Flaps taken from your tummy (abdomen)
- Flaps taken from other areas, such as your buttocks or upper inner thigh

Flap surgery is also called autologous tissue reconstruction. Autologous means the tissue is taken from your own body.

If the surgeon leaves the flap connected to its own blood supply, it is called a pedicel flap. If they connect the flap to a new blood supply using microsurgery it is called a free flap.

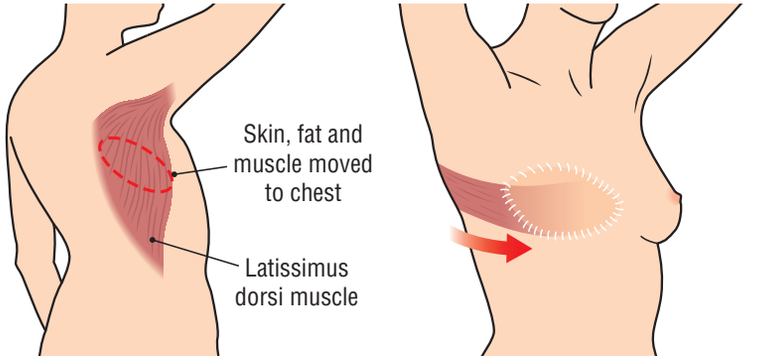
> A flap that is connected to its own blood supply is called a pedicel flap. A flap that is connected to a new blood supply using microsurgery is called a free flap.

Types of flap surgeries

Flap from your back – with or without an implant

This surgery uses skin and muscle from your back to replace the skin removed at the time of your mastectomy. It can be a good option if you don't need much skin replaced. It can replace some of the lost breast size and can give good results if you have medium- to large-sized breasts.

This type of pedicel flap transfer is called the latissimus dorsi (LD) flap. Part of the latissimus dorsi muscle is taken from your back along with the overlying skin. This muscle has a very good blood supply coming from the vessels in your armpit. As a result, it makes it very useful for breast reconstruction. For this surgery, the muscle and its blood supply are transferred to the breast area by tunnelling them through your armpit or around your ribcage so that they lie at the front of your body. Your surgeon will often suggest doing a sentinel node biopsy beforehand (see page 102). This is to see if you have traces of cancer cells in your armpit. This may mean more surgery to remove lymph nodes from your armpit.



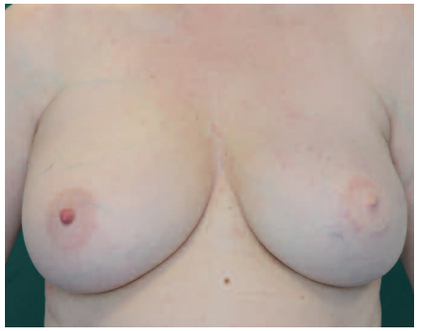
Latissimus dorsi flap

Will I have an implant?

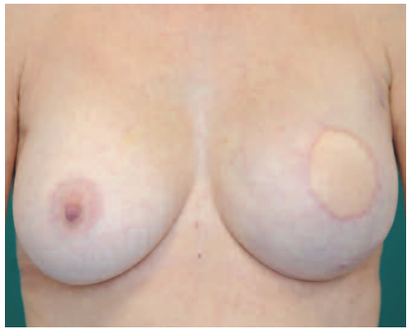
You may need an implant to increase the size of your breast. But sometimes it is possible to remove enough fat from your back along with the flap of skin and muscle to replace the missing breast without the need for an implant.

Lipomodelling

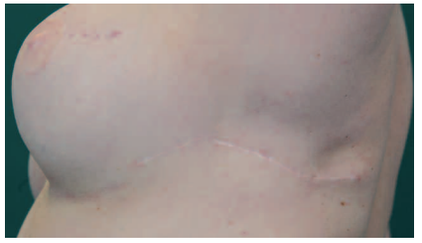
Lipomodelling is when fat from certain parts of your body, such as your abdomen or thighs is transferred to your reconstructed breast, especially when skin flaps are used to get larger volume and to avoid using implants. See page 73 for more details.



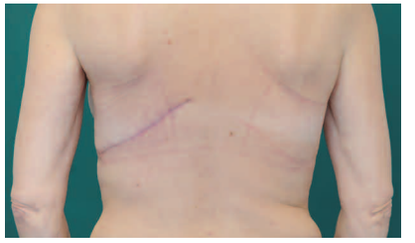
Immediate LD flap with nipple reconstruction on left breast



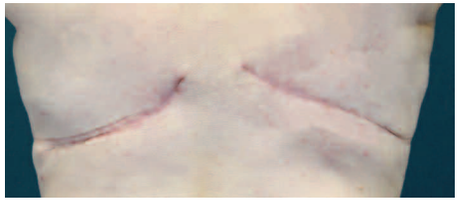
Immediate LD flap on left breast



Immediate LD flap scar on breast and back



Immediate LD flap scar on back after 3 months



Bilateral LD flap scars on back after 6 months

Latissimus dorsi (LD) flap — pros and cons

PROS	CONS
It can recreate a good breast shape.	You are likely to need an implant or fat transfer to match the size of your opposite breast. Or you may need to have your other breast reduced.
It is generally a successful operation and complications are rare.	You will have scarring on your back (donor site) and on your breast. The scar on your back, however, may be under the bra line and be hidden by underwear.
This muscle has a very good blood supply to aid healing.	Losing the muscle from your back can restrict your shoulder movements or strength. Usually this isn't permanent, but it can take from 6 to 12 months to recover your range of movement. Some patients may have permanent changes to their movement or strength, especially if they had shoulder problems before. This may be a problem for sports such as tennis and swimming.
It is a good option if you do not need much skin replaced.	It is not suitable if you have very large breasts.
The result may be more natural than with implant-only reconstruction. If you have an implant with LD flap surgery, the implant can be less visible and not easily felt under your skin.	
You may need to have an implant put in as well if you have larger breasts. But for smaller breasts you can often avoid having an implant.	
It is a possible option for immediate reconstruction if you need radiotherapy after your surgery.	

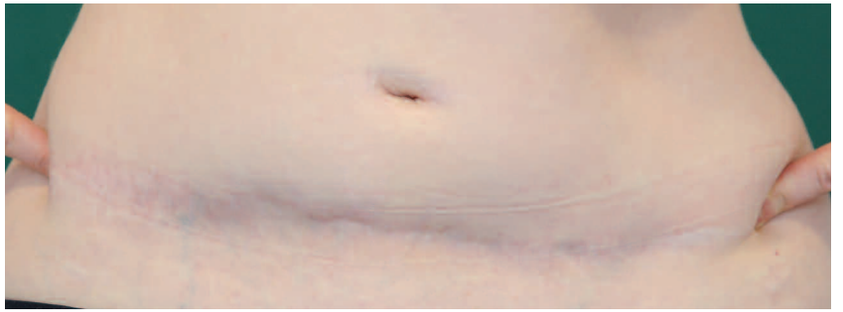
Flaps taken from your tummy (abdomen)

These flaps use skin, fat and sometimes muscle from your tummy, which is transferred to your chest to make a new breast.

Abdominal tissue is a good choice for breast reconstruction. This is because the skin and fat can feel like breast tissue once transferred. This type of reconstruction can be suitable if you are healthy with a large amount of skin and fat in your lower tummy. It can replace a large breast and achieve a very natural look and feel.

'Tummy tuck'

Removing this extra skin and fat is often welcomed by women, seeing it as a tummy tuck. You will lose excess tissue from your tummy, but the surgery does leave a higher, more noticeable scar. It might also weaken your abdominal wall, where a tummy tuck would usually try to strengthen it.



TRAM flap scar on lower tummy after 8 years

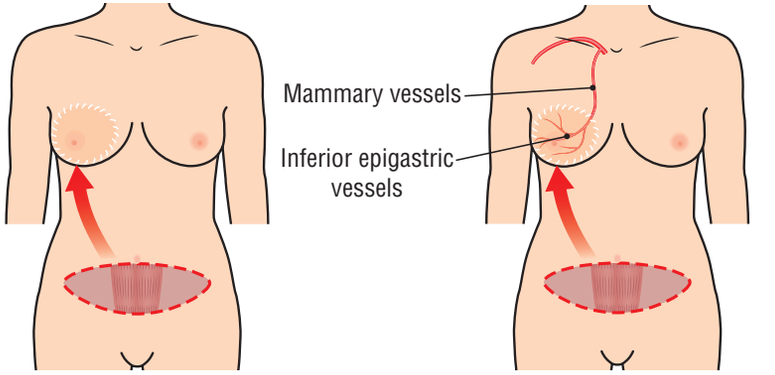
Types of abdominal flaps

There are several types of abdominal flaps.

Free TRAM flap: TRAM stands for transverse rectus abdominis muscle, which is a muscle layer found in your tummy. A small piece of this muscle along with its small blood vessels, fat and overlying skin is transferred as a free flap.

Pedicled TRAM flap: With this type of flap, part of the muscle, fat and skin from your tummy is transferred to your breast, though part of it

is still attached underneath to its original location. This is done to keep its blood supply. This surgery is not as common as a free TRAM flap.



TRAM flap DIEP flap

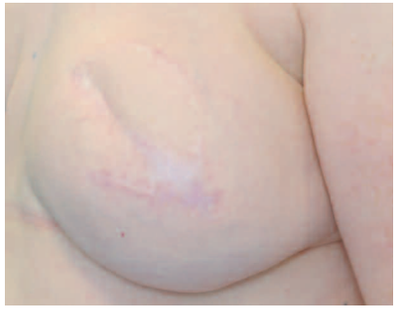
Free DIEP flap: DIEP stands for deep inferior epigastric perforator, which are small blood vessels in your tummy. This type of flap uses the same blood vessels as the TRAM flap, but they are carefully removed from the muscle when the flap is raised. The DIEP flap contains just the fat, overlying skin and blood vessels. The breast is shaped using the fat and skin, while the blood vessels are connected to blood vessels in your armpit or chest wall using microsurgery so that the flap can survive. You will have a scar on your tummy, breast and belly button. If you gain weight, your breast does too. If you lose weight, your breast does too. A free DIEP flap has the most natural feeling as it is all your own tissue.

Free SIEA flap: SIEA stands for superficial inferior epigastric artery, which are other small blood vessels in your tummy. Here some of the more superficial blood vessels in your tummy are used but no muscle is removed or transferred, just skin and fat. This procedure is not so common.

Which flap is best?

Your plastic surgeon will advise you on the type of flap that is best for you. Remember each patient is different. You will have your own considerations and issues. For example, you might have previous scars

from surgery, you may be underweight or overweight or have other health problems. There are other body issues to consider such as body structure (anatomy) and if your blood vessels can support the type of flap. This may be unknown until your surgery takes place. In general, these flaps can achieve similar types of result. But the DIEP and SIEA flaps hardly interfere with your tummy muscles, which is an advantage.



Immediate TRAM flap on left breast

Things to consider:

It is generally recognised that abdominal free flap reconstruction can give the best results, as the tissue is very similar to breast tissue and makes a good substitute. Some things to consider include:

- You will usually have a week in hospital with a longer recovery period lasting weeks or months.
- You will have scars both on your breast and a large one on the donor site, which is across your lower tummy as well as around your belly button.
- You may be sore at first and have some difficulty sitting up after lying down, especially if your tummy muscles were used in the reconstruction.
- Most women recover very well and resume their day-to-day activities within 4–6 weeks.
- You will not be able to drive for at least 6 weeks.
- With this type of surgery, you will not need further operations, unlike with implants, where an implant may need to be replaced at some stage. Balancing surgery to make your other breast the same size can be done at the time of this surgery or at a later date.

See pages 55-71 for more details about preparing for and recovering from surgery.

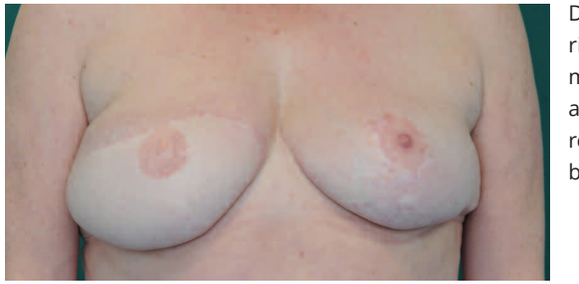
Free TRAM flap — pros and cons

PROS	CONS
It replaces breast tissue and gives a very natural look and feel.	It involves major surgery, which can last 3–5 hours. There is always a risk of complications with surgery.
You usually only need one operation.	You need adequate skin and fat in your lower tummy.
You use your own tissues and do not need an implant.	It may cause muscle weakness in your tummy with a risk of a hernia developing. You may have difficulty sitting up after lying down for some time.
	Your recovery period will be longer than implant only reconstruction.
	You will have a scar on your breast and a large one on your lower tummy, including your tummy button.

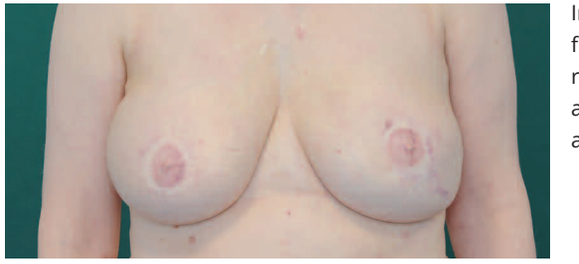
Email: supportline@irishcancer.ie

DIEP flap — pros and cons

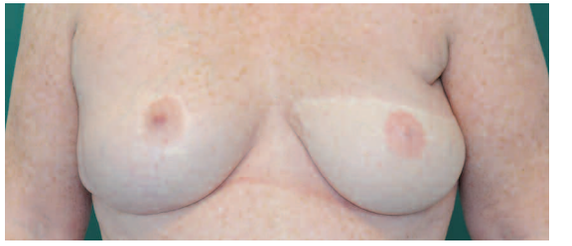
PROS	CONS
It replaces breast tissue with your own tissue giving a very natural look.	The surgery takes longer than other flap surgeries. The microsurgery involved is complicated. Surgery can last 5-8 hours.
It does not affect your tummy muscles that much. There is a low rate of hernias.	There is a risk that the tissue will not survive when moved to your breast. As with the TRAM flap, the blood supply can become blocked off with clots and the flap tissue dies. With the DIEP flap there is a higher chance of a small area of tissue dying off within the flap.
You will not need an implant.	You need adequate skin and fat on your lower tummy.
	Your recovery period will be longer.
	You will have scars on your breast, lower tummy and belly button.
	It is only available in some centres in Ireland.
	Fat necrosis can happen in a small number of women (see page 68).



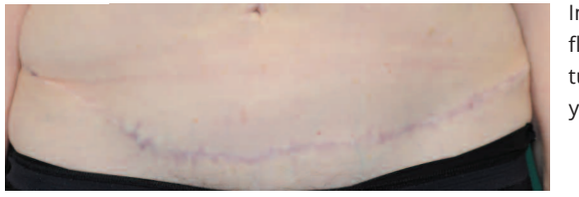
Delayed DIEP flap on right breast with mastopexy on left breast after 5 years. Nipple reconstruction on right breast after 2 years



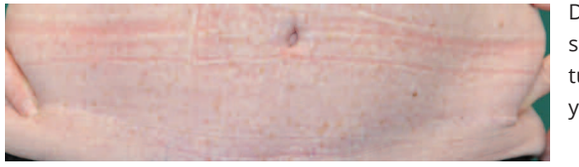
Immediate bilateral DIEP flaps with nipple reconstruction and areolar micropigmention, after 5 years



Delayed DIEP flap with nipple reconstruction on left breast and mastopexy on right breast after 3 years



Immediate DIEP flap scar on lower tummy after 5 years



Delayed DIEP flap scar on lower tummy after 3 years

Less commonly used flaps

Flaps can sometimes be taken from other parts of your body. This includes your buttocks (bottom) or upper inner thighs. These flaps are much less commonly used and not all breast reconstruction centres offer these techniques.

Flaps taken from your buttocks

Buttock flaps are taken from one or other of the small blood vessels coming from your buttock muscles and are named after them. Two types use flaps taken from the buttock. Like all free flaps, they are reconnected to the breast area by microsurgery.

SGAP (superior gluteal artery perforator): The flap of tissue is taken from your upper buttock.

IGAP (inferior gluteal artery perforator): The flap of tissue is taken from your lower buttock.

These flaps are suitable:

- If you want reconstruction using only your own tissues
- If you do not have enough tissue on your tummy
- If you have had previous tummy surgery

These operations are more difficult than those taking tissue from your back or abdomen. There is also a higher risk of complications.

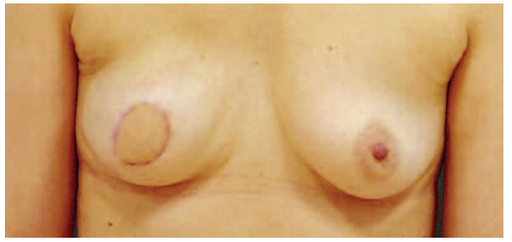
SGAP/IGAP flaps — pros and cons

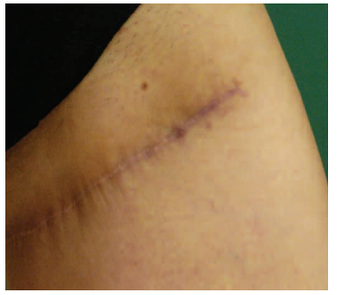
PROS	CONS
It replaces breast tissue with your own tissue, giving a very natural look.	You will have scarring on your breast and a large scar on your bottom.
It can be an option if you are slim and have had previous tummy surgery.	One buttock may be smaller than the other afterwards.
If you have enough tissue, a medium- to large-sized breast can be reconstructed.	These are long and complicated operations.
You will not need an implant.	Not all centres in Ireland offer this surgery.

Flap taken from your thigh

This surgery uses a free flap of tissue taken from your upper inner thigh. It is called a TUG flap, named after the transverse upper gracilis muscle. Like other free flaps, it is reconnected to the breast area using microsurgery. This surgery usually only provides a small amount of tissue and is suitable if you have small breasts, had previous tummy surgery, or do not have enough tissue on your tummy.

For more information, talk to your breast care nurse. You can also call our Support Line on 1800 200 700 700 or visit a Daffodil Centre.





Immediate TUG flap on right breast after 5 months
Right: TUG scar on right inner thigh after 5 months

TUG flaps — pros and cons

PROS	CONS
It replaces breast tissue with your own tissue giving a very natural look.	Suitable if you have smaller breasts.
It can be an option if you had previous tummy surgery.	It is a complicated operation.
You will have no muscle weakness in your tummy or back afterwards.	You may have scarring on your breast as well as a long scar on your inner thigh afterwards.
You will not need an implant.	Not all centres in Ireland offer this surgery

How will my new breast look and feel?

There can be big differences in how your new breast looks and feels between the various types of breast reconstruction. With implant surgery, your breast will usually have a more unnatural shape and sit higher up on your chest wall. It can also lack the droop (ptosis) of a natural breast. Implants can also feel firmer when compared to natural breast tissue. And sometimes it is possible to feel the edge of the implant through your skin.

Breast reconstructions using your own tissue flaps feel soft to touch and will move and look more natural than implants. Remember there will be less sensation, if any, in the reconstructed breast. This is generally common to all types of breast reconstruction surgery. Your new breast may not have the same shape, droop, texture and skin sensitivity as your original breast.

Preparing for surgery

How do I prepare for surgery?

One of the best ways to prepare for breast reconstruction is to become well informed about it. Discuss your options and expectations with your breast care team before surgery so you know what to expect. For example, find out about the possible complications of surgery, and what to expect when you're recovering from surgery. Ask what your breast might look like and if you will need more surgery to get the best result. Be realistic about the results and understand that results can vary. Remember your own expectations are very important.

Try to have a healthy lifestyle before surgery. This includes having a well-balanced diet, not smoking, taking regular physical exercise, keeping a healthy weight, and limiting your alcohol intake to safe amounts.

Smoking and breast reconstruction

Smoking can increase the risk of complications or failure of your breast reconstruction. This is because the nicotine and carbon monoxide from cigarettes narrow and tighten the blood vessels in your skin. This makes your blood circulation poorer. This in turn can affect wound healing and cause problems for surgery involving implants or flaps. For example, with an expander implant, the skin on your breast can be affected, causing the expander to fail. Some flaps are more likely to have complications such as fat necrosis. This is an area of damaged fatty cells in your breast. See page 68 for more details.

Smoking also increases the risk of respiratory (breathing) complications associated with having a general anaesthetic.

If you stop smoking as soon as you can after your diagnosis, your body will be able to recover from the effects of smoking before your surgery.

For a delayed reconstruction, you should stop smoking completely. This means no cigarettes for at least 3 months before your surgery.

If you would like advice or support on quitting, call the HSE Quit Team on CallSave 1800 201 203 or Freetext QUIT to 50100 or visit **www.quit.ie**.

Email: supportline@irishcancer.ie

Giving consent for surgery

You should be asked to sign a consent form saying that you give permission for the surgery to take place. No surgery can be done without your consent. Before the surgery, you should know about its benefits and risks. If you are confused about the information given to you, let your surgeon or nurse know straight away. They can explain it to you again. Some surgeries can be hard to understand and may need to be explained more than once. You can always ask for more time to decide about the surgery, if you are unsure when it is first explained to you.

Who will be involved in my care?

Some of the following health professionals may be involved in your care. Usually, a team of doctors will decide your treatment.

Breast surgeon A doctor who specialises in breast surgery. He or she can remove a tumour from your breast and perform some types of breast reconstruction. Also called an oncoplastic breast surgeon.

Plastic surgeon A surgeon who specialises in repairing and rebuilding different parts of your body. In this case, your breast. He or she can do many different types of breast reconstruction, including complicated flap surgeries.

Medical oncologist A doctor who specialises in treating cancer patients using chemotherapy and other drugs.

Radiation oncologist A doctor who specialises in treating cancer patients using radiotherapy.

Breast care nurse A specially trained nurse who cares for you and your family, giving information and support.

Oncology liaison nurse/ clinical nurse specialist A specially trained nurse who works in an oncology unit. She or he gives information and support to you and your family during treatment.

Radiation therapist A healthcare professional who specialises in giving radiotherapy and related advice to cancer patients.

Physiotherapist A therapist who treats injury or illness with exercises and other physical treatments related to the illness.

Medical social worker A person specially trained to help you and your family with all your social issues and practical needs. They are skilled in giving counselling and emotional support to you and your family at times of change and loss. They can give advice on financial and practical supports and services available to you when you go home.

Psychologist A specialist who can talk to you and your family about emotional and personal matters and can help you make decisions.

Counsellor A person specially trained to give you emotional support and advice when you find it difficult to come to terms with your illness. The Irish Cancer Society provides a counselling service. For details, call our Support Line on 1800 200 700.

After surgery

After surgery

How will I feel after my surgery?

How you feel after your surgery depends on which type of surgery you are having. Your surgeon will discuss what to expect from the surgery with you beforehand. That way, you can be as prepared as possible.

Type of surgery and recovery

All breast reconstruction surgery is done under general anaesthetic. The length of time your surgery takes will usually affect your recovery time. For example, if you are having a longer, more complicated flap surgery, your recovery will be much longer than if you were just having implant surgery. See page 65 for more information on average recovery times.

Drains and dressings

When you wake up, there will be some dressings and drains in place. These drains remove excess fluid from your wounds. They usually stay in for a few days, depending on how much fluid is draining from them.

Blood flow to flaps

After free flap surgery, the blood circulation to your flap will be carefully checked for the first few days. This is to make sure that the blood is flowing freely in and out of your tissues. You will usually be cared for in a single room with high temperatures to encourage good blood flow to the FLAP. Some people find this quite uncomfortable.

Getting up and about

How soon you can move about afterwards will depend on your surgery. For implant surgery, you will be up and about the next day. But for the more complicated types of flaps your surgical team will advise you. You may even be on bed rest for a while.

A physiotherapist will visit you regularly – to help you with breathing and leg exercises. Even when you are in bed you will be encouraged to move your legs and do deep breathing exercises at least once an hour.

You will also be given some exercises to keep your arms and shoulders mobile.

Your breast care nurse or consultant will advise you about the best bra to wear to support your newly reconstructed breast. You will probably feel most comfortable in a soft, supportive bra without underwires.

If you had surgery to your abdomen, they will tell you about the kind of underwear you need to support the area.

You will also be given advice about skin care – and how to keep the the skin supple and in good condition.

Pain control

You are likely to have some discomfort or pain after your surgery. But you will be given painkillers for pain control. Everything will be done to make you as comfortable as possible. Let your nurse or doctor know if the painkillers are controlling the pain.

Average recovery times for different surgery types

	Implant only	Expander Implant	LD flap	TRAM flap	DIEP flap
Surgery time	2–3 hours	2–3 hours	3–4 hours	3–5 hours	5–8 hours
Hospital stay	1–2 days	1–2 days	2–4 days	5–7 days	5–7 days
Recovery time at home	2–3 weeks	2–3 weeks	2–6 weeks	4–6 weeks	4–6 weeks
Effects to consider	Implant used	Implant used	Implant usually used	No implant used; breast made from your own body tissue	No implant used; breast made from your own body tissue
	No muscle problems	No muscle problems	May cause some muscle problems in your back and shoulder	May cause abdominal muscle weakness	Usually no muscle problems
	Scar on your breast only	Scar on your breast only	Scar on your breast and your back	Scar on your breast and your lower tummy	Scar on your breast and your lower tummy

Note: These times are a rough guide only and will depend on the individual patient. Not all issues are included in the above table. See pages 33-52 for more details.

What aftercare will I need?

Once you go home from hospital, you are likely to feel tired. Your recovery period will depend on which type of surgery you have had.

If you have friends and relatives, ask them to support you at home for the first week or so. If you don't have someone to help you on a day-to-day basis, plan well in advance – stocking your freezer with pre-cooked meals, and so on.

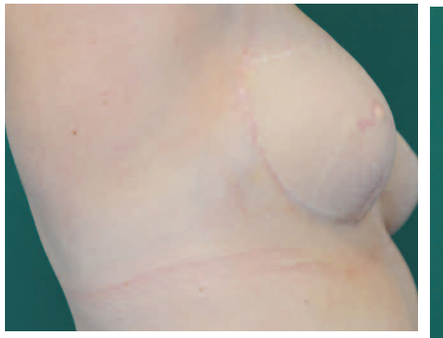
Some general things to remember:

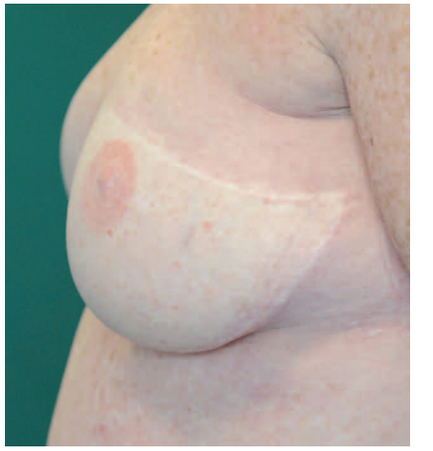
- Rest for the first week after surgery. Then you can start to look after yourself and begin to resume some normal activities, depending on your type of surgery.
- If you have dressings that still need to be changed after your discharge, ask who will be looking after them. You may need to attend a dressing clinic at the hospital, or sometimes a public health nurse may visit you at home for dressings. Ask your surgeon who you should contact if you have any worries about your wounds while at home. Sometime after your surgery, you will be seen again by your surgeon in the outpatient clinic. Your wounds will be checked to see if they are healing well and that you are recovering well.
- You will usually be seen by your surgeon at a later stage when healing is complete. This is to weigh up the results of the surgery and decide if any further steps are needed.

Will there be scars?

All surgery results in scarring of some sort. The location and size of scars after breast reconstruction depend on the technique used. In general, implants leave shorter scars, which will only be on your breast. With flap techniques there will be extra scars, from where the tissue has been taken (donor site). For example, your back, tummy or thigh.

You can expect most scars to be lumpy at first and to go through a period of being pink, red and raised. But they will gradually become flat and pale. This can take as long as 2 years to happen. Sometimes scars do not remain narrow but can stretch and widen. Or some scars remain red and raised and do not become pale or flat. The type of scar you get is not always possible to predict. It can depend on various factors, including your skin type.





Above: Delayed DIEP flap scar on right breast, awaiting micropigmention

Right: Delayed DIEP flap scar on left breast with nipple reconstruction

Are there any possible complications from the surgery?

For any kind of surgery there are possible risks. But your surgeon will take any steps needed to reduce these risks. Some complications are more likely to occur soon after surgery, while others can happen much later.

Immediate risks

The risk of delayed wound healing is an important concern. This risk can be greatest in larger flap surgery where the scars are much longer.

Wound problems: These are usually minor but sometimes can become more serious. For example, infection, skin loss, or if the

wound opens. You might have to return to surgery for the wound to be repaired. The reconstruction may need to be removed, and redone at a later date, to allow an infection to clear up. Antibiotics are sometimes given to reduce the risk of infection.

Bleeding and bruising: Some bruising at the breast site and area where tissue was taken from (donor site) is very common. Usually this doesn't cause any problems, but occasionally blood can collect beneath the wound site. This is called a haematoma and may need to be drained under anaesthetic. On very rare occasions, bleeding can occur soon after surgery. You may need further surgery to stop it. Sometimes a blood transfusion may be needed.

Seroma: Sometimes fluid collects beneath the wound and may need to be drained off in the clinic. This fluid is called a seroma.

Blood clots: There is a slight risk of blood clots (thrombosis) after your surgery. These can occur in your arms, legs or lungs. Steps can be taken before, during and after surgery to reduce this risk.

Blocked circulation: With free flap surgery, there is a risk that the blood circulation to the flap becomes blocked. If this happens, it is usually on the first day or so after surgery. Do not worry as you will be checked carefully for this. If it occurs, you will need to return to theatre for the microsurgery to be redone. This usually restores the circulation. But there is a slight risk that it may not be successful and the flap will need to be removed.

Flap failure: There is always the risk that the flap may fail. This happens in about 1 in 30 women. The risk is higher if you smoke.

Fat necrosis: Fat necrosis is an area of damaged fatty breast tissue where the cells have died after flap surgery. It is due to a poor blood supply in the reconstructed breast. It can look like a lump and may be painful. In some cases, these areas will need to be removed surgically. It is more common if you have had radiation after your first flap surgery.

Long-term risks

Implant surgery: With implant surgery, some very specific complications can happen. These include rupture of the implant, infection, hardening around the implant, and visible folds and ripples in your breast.

Abdominal flap surgery: With some abdominal flap surgery, mainly the TRAM flap, there is a risk of abdominal muscle weakness or of a hernia developing.

The risks of these complications vary between the various types of surgery. The chances of you developing any complications will be discussed with you beforehand. Often very little can be done to reduce any of these risks. But if you opt for delayed breast reconstruction and you are overweight and/or you smoke, you will be advised to lose weight and/or to stop smoking before surgery. Some surgeons may not do TRAM or DIEP surgery if they feel the risk of flap failure is high.

What follow-up do I need?

Once you are discharged from hospital, you will be given an appointment to see your surgeon. These check-up visits will happen regularly and are called follow-up. How long you are followed up will depend on the type of surgery you have had.

If you decide to have nipple reconstruction – some women choose not to – it is usually the last step and is done after any other adjustments are made. After nipple reconstruction, you will usually have a further follow-up visit. After that, you will not need to go back to your plastic surgeon, if there are no other issues or problems.

If you were attending your breast surgeon for your reconstruction, follow-up may last for several years. You may also be followed up by other specialists, depending on what other types of treatment you needed.

You will have a physical exam of both your natural and reconstructed breast at these check-ups. Every year you will still have a mammogram on your natural breast. This will go on for several years. You will not need a mammogram of your reconstructed breast after a mastectomy. But you will still need a mammogram of your opposite breast if an implant was added to match the size of your reconstructed breast or if an implant was used after breast-conserving surgery. In these cases, it is best to tell the radiographer in advance about your implant.

How can I be breast aware afterwards?

After your breast reconstruction, it is just as important to remain breast aware. Naturally, it will take a while for you to get to know your new breast shape. You will be advised to wait until all the swelling has gone down first, which could take many weeks.
Do ask your surgeon for advice as each person's recovery is individual. If you have had implant surgery, you will need to look out for hardness or rippling of the skin over the implant. This could be a capsular contracture or a tightening around the implant. After any type of breast reconstruction, you should look out for changes in both breasts. These include:

- A change in appearance or shape
- A lump or lumpy area in your breast or armpit
- A change in skin texture
- Swelling in your upper arm
- Any changes or discharge from your nipple
- Pain or discomfort that persists longer than the type that occurs before your periods (premenstrual)

If you notice these or any other changes in either of your breasts, contact your breast care nurse, surgeon or GP. If there are any concerns, your specialist will arrange for further tests. Remember having breast reconstruction does not increase your risk of breast cancer recurring. If you would like more information about being breast aware, call our Support Line on 1800 200 700. Ask for a copy of our leaflet, ***Breast Cancer: What You Should Know***.

Email: supportline@irishcancer.ie

Getting the best result — other procedures

How can I get the best result?

Breast reconstruction is often referred to as a process, as adjustments can be made gradually. Your surgeon will try to make your reconstructed breast as similar as possible to your other breast, but it's unusual for a woman to be completely satisfied after her first reconstructive surgery.

You might need a number of procedures to get the best result. For example:

- Exchanging the implant after expansion is complete.
- Reducing or reshaping your other breast to match the newly reconstructed one (mammoplasty or mastopexy) – see page 102 for more.
- Reducing the new breast size
- Increasing the size of your reconstructed breast using lipofilling
- Having your nipple reconstructed by surgery
- Adding colour to your new nipple by medical tattoo (areolar pigmentation)
- Revising or reshaping your breast shape to improve the size and evenness

If you want to have more procedures to improve the look, size, shape and match of your breasts, your surgeon will tell you which techniques are suitable and recommended for you.

Breast reconstruction after breast-conserving surgery

Most women don't need reconstruction after a wide local excision or a lumpectomy, but if a large amount of breast tissue is removed, you may need to replace the lost volume to maintain the breast shape. Volume can be replaced by moving some of the breast tissue around to reshape the breast (mastopexy).

Surgery to your other breast

Some women might decide at some stage to have balancing surgery done to the other breast. This is to get the closest match possible and usually involves either breast reduction or enlargement.

Breast reduction

If your new breast is smaller than your opposite breast, your surgeon might suggest that you have the other breast reduced in size. This may appeal to you, especially if your breasts were very large. This is called a therapeutic mammoplasty and is done under general anaesthetic. It usually involves moving your nipple. Ask your surgeon or breast care nurse for more advice.

Breast enlargement

Sometimes if your opposite breast is smaller, your surgeon might suggest using an implant to increase it. This can help improve your shape and achieve a better result. It can correct any unevenness or imbalance in your breast and match your newly reconstructed breast. Your surgeon or breast care nurse might refer to this as augmentation. Ask them for more advice or call our Support Line on 1800 200 700 for information.

Lipofilling or lipomodelling

Lipofilling is where fat is removed from another part of your body and transferred to your breast area to fill out a dent, improve the shape or increase your breast size. It is carried out in stages and involves a number of hospital visits.

First, the fat is removed by liposuction. Then it is refined in theatre and injected into the breast area. It generally works best when some time has passed after breast reconstruction, once healing has taken place and any swelling reduced. Your surgeon can discuss lipofilling if they think you could benefit from it.

What's involved?

- Fat is taken from an area where there is extra tissue, such as your hips or tummy.
- It is specially treated in theatre on the day of surgery.
- It is then injected to either increase the size or shape of a previous reconstruction or correct a defect in the curve of your breast or chest.
- Lipofilling is usually done under local anaesthetic, but a general anaesthetic can be used depending on the size of the area to be treated.
- Lipofilling may need to be repeated if the first treatment does not fully correct the dip in shape.

Support Line Freephone 1800 200 700

Creating a new nipple

Usually with a mastectomy, your nipple is removed along with your whole breast. The final stage in the creation of your new breast is often having your nipple reconstructed.

There is no pressure on you to have this done, and indeed some women decide against it. The surgery is fairly simple and painless and can dramatically improve the overall look of your new breast. It is done as a day case using local anaesthetic.

When is nipple reconstruction done?

Nipple reconstruction is usually done at a later stage after breast reconstruction. The reason for the wait is to allow the swelling in your reconstructed breast to settle down and for your breast to become supple. This usually happens after several months. Then your nipple can be formed in the most suitable position. If you need radiotherapy or chemotherapy, your plastic surgeon will usually wait 4–6 months from the time you finish treatment before doing the nipple reconstruction.

Sometimes nipple reconstruction is not possible. For example, if your skin is very thin, tight or if you have a lot of scarring on your chest due to radiotherapy. Remember, the nipple is purely for cosmetic reasons. It will restore the look but not the feel, sensation or function of a natural nipple.

Breastfeeding will not be possible, as the network of milk glands and ducts has been removed. Your new nipple will not change shape after being stimulated or to a change in temperature. Over time your reconstructed nipple may also flatten slightly.

What's involved?

There are two main steps involved:

- Creating a nipple shape
- Applying colour to the nipple

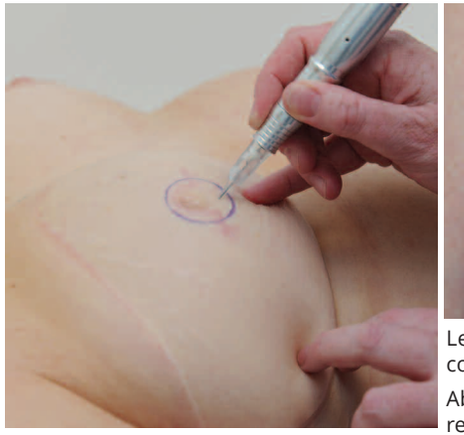
Creating a nipple shape

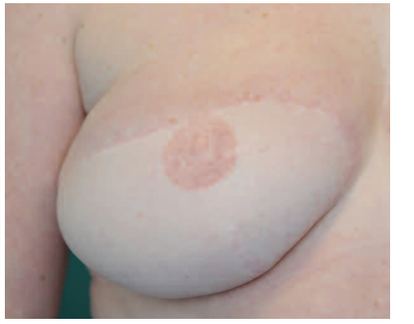
Nipple reconstruction is usually done while you are awake, using local anaesthetic. There are two ways to do it, with the most common one involving a skin flap. The surgeon uses a skin flap to fold skin onto your reconstructed breast and make it into a nipple shape.

The second way involves taking a graft (layers of skin) from another part of your body, or from your other nipple areola, if you have very large areola. Your areola is the flat, pinkish brown circle of skin around your nipple. The graft is then transferred to your reconstructed breast. The area where the tissue was removed from can be uncomfortable for some time afterwards.

Applying colour to the nipple

At a later stage, usually some weeks after the nipple shape has been made, your areola will be coloured.





Left: Nipple reconstruction – applying colour to the nipple

Above: Delayed DIEP flap with nipple reconstruction

Normally, a medical tattoo is used to apply a colour that matches your natural areola. This is called micropigmentation. It uses a semi-permanent pigment made from natural ingredients. You might choose to have the micro-pigmentation without a surgical nipple reconstruction. This is simple to do and can be carried out as an outpatient.

The area to be treated is marked and the tattoo pigment mixed to get the right colour. A numbing cream can be used to help prevent any discomfort. This may not be a problem as you may have less sensation or a numbness in your newly reconstructed breast.

A sterile needle is used to inject the pigment into the skin to create the areola shape. Your surgeon will try to match the colour and shape of the new areola to that of your opposite breast. This usually takes about an hour and you can go home afterwards.

For a few days afterwards your new nipple may be sore and uncomfortable. A scab usually forms that will come off after a few days. You can cover the area with a dressing as some oozing or weeping may occur. You might need more than one session of micropigmentation to get your best colour result. You might also need top-ups of the colour after 18 months to 2 years. This is because the pigment is semi-permanent and the colour can fade over time.

Stick-on nipples

If you are unable to have a permanent nipple reconstruction or you choose not to, you can use a stick-on nipple prosthesis if you prefer.

These are made from silicone rubber and can be matched in colour to your natural breast. For more information, talk to your breast care nurse. You can also call our Support Line on 1800 200 700 or visit a Daffodil Centre.

Email: supportline@irishcancer.ie

Coping and emotions

How can I cope with my feelings?

If you have just been diagnosed with breast cancer recently, then you may be feeling anxious, distressed or even angry or confused. There are many reactions when told you have breast cancer. Reactions can often differ from person to person. In fact, there is no right or wrong way to feel. There is also no set time to have any particular emotion.

Some reactions may occur at the time of diagnosis, while others might appear or reappear later during your treatment. Or indeed it may not be until you recover from your illness that your emotions hit hard.

Sometimes a cancer diagnosis can bring greater distress and cause anxiety and depression. A helpful booklet that discusses them in detail is called ***Understanding the Emotional Effects of Cancer***. Call our Support Line on 1800 200 700 for a free copy. You can also talk to the medical social worker in your hospital, if you prefer.

Your feelings about breast reconstruction

When considering breast reconstruction, you are likely to experience a range of emotions. It is normal to feel nervous about the surgery but excited too at the prospect of gaining a new breast, especially if you have been without one for some time. You might also be feeling a bit confused. Remember it is good to express how you are feeling. Talk to your surgeon or breast care nurse, who may be able to organise for you to speak to someone who has had similar surgery. You can also call our Support Line on 1800 200 700 or visit a Daffodil Centre to speak to a cancer nurse in confidence.

Readjusting: It's normal for it to take some time to adjust to your new body image. Every day after your surgery, your new breast will undergo changes as healing takes place.

Disappointment: At first you may feel disappointed because your shape is not what you expected it to be. But any swelling and bruising in the days after your surgery will gradually ease off. Your soreness and discomfort too will lessen. This will all help to increase your satisfaction.

Lack of sensation: The fact that your new breast feels different and lacks the same sensation as natural breast tissue might surprise you, as it does many women. But with time, you will adjust to this and accept it as part of your new breast.

Length of recovery: It can often take some months to finally complete both the adjustments to your opposite breast and to create your new nipple. This means that you may be feeling somewhat dissatisfied for a time. It can help to understand that breast reconstruction is not just one operation but a process. Usually with time and some adjustments, satisfaction can be achieved.

Will surgery affect my sex life?

Losing a breast can make it difficult for you to feel desirable and normal again. For some women, having breast reconstruction helps them regain their sense of femininity and to feel more attractive and confident. It is natural that you might lose interest in sex for a while. Do not worry as sex can resume when you feel comfortable and when the soreness and swelling due to surgery have settled down.

It is natural to feel self-conscious in intimate situations after breast cancer surgery. While a reconstructed breast can help relieve these feelings, there are other things to be aware of.

In general, there is less sensation in your reconstructed breast. Also, the surrounding chest tissue may remain tender for some time. As nipples are highly sensitive areas and bring pleasure and satisfaction during sex, most women do miss this aspect of their sex life. Reconstructed nipples usually do not have any feeling or sensation.

Other side-effects such as hair loss, fatigue or menopausal symptoms, which can be caused by chemotherapy and other treatments, can also affect how you feel about yourself and your desire for sex.

Further advice and support

If you continue to experience problems adjusting to your new body image, do seek advice. You can talk to your breast care nurse or the medical social worker in your hospital. You call also our Support Line on 1800 200 700 for advice on counselling services in your area. For more about coping and emotions associated with a breast cancer diagnosis, ask for a copy of our booklet, ***Understanding Breast Cancer***. If you prefer, you can talk to a cancer nurse at a Daffodil Centre.

Support resources

Coping with the financial impact of cancer

- If you have cancer you may not be able to work for a time. You may also have extra expenses.
- You may have to pay for some of your cancer treatment.
- You might be entitled to certain social welfare payments.
- There are services to help you if you're finding it hard to manage.

A diagnosis of cancer often means that you will have extra expenses, like car parking during hospital visits, medication, travel, heating and childcare costs. If you can't work or you are unemployed, this may cause even more stress. It may be harder for you to deal with cancer if you are worried about money.

Medical expenses

Medical expenses that you might have to pay include:

- Visits to your family doctor (GP)
- Visits to hospital
- Overnight stays in hospital
- Medicines
- Medical aids and equipment (appliances), like wigs

How much you pay towards your medical expenses depends on whether or not you qualify for a medical card and what type of health insurance you have, if any.

If you have a medical card, you will probably have very little to pay for hospital and GP (family doctor) care or your medication. If you are over 70, you can get a free GP visit card.

Medical cards are usually for people on low incomes, but sometimes a card can be given even if your income is above the limit. For example, if you have a large amount of medical expenses. This is known as a discretionary medical card.

An emergency medical card may be issued if you are terminally ill and in palliative care, irrespective of your income.

If you don't have a medical card you will have to pay some of the cost of your care and medication.

If you have health insurance the insurance company will pay some of the costs, but the amount will depend on your insurance plan. It's important to contact your insurance company before starting treatment to check you're covered.

Benefits and allowances

There are benefits that can help people who are ill and their family. For example, Illness Benefit, Disability Allowance, Invalidity Pension, Carer's Allowance, Carer's Benefit, Carer's Leave.

If you want more information on benefits and allowances, contact:

- **The medical social worker** in the hospital you are attending
- **Citizens Information** – Tel: 0761 074 000
- **Department of Employment Affairs and Social Protection** – Tel: 1890 662 244 or ask to speak to a DSP representative at your local health centre or DSP office.

Always have your PPS number to hand when you are asking about entitlements and benefits. It's also a good idea to photocopy completed forms before posting them.

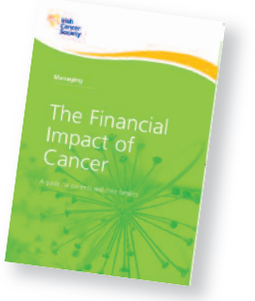
If you have money problems

If you are getting into debt or you are in debt, the Money Advice and Budgeting Service (MABS) can help you. MABS can look at your situation, work out your budget, help you to deal with your debts and manage your payments. The service is free and confidential. Call the MABS Helpline 0761 07 2000 for information.

If you are finding it hard to cope financially, contact your medical social worker in the hospital or your local health centre for advice. The Irish Cancer Society can also give some help towards travel costs in certain cases. See page 95 for more details of our Volunteer Driver Service and the Travel2Care fund.

You can also call our Support Line 1800 200 700 or visit a Daffodil Centre and the nurse will suggest ways to help you manage.

More information



Go to **www.cancer.ie/publications** and check out our booklet, ***Managing the Financial Impact of Cancer.*** This explains:

- Medical costs and help available
- Benefits and allowances that you or your family may qualify for
- Travel services
- Ways to cope with the cost of cancer

The booklet also has lots of other information to help you manage. For example, disability and mobility supports, help for people in financial difficulty, help for carers and living-at-home and nursing home supports.

Irish Cancer Society services

Our Cancer Support Department provides a range of cancer support services for people with cancer, at home and in hospital, including:

- **Support Line**
- **Daffodil Centres**
- **Survivor Support**
- **Support in your area**
- **Patient travel and financial support services**
- **Night nursing**
- **Publications and website information**

Support Line Freephone 1800 200 700

Call our Support Line and speak to one of our cancer nurses for confidential advice, support and information.
The Support Line is open Monday–Friday, 9am to 5pm.
You can also email us on **supportline@irishcancer.ie** or visit our Online Community at **www.cancer.ie**

For the deaf community, our Support Line is using the Sign Language Interpreting Service (SLIS) using IRIS. Contact IRIS by text 087 980 6996 or email: remote@slis.ie

Daffodil Centres

Visit our Daffodil Centres, located in 13 hospitals nationwide. The centres are staffed by cancer nurses and trained volunteers who provide confidential advice, support and information to anyone concerned about or affected by cancer.

Who can use the Daffodil Centres?

Daffodil Centres are open to everyone – you don't need an appointment. Just call in if you want to talk or need information on any aspect of cancer including:

- Cancer treatments and side-effects
- Chemotherapy group education sessions
- Emotional support
- Practical entitlements and services
- Living with and beyond cancer
- End-of-life services
- Lifestyle and cancer prevention
- Local cancer support groups and centres

You can email **daffodilcentreinfo@irishcancer.ie** or visit **www.cancer.ie** to find your local Daffodil Centre.

Survivor Support

Speak to someone who has been through a cancer diagnosis. Our trained volunteers are available to provide emotional and practical support to anyone going through or finished with their treatment.

Support in your area

We work with cancer support groups and centres across the country to ensure cancer patients have access to confidential support, including counselling. See page 98 for more information.

Support Line Freephone 1800 200 700

Patient travel and financial support services

We provide practical and financial support for patients in need, travelling to and from their cancer appointments. There are two services available through the Society:

- **Travel2Care** is a limited fund, made available by the National Cancer Control Programme, for patients who are travelling for cancer tests or treatment to one of the national designated cancer centres or their approved satellite centres. Patients must be travelling over 50km one way to access the fund.
- **Irish Cancer Society Volunteer Driver Service** is for patients undergoing chemotherapy treatments who are having difficulty getting to and from their local appointments in our partner hospitals.

To access either of these services please contact your hospital healthcare professional.

Irish Cancer Society Night Nursing

We provide end-of-life care for cancer patients in their own home. We offer up to 10 nights of care for each patient. Our service allows patients to remain at home for the last days of their lives surrounded by their families and loved ones. This is the only service of its kind in the Republic, providing palliative nursing care at night to cancer patients.

The health professional who is looking after your loved one can request a night nurse for you, so talk to your palliative care team member, GP or public health nurse about this.

Publications and website information

We provide information on a range of topics including cancer types, treatments and side-effects, coping with cancer, children and cancer, and financial concerns. Visit our website **www.cancer.ie** or call our Support Line for free copies of our publications.

If you would like more information on any of our services, call our Support Line on 1800 200 700 or visit a Daffodil Centre.

Local cancer support services

The Irish Cancer Society works with cancer support services all over Ireland. They have a range of services for cancer patients and their families, during and after treatment, many of which are free.
For example:

- **Professional counselling** (the Irish Cancer Society funds up to 8 sessions of free one-to-one counselling in many affiliated support services)
- **Support groups**, often led by professionals like social workers, counsellors, psychologists, or cancer nurses

- **Special exercise programmes**, like the Irish Cancer Society's *Strides for Life* walking group programme
- **Stress management and relaxation techniques**, such as mindfulness and meditation

- **Complementary therapies** like massage, reflexology and acupuncture
- **Specialist services** such as prosthesis or wig fitting and manual lymph drainage
- **Mind and body sessions,** for example, yoga and tai chi
- **Expressive therapies** such as creative writing and art
- **Free Irish Cancer Society publications** and other high-quality, trustworthy information on a range of topics

Cancer support services usually have a drop-in service where you can call in for a cup of tea and find out what's available.

You can call our Support Line on Freephone 1800 200 700 to find your nearest cancer support centre. Or see our online directory at **http://www.cancer.ie/support/support-in-your-area/directory**

What does that word mean?

Abdomen The part of your body that lies between your chest and pelvis. Sometimes called your belly, tummy or stomach. The lower part is used for some breast reconstruction surgery.

Areola The flat, pinkish brown circle of skin around your nipple.

Breast prosthesis (external) An artificial breast form that can be worn with a bra and can provide volume where it has been lost after breast cancer surgery.

Breast prosthesis (internal) Another name for an implant. It is an artificial device that is placed in your body to repair or reconstruct the tissues. Breast implants are made of silicone or filled with salt water (saline).

Delayed reconstruction Breast reconstruction done some time after your breast cancer diagnosis and treatment.

DIEP flap A flap consisting of lower abdominal skin and fat and the small blood vessels that supply it. These blood vessels are called the deep inferior epigastric perforator (DIEP) and pass through your abdominal wall.

Donor site The area of your body from where tissue is taken. For example, if you have an LD flap reconstruction, the donor site is your back.

Free flap A piece of tissue that is transferred with its own blood supply to your breast. It is then reattached using microsurgery.

IGAP flap A flap consisting of buttock muscles, skin and fat and the small blood vessels that supply it. These blood vessels are called the inferior gluteal artery perforator (IGAP) and pass through your lower buttocks.

Immediate reconstruction Breast reconstruction done at the same time as your breast cancer surgery. For example, a mastectomy.

Implant An artificial, soft capsule that is surgically put into your body to help replace tissue that has been removed from your breast. Most breast implants are made of silicone, while some are filled with salt water (saline).

Latissimus dorsi A large muscle on your back that can be used to reconstruct a breast. The muscle along with the overlying skin and fat can be moved to your chest.

Lipofilling Small amounts of fat taken from another part of your body by liposuction and injected beneath your skin to improve the shape of your breast.

Liposuction Removing fat from beneath your skin using a large needle and suction. It can take away fat from a part of your body. Once the fat is treated, it can be used for lipofilling.

Lumpectomy (similar to wide local excision or partial mastectomy) An operation to remove a lump in your breast. It usually involves removing the lump along with an area (margin) of healthy tissue.

Mammoplasty	Surgery that reduces your opposite breast to match your reconstructed breast. Also called a therapeutic mammoplasty.
Mastectomy	An operation that removes your full breast, including your nipple.
Mastopexy	Surgery to change the size, shape or elevation of breasts. For example, if breasts are sagging.
Microsurgery	A technique used to join very small parts of your body tissues together. For example, blood vessels. It involves using an operating microscope and tiny stitches.
Partial mastectomy	(similar to wide local excision or lumpectomy) Removing part of your breast.
Perforator	The medical term for the very small artery and vein in a flap that pass through the muscle to carry blood into and away from the flap.
Prosthesis	See breast prosthesis.
Sentinel lymph node biopsy	A test to check if cancer cells have reached the lymph nodes in your armpit. Sentinel means 'guard' and the sentinel node is the main draining node for the tumour. When found, it is surgically removed and examined instead of removing all the lymph nodes. Sometimes two or three nodes are removed.

SGAP flap	A flap consisting of skin and fat in your buttocks and the small blood vessels that supply it. These blood vessels are called the superior gluteal artery perforator (SGAP) and pass through the top of your buttocks.
SIEA flap	A flap consisting of skin and fat in your groin and the small blood vessels that supply it. These blood vessels are called the superficial inferior epigastric artery (SIEA) and pass through your lower abdomen.
Tattooing	Applying colour to your skin. It can be used to recreate the colour of your natural nipple and areola.
TRAM flap	A flap using the transverse rectus abdominis muscle (TRAM) found in your abdominal wall. The flap consists of a part of this muscle and the skin and fat of your lower abdomen as well as its blood supply. A TRAM flap is commonly used to reconstruct the breast.
TUG flap	A flap using the transverse upper gracilis muscle found in your upper inner thigh. The flap consists of a section of the muscle along with the overlying skin and fat and its blood supply.
Wide local excision	(similar to lumpectomy or partial mastectomy) An operation to remove a lump, usually a tumour, along with an area (margin) of healthy tissue.

Your own questions

Your own questions

Notes

About this booklet

This booklet has been produced by the Irish Cancer Society to meet the need for improved communication, information and support for cancer patients and their families throughout diagnosis and treatment. We would like to thank all those patients, families and professionals whose support and advice made this publication possible. We would particularly like to acknowledge the contribution of the many consultants, nurses and other healthcare professionals who so kindly gave up their time and expertise to contribute to previous editions of this booklet.

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The following sources were used in the publication of this booklet:

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- *Breast Implants: Information for Women Considering Breast Implants.* Department of Health/Irish Medicines Board, 2005.
- *Cancer Nursing: Principles and Practice*, CH Yarbro, MH Frogge, M Goodman & SL Groenwald. Jones and Bartlett, 7th Ed (2011)

Next revision: 2022

Join the Irish Cancer Society team

If you want to make a difference to people affected by cancer, join our team!

Support people affected by cancer

Reaching out directly to people with cancer is one of the most rewarding ways to help:

- Help people needing lifts to hospital by becoming a volunteer driver
- Give one-on-one support to someone newly diagnosed with cancer as part of our Survivor Support programme
- Give information and support to people concerned about or affected by cancer at one of our hospital-based Daffodil Centres

Share your experiences

Use your voice to bring reassurance to cancer patients and their families, help people to connect with our services or inspire them to get involved as a volunteer:

- Share your cancer story
- Tell people about our services
- Describe what it's like to organise or take part in a fundraising event

Raise money

All our services are funded by the public's generosity:

- Donate direct
- Take part in one of our fundraising events or challenges
- Organise your own event

Contact our Support Line on Freephone 1800 200 700 if you want to get involved!

Did you like this booklet?

We would love to hear your comments or suggestions.
Please email reviewers@irishcancer.ie

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W: www.cancer.ie

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Irish Cancer Society