People with cancer who actively participate in their care along with their health care providers may enhance the possibility of recovery. People with cancer who actively participate in their care along with their health care providers will improve the quality of their lives.
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When you hear the words, “you have breast cancer,” it’s easy to feel like you need to make decisions within days of your diagnosis. But in most cases you have time to meet with different physicians to learn about your surgical, treatment and reconstruction options. The Cancer Support Community taught me the importance of taking a proactive role in my decision-making and I encourage all women to do the same.

— Sharishta

No matter what your individual circumstances may be, the decision about whether or not to have breast reconstruction after cancer is tremendously difficult and it requires a great deal of thought.

Often, women diagnosed with breast cancer are asked to make challenging decisions about cancer treatments including surgery for lumpectomy, mastectomy, or prophylactic mastectomy. Then at the same time, they may be asked whether or not they want to undergo breast reconstruction to restore one or both breasts following cancer surgery, and immediately determine what type of reconstruction to have. This is a lot to consider.
In this booklet, we shed light upon this very personal decision, specifically to clarify information about:

- The variety of reconstruction and non-reconstructive options available for women affected by breast cancer
- Short and long-term expectations
- Common medical and emotional influences
- Important questions for women to ask themselves and their medical team

Our goal is to provide education, resources, and support that will help anyone exploring breast reconstruction after diagnosis make more comfortable and confident decisions within a timeframe that feels reasonable.

This booklet has been created, with care, based on survey results from 840 women in the U.S. with breast cancer; a focus group of nine breast cancer survivors who share their experiences; with authoritative insight from our partners: Bright Pink, FORCE, Living Beyond Breast Cancer, and Young Survival Coalition; and with professional guidance from medical, oncology, plastic surgery, and psycho-oncology experts. Thank you to all contributors.

There are many influences that impact women’s decisions after breast cancer. CSC’s 2010 survey of 840 women with breast cancer suggests that a majority of women chose reconstruction after mastectomy to improve their body image (70%) and physical appearance (73%). Women who opted not to undergo reconstruction were concerned about side effects (62%), didn’t want additional surgery (59%), or they were worried about cancer recurrence (42%).
Being handed a cancer diagnosis is devastating, with unknowns that affect many aspects of life. There are primary concerns about overall health, self-image, and questions about short and long-term treatment. There can be setbacks to daily activities, career, finances, and relationships, and there will be “what next?” questions.

Yet, after the immediate crisis of the diagnosis is over, most women learn coping skills that enable them to weather the difficulties of breast cancer without long-term physical, sexual or emotional problems.

Becoming empowered to ask questions about your options is a critical first step towards navigating your decisions and coping more effectively with your cancer experience, treatment, and other life changes after cancer.
EMPOWER YOURSELF

_You are the expert in your cancer experience in relation to how you feel, what is important to you, and what you want._

“Empower Yourself” is a phrase we use to describe the ongoing process of making a personal effort to become educated about your cancer diagnosis, your treatment and reconstruction options, your medical team, and ways to improve your physical, mental and spiritual wellbeing after cancer. Becoming “empowered” is about regaining a sense of control and confidence after receiving a cancer diagnosis.

If you have the confidence to ask important questions of your healthcare team, you will, often, be able to make decisions about cancer treatment and recovery that work for you.

If you start to feel overwhelmed, you can feel empowered to take a step back and give yourself the time you need to make a comfortable decision about breast reconstruction or any other decisions related to your treatment.

10 ACTIONS YOU CAN TAKE TO FEEL EMPOWERED AFTER BREAST CANCER

1. **Remember this is YOUR body and YOUR decision.** Decisions about breast cancer treatment and reconstruction are very personal and they are yours to make. How do you feel about your breasts as part of your self-image? How will breast surgery affect your life? Develop a plan with your oncologist, surgeon, partner, family – determine what you feel most comfortable with.

2. **Take one step at a time.** Take a moment to slow down when you feel stressed or overwhelmed. Allow yourself to think carefully about what you need to do. You have time to gather information and make an informed decision.

3. **Seek support from others.** People often find comfort and answers when talking with others who share common experiences and challenges. Contact the organizations listed as resources throughout this booklet to connect with others.
4. **Communicate openly with your healthcare team.** Having an open and honest relationship with your medical team will help to increase trust and help you feel a greater sense of control. Even when your medical team includes people you’ve only just met, talk with them about your concerns and questions. Consider a second opinion, especially when discussing reconstructive surgery.

5. **Prepare a list of questions for each appointment.** Ask for clarification of terms you don’t understand. Ask about your options—about breast reconstruction now vs. in the future or not at all. Ask what each option may involve: recovery time, after-effects, treatment considerations, long and short-term expectations. With so many questions, it helps to write them down.

6. **Express your feelings.** Cancer and the treatment process are stressful and they tend to trigger many strong emotions. It helps to find ways to acknowledge the range of feelings you have: journaling, support groups, or professional counseling are just a few useful strategies.

7. **Openly ask for support.** Friends and family often want to help, but don’t know how. They will appreciate specific examples of support, such as preparing meals, making phone calls for you, joining you for a movie – or – take someone with you to medical appointments to take notes and discuss what you heard afterwards.

8. **Learn to relax.** It helps to learn how to find a calm, controlled physical state that can reduce your stress. Treat yourself. Consider a relaxation program or engage in calming activities, such as walking, yoga, reading, or music.

9. **Strive for a “new normal.”** A breast cancer diagnosis can be life changing. It can be an opportunity to reprioritize goals and reframe your self-image. Focus on living in the present and enjoying every moment with the people you care about – with appreciation for your new body.

10. **Maintain a spirit of hope.** You may have cancer, but cancer does not have you! Remember that many women have survived a diagnosis of breast cancer. Draw upon your spiritual beliefs, cultural customs, and family connections. Hope can be a motivating factor in your recovery.
Navigating Decisions

When one or both breasts are completely removed during mastectomy to remove cancer (for example), a woman will be faced with the option not to have additional surgery and leave her chest as is, or to undergo reconstruction to restore her breasts.

When you are diagnosed with cancer and are told about striking surgical options such as these, you will experience a wide range of emotions. It’s difficult to know where to begin and you may feel lost or even unable to make decisions.

First you must decide whether or not you want reconstruction and if it’s important to you. Then research your options. Find out what’s possible...but first it’s imperative to decide if you want it. It’s very individual and very personal.

— Sandy
CHECKLIST: THINGS TO CONSIDER FOR BREAST RECONSTRUCTION

☑️ **Your feelings and emotions** – How will the loss of a breast affect the way you view your body or sexual identity (body image)? The relationship a woman has to her body is highly personal and feelings about physical changes will vary from woman to woman.

☑️ **Your health** – Will your cancer diagnosis, other medical conditions that affect healing, and/or your treatment history (including experience with radiation or chemotherapy) impact your options for reconstruction?

☑️ **The need for multiple surgeries** – Does it matter that the reconstruction process involves multiple steps? For example, it can include growing the skin with expanders, revising or contouring the new breast after initial surgery, nipple replacement or other surgery.

☑️ **Potential scarring** – Will scar tissue beyond the breast bother you? For some reconstruction procedures, scar tissue may be obvious on parts of the body where tissue was removed as well as on the reconstructed breast. The need for additional plastic surgery to remove scars may be desired.

☑️ **Absence of feeling** – Do you care that reconstruction restores the shape of the breast but not sensation (although sensitivity may improve in time depending on the procedure)? No matter what, sensation is greatly diminished with the removal of a breast.

☑️ **Appearance** – If you have a single mastectomy, would you want to reshape the uninvolved “healthy” breast to match the appearance of the reconstructed breast? Some women do not want to touch the uninvolved breast as all surgical options will add scars, prolong recovery time, and affect sensation. If you have a double mastectomy, would you consider a uniform new size for both breasts (with a reduction, a lift, or an enlargement)?

☑️ **Texture** – When you touch a reconstructed breast, will its texture and consistency feel like breast tissue? It’s helpful to talk with women who have had each type of breast reconstruction you are considering for many reasons, including to ask how they experience the texture of their reconstructed breasts.

☑️ **Recovery** – Will your lifestyle be affected by the recovery time? For example, recovery from a mastectomy alone is relatively faster than a mastectomy plus reconstruction. Ask about the short and long-term impacts from each type of reconstruction procedure that you can consider.
It is important to acknowledge your fears and feelings, as painful as they may be. This is a crucial step towards becoming informed, supported, and ultimately empowered. Operating from a place of clarity will enable you to make smart, timely decisions throughout your cancer experience.

Take a moment to prioritize what’s important to you when considering your breasts after cancer. How you felt about your breasts before cancer, your treatment plan, and other considerations will influence how you wish to deal with reconstructive surgery.

In general, one out of every three women affected by breast cancer chooses to have breast reconstruction immediately after a mastectomy or lumpectomy. Those who don’t choose to have reconstruction immediately may revisit the idea in the future.

The other two out of three women, who do not choose immediate reconstruction, make this decision for the following reasons:

- they don’t have this option (late stage cancer, other health reasons, etc.)
- their breast doesn’t change much after a lumpectomy
- they don’t know about their reconstruction options or insurance benefits
- they would consider reconstruction after having more time to recover from cancer
- or they ultimately determine that reconstruction is not the right choice for them

More information about timing considerations for reconstruction is in Chapter 4. Also, when making the decision to undergo reconstruction or not, you should weigh the pros and cons of each procedure (see chart in Chapter 8), including personal factors that may involve family responsibilities, workplace concerns, or expectations.
Decisions about breast cancer treatment requires you and your doctor to discuss many different concerns, but the single most important factor for initial treatment is the stage of your breast cancer. Tumor stage determines whether surgery, radiation therapy, hormone therapy, chemotherapy or some combination of those therapies is the best option for your treatment success.

Earlier stage breast cancers typically include surgery as part of the treatment plan. Depending on the stage of the tumor, the size of the tumor, and the involvement of surrounding lymph nodes and tissue, either breast-conserving surgery (lumpectomy), or mastectomy may be proposed.

I think it’s important to speak with someone who’s been through it. I felt lost and had nobody to talk to — I felt pressured. I now know it helps so much to find sources of information and people you feel comfortable with.

— Francis

**Types of Primary Breast Surgeries**

**Breast-Conserving Surgeries**

- **Lumpectomy** – the tumor (‘lump’) and a small amount of surrounding normal tissue is removed.

- **Partial mastectomy or segmental mastectomy** – the part of the breast that has cancer and some surrounding normal tissue is removed.

- **Auxiliary lymph node dissection or sentinel lymph node biopsy** – some of the lymph nodes under the arm may be removed for evaluation with breast-conserving surgery, although it may be done at a later time through a separate incision.

**Mastectomy**

- **Total or simple mastectomy** – the breast with cancer is entirely removed. Some lymph nodes are also typically removed for evaluation (lymph node dissection).

- **Modified radical mastectomy** – the breast with cancer is entirely removed, along with lymph nodes and the lining over the chest muscles.

- **Radical mastectomy/Halsted radical mastectomy** – the breast with cancer is entirely removed, along with all lymph nodes and the chest wall muscles under the breast.
In some cases with women who have small breasts, a lumpectomy can remove enough breast tissue that it can have the same impact as a mastectomy in terms of breast loss, though a surgeon will do as much as possible to conserve the breast.

Radiation therapy is usually recommended after a lumpectomy and may additionally alter the breast, making it firmer and/or smaller in appearance.

Women may choose a unilateral prophylactic mastectomy (one breast removed by choice) due to genetic risk, even if the stage of their cancer indicates that lumpectomy is an option. Or, some women will choose to have both breasts removed when cancer is discovered in one breast (to receive a bilateral prophylactic mastectomy). These are individual decisions that should be made after much thought and consideration with guidance and support from your doctors and family.

If you have a family history of breast or ovarian cancer, your doctor may recommend a genetic test and discussions with a genetic counselor among your other doctors before making a decision about surgery or reconstruction. See p. 12 for more information.

*Radiation did things to my breast tissue that I didn’t expect — the sensations are different, the size is different, and the radiated breast doesn’t really function the way the other one does, but I’ve been fine with it for the past 24 years.*

— Susie
1) How do your breasts affect your self-image or sexual identity?
For some, the loss of a breast may not matter when health concerns take center stage – and they can adapt to a post-surgical body over time with a prosthetic breast. For others, breasts are an intrinsic part of their self image and sexual identity. For those women, a mastectomy with reconstruction is one option, or a breast-conserving lumpectomy with or without reconstruction is another.

2) Are you willing to have radiation treatments if you opt for a lumpectomy?
You may need to set aside six or more weeks for breast radiation after a lumpectomy. This will involve daily appointments, time off from work, childcare arrangements, transportation support, and taking extra good care of your skin. If you’ve had prior radiation treatments, learn whether or not your body has had the maximum dose of radiation.

3) Will you be comfortable with monitoring your breast if you opt for a lumpectomy?
If you are comfortable with follow-up cancer monitoring, such as an MRI every three years or regular breast exams, you may opt for a lumpectomy rather than a mastectomy.

4) Do you have a family history of breast cancer?
If you have a high risk for cancer or cancer recurrence due to genetic risk, you may be a candidate for a prophylactic mastectomy. Ask your doctor to refer you to a genetics expert to learn about testing for the main hereditary breast and ovarian cancer (HBOC) syndromes caused by gene mutations in BRCA1 or BRCA2. These mutations can substantially increase a woman’s risk for breast and ovarian cancer. Genetic counseling and testing can help determine your cancer risk, and a breast surgeon can help explain your surgical options.

5) What cosmetic results will you be content with after breast cancer surgery?
For some women, a lumpectomy is minimally invasive leaving only a dimple in the breast when healed. For others, a lumpectomy may cause a noticeable change in the breast shape. With a unilateral mastectomy (one breast is removed), you may wish to balance your appearance with reconstruction or a prosthesis. With a bilateral mastectomy (both breasts are removed), you may wish to create smaller or larger breasts than your original size. Think about what end-result you would be content with.
If you have a family history of cancer or if you have a gene change in one of the genes called BRCA1 or BRCA2, your lifetime risk for breast cancer is very high. If you have a BRCA1 or BRCA2 mutation and have already been diagnosed with breast cancer, you may be at increased risk for a new diagnosis. Some women with these mutations choose preventive (prophylactic) mastectomy of one or both breasts, even if the breast tissue is currently non-cancerous.

Prophylactic mastectomy and prophylactic oophorectomy (surgery to remove ovaries for cancer prevention) have been shown to significantly reduce cancer risk for genetically prone individuals. It is important for women considering these procedures to discuss with their doctor how these surgeries can impact other decisions, such as reconstruction.

Genetic counseling and testing can help with treatment and reconstruction decisions. For example, say “Pam” has breast cancer in her left breast and undergoes a unilateral (one sided) mastectomy with reconstruction using a DIEP flap (abdominal tissue). If later, Pam undergoes genetic testing and learns she has an abnormal BRCA gene, she may be advised to undergo a prophylactic mastectomy on the right side. Because she has already used her abdominal tissues for the first reconstruction, she will have to choose a different type of reconstruction for the right breast. If genetic counseling and testing were done prior to the original mastectomy and reconstruction, she might have chosen to have both mastectomies done together and been able to have reconstruction on both breasts simultaneously.

It is important to note that genetic testing and prophylactic mastectomy is not necessary for all high risk patients. Each patient should speak with her breast surgeon and/or oncologist about family history, personal risk, and treatment options. You can visit the National Society of Genetic Counselors for more information www.nsgc.org, Bright Pink www.BeBrightPink.org, or Facing Our Risk of Cancer Empowered www.facingourrisk.org.
TIMING CONSIDERATIONS

If breast reconstruction is something you are considering, it should ideally be part of your earliest discussions with your cancer surgeon. If you’ve already had breast cancer surgery, then you should know that you still have the option to undergo reconstruction or alternate reconstruction procedures, even many years later.

Delayed reconstruction can allow you more time to adapt emotionally to a cancer diagnosis and allow you more time to research your reconstruction options. In some cases, women prefer to have more time to recover from their mastectomy surgery before beginning the reconstructive surgery process. In other cases, women decide that they are fine without reconstruction after they heal, and they choose to wear a prosthesis or other non-reconstruction options.

For women who choose mastectomy, breast reconstruction can be an option:

- At the time of mastectomy (immediate breast reconstruction), or
- At a later date of your choosing (delayed breast reconstruction)

The advantages of immediate reconstruction include potentially more chest tissue to support reconstruction because there is no surgical scarring or damage from radiation therapy (unless you had that earlier in your life). And, although multiple surgeries may be required for reconstruction, scheduling the initial step at the same time as the mastectomy means there will be at least one less surgery and exposure to general anesthesia. Another advantage to immediate reconstruction is that your physical changes after a mastectomy are not as dramatic.

If radiation therapy is or was part of your treatment plan, you should ask your surgeon about the best timing for reconstruction in order to reduce damage to the reconstructed breast (radiation reduces the elasticity of skin tissue and can impact reconstruction). Or, if you smoke, most surgeons will require that you stop two months before reconstructive surgery.

Some women will not be able to predict how they will adapt to body image changes after a mastectomy until they experience those changes. It is reassuring to know that you can still choose reconstruction at a later date, or that you can choose to alter your uninvolved breast at a later date.

We will discuss reconstruction options in more detail in Chapter 4 and in the chart in Chapter 8.
YOUR CHANGING BODY IMAGE

Reconstructed breasts do not have the same feeling and sensation as natural breasts. On the other hand, they can look very much like your natural breast – and look great with clothing. In some cases, women like their breast size and shape better after reconstruction. It is important to realize, however, that no surgery will make your breasts look, feel, or have the same sensations as before surgery, nor can it erase the distress caused by cancer.

Reconstruction can be a tool to help you feel whole again, and help you get back on track. Many women find, however, that moving-on has much more to do with personal courage and perseverance.

Knowing this, it is still helpful to get a better idea of how you might look after reconstruction. It is a good idea to ask your plastic surgeon to show you pictures of the results of the different types of reconstruction that you are considering – or show you how mastectomy scars look without reconstruction.

Try to do your own research, and ask your plastic surgeon to connect you with at least one former patient who has had the same surgical procedure that you are considering. Most plastic surgeons will have picture books for you to look at, as well as former patients who would be willing to talk with you about reconstruction.

Because this is a big decision and some reconstructive surgeons prefer or specialize in certain procedures, you should not hesitate to seek a second or even third opinion with other plastic surgeons to ensure that you have heard all of the available options tailored for you.

The advice I have is to take your time if you can. The more time you have to talk to people, learn what you can, etc. the more likely, I think, you’ll have a positive outcome.

— Norma
Some great websites and bulletin boards that share “After Reconstruction” images and real testimonials include:

- **The American Society of Plastic Surgeons** website includes a before/after photo gallery of breast reconstruction. [www.plasticsurgery.org](http://www.plasticsurgery.org)

- **www.breastcancer.org** illustrates different breast reconstruction surgery types with a photo gallery of women, and their stories about their reconstruction experience (search “photos”).

- **Facing Our Risk of Cancer Empowered** has a password-protected photo gallery of real women who share their experience ([www.facingourrisk.org/photogallery](http://www.facingourrisk.org/photogallery)) and a discussion board open to anyone ([www.facingourrisk.org](http://www.facingourrisk.org)).


- **Your Breast Options**
  [www.yourbreastoptions.com](http://www.yourbreastoptions.com) offers comprehensive information about breast health, breast cancer awareness and breast reconstruction options, including testimonials (no images).

- **Young Survival Coalition**
  has ongoing dialogues by women about reconstruction, among other important issues, in their open bulletin board [www.youngsurvival.org](http://www.youngsurvival.org) — YSC also offers an important list of Questions and Answers about breast reconstruction on their site.
OTHER PRACTICAL CONSIDERATIONS

Choosing your Medical Team

In general, there are five or six key individuals who can help you make appropriate decisions regarding your entire treatment experience.

1. **Your family physician**, who understands your history, preferences, and how you would like to manage your general health throughout your treatment and beyond. Plus, your general physician can coordinate the team that will help you manage treatment decisions along the way.

2. **Your breast or general surgeon** would make the initial surgical recommendations, determine if you can have a breast-conserving operation or a mastectomy, refer you to an oncologist and/or plastic surgeon, and help review what options you may have for reconstruction, if appropriate.

3. **Your medical oncologist** specializes in the treatment of cancer, and will offer cancer treatments and referrals with respect to chemotherapy, hormone therapy, radiation treatments or any other therapy after surgery.

4. **Your radiation oncologist**, if you need radiation, can discuss the timing of radiation therapy in conjunction with breast reconstruction, which is a very common part of many women’s cancer treatment.

5. **Your board certified plastic surgeon**, if you are considering reconstruction, can discuss the many reconstruction techniques available and what might be best for you and your situation. Ask about long and short term expectations.

6. **Your support team**, including a nurse navigator, can help you work through decisions and your emotions; often offering a great sense of strength and support. This can include a support group or one-on-one counseling with an oncology social worker or psychologist.

You should find people you can trust and communicate openly with. If you feel intimidated or rushed by anyone, seek a referral to someone else.

To find referrals for a qualified, board certified plastic surgeon, you can search the American Society of Plastic Surgeons website: www.plasticsurgery.org
If you are interested in reconstruction, you’ll want to make sure that you learn about all three types of breast reconstruction options (the use of an implant, the use of tissue from another part of your body, and the combined use of an implant with tissue from your body) and which would be acceptable for you. See Chapter 4.

Consulting with a reconstructive plastic surgeon (certified by the American Board of Plastic Surgery) before you make a decision about surgery will provide you with valuable information. Some plastic surgeons specialize in different aspects of breast reconstruction, so ask questions!

**I wish I had more information about how reconstruction would feel afterwards. If I could do it again, I would ask my surgeon more questions.**

— Judy

CSC’s 2010 survey suggests that 86.8% of women who discussed breast reconstruction options with a plastic surgeon at the time of diagnosis (as opposed to a later date) were mostly or extremely satisfied with their decision to undergo reconstruction.
BACK POCKET QUESTIONS

As you search for answers about breast reconstruction, bring a written list of questions. Here are some examples:

<table>
<thead>
<tr>
<th>GENERAL QUESTIONS FOR THE SURGEONS TREATING YOUR CANCER</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Am I a candidate for lumpectomy or would you recommend a mastectomy and why?</td>
</tr>
<tr>
<td>• What is the risk of cancer developing in my other breast?</td>
</tr>
<tr>
<td>• Am I a candidate for reconstructive surgery?</td>
</tr>
<tr>
<td>- What’s the difference, for me, with respect to getting reconstruction now (as my cancer is being treated/during initial surgery) vs. in the future?</td>
</tr>
<tr>
<td>- How will my other treatments (i.e. chemotherapy or radiation or follow-up care) affect reconstruction or vice versa?</td>
</tr>
<tr>
<td>- What will my insurance cover and what will be my out-of-pocket expenses?</td>
</tr>
<tr>
<td>• What happens if cancer returns beneath a reconstructed breast?</td>
</tr>
<tr>
<td>• Can I talk with someone who currently uses prostheses?</td>
</tr>
<tr>
<td>• What sort of follow-up will I require if I choose lumpectomy over mastectomy?</td>
</tr>
<tr>
<td>• How long would it take for me to resume normal activities (sexual or athletic) after surgery?</td>
</tr>
<tr>
<td>• Can you offer me a few referrals to plastic surgeons?</td>
</tr>
</tbody>
</table>

Notes / Additional Questions

_________________________________________________________

_________________________________________________________

_________________________________________________________

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_________________________________________________________

_________________________________________________________
Questions about reconstruction for a plastic surgeon

- What are the types of reconstruction surgery available to me?
- Which would you recommend and why? (Different surgeons may give you different answers – it can help to get a second or third opinion)
- Will my breasts look relatively the same? Will they be symmetrical?
- Would you recommend surgery for the opposite breast for symmetry (lift, reduction, augmentation)?
- Will I regain sensation?
- What will reconstructed breast(s) feel like? (How will they feel on my chest?)
- What will my scars look like?
- How much experience do you have with this type of reconstruction?
- What side effects or possible complications should I know about?
- How many surgeries will I need?
- What type of pain or discomfort should I expect, and for how long?
- How long is the reconstruction process from start to finish?
- How long is the recovery period for my type of reconstruction?
- How will the reconstructed breast respond to aging and/or weight gain/loss? (How do they change over time?)
- Do you have pictures of results from previous surgeries you’ve done that I could look at?
- Can you put me in-touch with a past patient of yours who’s had this type of reconstruction?
- What happens if my cancer returns after I’ve had reconstructive surgery?
- What sort of follow-up is necessary for my reconstructive choice?
- How might pregnancy affect my choice?
- Will I be able to breast feed?
Choosing not to Undergo Reconstruction

You need to talk to people you can identify with because everybody is different. For me, I never had cleavage and my breasts weren’t a huge part of who I am. For other people, breasts really matter.
— Bette

PERSONAL CHOICE

It is important to remember that breast reconstruction is not for everyone. Every woman is different, and no decision you make for yourself about something this personal could be wrong.

For some women, reconstruction may not ever be an option for a variety of factors including, but not limited to, their diagnosis or health status. For example, if cancer is advanced, reconstruction may not be recommended; or if a woman is very thin she may not be a candidate for certain procedures.
When presented with the choice, some women elect not to undergo reconstruction for their own personal reasons. These women may be focused on getting back to work and family routines with minimal disruption to their schedules and without prolonged recovery times from additional surgery. A woman may find it easier to live an athletic lifestyle without breasts; or more mature women may care more about other things than breast appearance; while others just want to “get the cancer out” and move on with their lives.

In the “Personal Considerations” section of this booklet we discuss issues of loss that most all women feel after breast surgery, as well as issues of body image and sexuality which are critical to consider as a woman moves beyond cancer and finds her “new normal.”

*Women can feel beautiful with or without reconstruction surgery. Beauty comes from within.*
**BREAST FORMS AND PROSTHESES**

An alternative to reconstruction is a breast form designed to simulate the appearance of a natural breast under clothes. A breast form, or prosthesis, is worn inside the bra or attached to the body with adhesive strips (attachable or contact prosthesis). It should be professionally fitted once your doctor determines that your mastectomy site has adequately healed.

Breast prostheses come in a wide range of shapes, sizes, and skin tones. The costs are generally covered by insurance. Prostheses also come in different materials.

A silicone prosthesis most naturally imitates the weight and drape of the breast. A silicone breast form is weighted so that your posture is restored and you feel balanced when you move and walk. It creates a natural appearance in clothing and allows your clothes to fit the way they did before your mastectomy.

Non-silicone breast forms (foam rubber, fiberfill, or cotton) are also available and are lighter, cooler and less expensive. You may choose to wear the bra you have always worn or a special mastectomy bra with a pocket for the breast form. You may also have your own bras modified to fit the breast form.

Soft bras are available for nighttime use if you prefer to wear your prosthesis under your nightgown.

After surgery you will be given a temporary prosthesis to wear during your recovery. When ready, you can be professionally fitted for a prosthesis that will fit into pockets sewn into your bra (and swimsuits).

Always have your physician write a prescription for your breast prosthesis and mastectomy bras. Determine what costs your insurance company will pay and keep good records of your expenses.

---

*I opted to have my second breast taken off right away. I kind of miss that having one natural breast helps keep the prosthesis in place - but special bras help.*

— Nancy

---

Some resources with information about breast prosthesis:

- [www.tlcdirect.org](http://www.tlcdirect.org), American Cancer Society’s “TLC Catalog”
- [www.amoena.com](http://www.amoena.com), Amoena Breast Forms
- [www.breastprosthesis.net](http://www.breastprosthesis.net), listing several prosthesis manufacturers and retailers
Breast reconstruction is a surgery performed after mastectomy to rebuild the breast, restoring its shape and size. The nipple and the areola (dark area around the nipple) can also be reconstructed. It is important to choose a plastic surgeon who is experienced in breast reconstruction specifically.

If you haven’t yet had your mastectomy, it is important to discuss reconstruction options with at least one breast or plastic surgeon prior to your mastectomy, to explore the opportunity to begin reconstruction at the same time that your mastectomy is performed.

_I’m very happy with my decision to undergo breast reconstruction. This may not be the path for everyone, but it was the right thing for me and I don’t think there should be a stigma around any decision you make._

— Sharishta
If you have a medical oncologist, it is also important to have your plastic surgeon talk with him/her about the cancer treatments you’ve had. For example, immediate reconstruction may not be an option for someone who is required to undergo radiation therapy.

There are three general surgical approaches to restore the shape of the breast:

- Use of an implant (saline or silicone)
- Use of tissue from another part of your body (abdomen, back, thighs, etc.)
- Use of an implant and tissue from your own body (combination)

On pages 42 - 51 you will find a chart that compares the different breast reconstruction methods and shares some of the pros/cons about each one.

With breast cancer two very visible signs of being female can be removed: your hair with chemo and your boobs with mastectomy. Reconstruction gives you a chance to feel more like you did before - but there are things I wish I knew before jumping in.

— Norma
There are two common types of implants available for reconstruction: a saline implant, which is a silicone form filled with sterile saline (similar to salt water), and a silicone-gel filled implant.

*Implant procedures can be divided into two types:*

- **Direct to Implant** – surgery with an implant is performed in one stage, at the same time as your mastectomy. After the surgeon removes the breast, an implant is placed under the chest wall muscle. This is also called single stage immediate breast reconstruction.

- **Expander Implant** – done in two stages, the use of a tissue expander allows the body to grow new skin to replace the skin which was taken away during the mastectomy. After the mastectomy is performed, a tissue expander, similar to a balloon, is placed under the skin and muscle where the breast was removed. Saline is inserted gradually over 4 to 6 months through a small valve in the implant, which can be accessed under the skin by the surgeon. Women comment that expanders can feel tight or “like rocks” while in place. When the breast area has stretched adequately, a second surgery is performed to remove the tissue expander and replace it with a permanent implant. This is also called two-stage reconstruction.

In the past, there were fears about the use of silicone implants due to concerns about silicone leakage as a potential cause of auto-immune diseases. The U.S. Food and Drug Administration (FDA) has since evaluated breast implants and has determined that silicone filled implants are safe for both reconstruction and cosmetic reasons.

Discuss any concerns you have about implants with your surgeon. You should know that implants may need to be replaced with surgery at some point in your lifetime. Implants can also leak or tear, cause an infection, or develop scar tissue – but these things can be managed effectively with your surgeon.
RECONSTRUCTION WITH A TISSUE FLAP

A tissue flap procedure uses tissue from your body — your abdomen, back, thighs or buttocks — to rebuild the breast. When your own tissue is used to create a new breast, the general term for the procedure is autologous reconstruction.

Tissue flaps behave more like your own body than implants — for example, they shrink or expand when you lose or gain weight. Tissue flap procedures result in two scars — one at the breast and another at the site where tissue was removed. It is possible that the tissue removed from your abdomen for a reconstructed breast can cause changes, for example, in the shape of your belly button. In some cases, the abdomen may require support as it heals after a tissue flap procedure to minimize problems such as hernias or bulges. These are things you may want to ask more about.

There are several types of tissue flap procedures:

- **TRAM (transverse rectus abdominis muscle) Flap** — tissue from the abdomen (including skin, fat, blood vessels and at least one abdominal muscle) are used to rebuild the breast. In addition, an implant may be used to create a fuller shape. There are two types of TRAM flaps:

  - a **pedicle flap** where the tissue remains attached to its original blood supply and is tunneled under the skin to the breast area
  
  - a **free flap**, where the tissue is cut away completely from its original location and is attached to a new blood supply in the chest area. Free flap procedures use microsurgery techniques to connect blood vessels and ensure adequate circulation to the site.

**Woman in process of TRAM flap reconstruction**

A) lines of reconstructed breast incisions  
B) right trans rectus abdominis muscle  
C) left TRAM muscle is swung over to re-create the new breast  
D) incision circle of re-positioned “belly button” incision  
E) line of abdominal surgery
• **Latissimus Dorsi Flap** – a pedicle flap procedure where tissue from the upper back is tunneled under the skin to the breast area, creating a pocket for an implant.

• **DIEP (deep inferior epigastric artery perforator) Flap** – a free flap procedure using fat and skin, but not muscle, from the upper abdominal area. A **SIEA (superficial inferior epigastric artery) Flap** uses skin and fat from the lower abdominal area, also as a free flap. The relocated tissue is attached to a new blood supply in the chest.

• **Gluteal free flaps** – free flap procedures where tissue from the buttocks, including muscle, is relocated to the breast area and connected to a new blood supply there in order to recreate the shape of the breast. **IGAP (inferior gluteal artery perforator) Flap**, and **SGAP (superior gluteal artery perforator) Flap** are both newer types of breast reconstruction. If necessary, an implant can also be used to fill out the size of the new breast.

Because tissue flap procedures relocate tissue to a new place and often include the placement of an implant, a structure for support is very important. The new tissue needs to remain in place as it heals.

To help tissue grow and heal, surgeons use synthetic mesh and more recently, **acellular dermis (ADM)**, which is donated human skin with the cellular elements removed, leaving behind a collagen matrix to support the tissue expander or single stage reconstruction process. ADM may be used to help support the chest wall musculature and the breast implant under the mastectomy flaps.

More information about ADM can be found at [www.lifecell.com](http://www.lifecell.com) or [www.mtf.org](http://www.mtf.org).
Frankly speaking about cancer / breast reconstruction

CONCERNS ABOUT SURGICAL COMPLICATIONS

Like any major surgery, your surgeon should explain and discuss the complications and time commitments associated with your specific procedure, as well as methods to prevent problems. Ask questions so that you fully understand risks before making your decision. (See the chart on pages 42-51 for a summary of some of the risks for each surgery).

Surgery, in general, can pose a number of risks (infection, bleeding, blood clots, breathing problems, pain, reactions to medications or general anesthesia, and other more serious complications). However, each individual is unique and reacts differently – ideally problems can be avoided or well managed.

NIPPLE AND AREOLA RECONSTRUCTION

Nipple and areola reconstruction is a separate surgery and is usually the final step in breast reconstruction. Tissue from the reconstructed breast, opposite nipple, ear, eyelid, groin, inner thigh or buttocks can be used to recreate a nipple. Because reconstructed nipples tend to shrink, they are initially made up to 50% larger than the desired size. Tattooing can give the nipple a natural color and create an areola.

For some women, a nipple-sparing mastectomy may be an option. This type of surgery is performed when cancer is at an early stage and the tumor is located in the outer area of the breast, far from the nipple. The nipple may also receive a dose of radiation during or after the mastectomy to destroy any hidden cancer cells.

In Chapter 8, p. 52, you will find a chart that compares different nipple and areola reconstruction methods and shares some of the pros/cons about each. Newer methods, such as three-dimensional tattooing, are not discussed.
CELL ENHANCED
LUMPECTOMY REPAIR

Although lumpectomy and partial mastectomy are breast-conserving surgeries, a scar is created and a dimple is left behind. A new option for women undergoing these procedures — cell enhanced breast reconstruction — is being explored in clinical trials. Fat tissue, which is rich in stem cells, is subjected to a special process to enhance its ability to adapt to a new site, and then injected into the lumpectomy site.

This process is very new, but may be worth asking your doctor about.

More on breast implant safety is available at:

FDA (Food and Drug Administration) website:
www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/ImplantsandProsthetics/BreastImplants/ucm063717.htm

National Cancer Institute
Breast Implant Study Fact Sheet:
www.cancer.gov/newscenter/siliconefactsheet
PLANNING FOR SURGERY

Prior to surgery, your health status will be assessed. Tell your doctor or nurse about all medications that you take, including prescription drugs, over-the-counter medicines, and vitamins and herbal supplements.

You will be asked to stop taking blood thinners, aspirin products, anti-inflammatory medications such as ibuprofen, vitamin E and all herbal drugs. Some doctors will ask you to begin taking a stool softener a few days prior to surgery because pain medication can cause constipation.

Exercise, get plenty of rest, and eat well so that you will be as healthy as possible prior to surgery. If you smoke, you should stop. Some surgeons will not perform breast reconstruction procedures on smokers because surgical wounds may not heal as well; this can also delay other forms of treatment you may need.
Your recovery period can be more comfortable if you anticipate your needs before you return home. Planning meals in advance or lining up assistance from family or friends, for example, is helpful.

You will not be able to lift heavy items (a rule of thumb is nothing heavier than an old phonebook) so gallon jugs of milk or large bags of pet food should be put in smaller containers. In most cases, you will not be able to raise your arms above your head right away – soft, oversize or front button-down shirts will be most comfortable. This discomfort will disappear over time with exercise. Physical therapy may be especially helpful for women who have had radiation or a flap procedure.

**Exercise really helps. I originally felt very uncomfortable after my reconstruction — I lost arm movement after my latissimus dorsi surgery. Physical therapy, swimming and yoga helped me feel so much better and regain movement.**

— Liz

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**CLOTHING & COMFORT TIPS**
*Immediately following reconstruction surgery*

- Button-down shirts and pajamas are much easier to take on and off when it’s difficult to raise your arms
- Camisole tops with a shelf-bra are worn for comfort
- If you are having a procedure like the TRAM flap, you will want to wear loose pants
- Slip-on shoes or slippers/flip flops, preferably with a rubber sole to prevent falls, will be more comfortable when it’s difficult to bend
- Set up your bed with lots of pillows for support and positioning
- If you undergo radiation therapy or a flap procedure, you might want to make an appointment with a physical therapist to learn exercise techniques that can help expedite healing and build strength for comfort
Reconstruction surgery is performed in a hospital, at an ambulatory surgery center, or at an office-based surgical center. Depending on the type of breast reconstruction procedure you choose, you will either go home the same day or remain in the hospital for a few days. Some follow-up procedures may be performed in your physician’s office.

Prior to surgery, you will be asked to sign consent forms that detail the risks and complications of the procedure. This information should be similar to what you’ve already discussed with your surgeon.

If you are having a flap procedure, your surgeon will use a skin marker to confirm the incisions and make other marks to guide the surgery.

To make sure you are comfortable, you will receive general anesthesia (you are asleep and pain-free) or intravenous sedation (you are easy to awaken and pain-free) during your procedure. If general anesthesia is planned, you should not eat or drink for 8 to 12 hours before your surgery is scheduled. Some follow-up procedures in the surgeon’s office require only local anesthesia (you are awake and pain-free).

When you awake from surgery, you will have gauze or bandages over your incision and a support bra or elastic bandage to reduce swelling and secure the reconstructed breast. A small, thin tube or tubes (surgical drains) will be under your skin to help remove excess fluid or blood from the surgery site. Ask your doctor about bathing and showering and any restrictions on your activity. Be sure you understand how to take care of the drains and incisions.

Your doctor will prescribe pain medicine and antibiotics. You may have a pain pump that allows you to press a button to receive narcotic pain medication (a Patient Controlled Analgesia (PCA)) through a vein for one to three days after surgery. Sometimes, your surgeon will use a “pain ball” (non-narcotic) which slowly deflates, dripping pain medicine and a local anesthetic to the reconstructed area.

When the surgeon feels you are ready to be discharged, be sure to have someone drive you home and stay with you for the first night. Pillows can help you find a comfortable position in the car.

Visits to your physician will be scheduled until the drains are removed. You cannot drive when you are taking narcotic pain medication, so you should arrange for someone to drive you to your doctor’s office.
The first phase of the healing process for reconstructive surgery takes at least 4 – 6 weeks and you can expect to feel tired and sore. More than one operation may be required to complete the process or achieve the result you want.

Depending on your cancer diagnosis and level of treatment, complete recovery time will vary. Some women may need more than a year to feel completely healed and back to normal, while others need less time.

When a women opts for immediate reconstruction (at the time of her mastectomy), she may recover 4-6 weeks faster than a woman who opts for delayed reconstruction (at a later date).

The shape and position of the new breast will improve as swelling diminishes. Eventually scars will fade but they will never completely disappear. Over time, some sensation may return to the reconstructed breast.

Although it is difficult to re-create the look and feel of a natural breast, most women are pleased with their new breast silhouette after reconstruction and their ability to look natural in clothing.

Finding support during this time is so important. It’s very hard for women to engage and accept help, but now is the time. Not only are women dealing with cancer but the additional surgery creates a real need for emotional support.

— Marty Nason, Vice President of Programs, The Wellness Community Valley/Ventura
FEELINGS OF LOSS

Many women will go through a process of mourning for their breast and its function after breast surgery. Your body image has been altered. How you feel about your body may change.

Allow yourself to grieve and know that it may take some time to come to terms with your new body. Over time, you might find that you develop a positive perspective and a new view of yourself as a woman; a person who had cancer.

The meaning of the loss of one’s breast varies greatly from person to person and can also depend on your age. The important thing is to make a decision that makes sense to you. Take the time to ask yourself what the meaning of this loss is to you and for your significant others.

Replacing the lost breast with a reconstructed one at the time of surgery can minimize the sense of loss, because you will be rebuilding the breast that was removed. But, it is important to have realistic expectations.
YOUR SEXUALITY AND BODY IMAGE

Sexuality is closely related to your feelings about your body (your body image). It is complex because sex may be the last thing on your mind during the emotional roller coaster of cancer diagnosis, treatment and recovery. Eventually, however, enjoying sexual intimacy will be on your mind.

The options of breast conservation and reconstruction give women a new sense of control over their treatment and are quite successful in helping women feel comfortable with their bodies again. So many women feel that plastic surgery can help to reduce the visible signs of cancer. For women who don’t choose reconstruction, there can be a period of readjustment to a new body image and a feeling of loss before feeling comfort and satisfaction with their bodies.

The effectiveness of breast conservation and reconstruction in preventing or reducing sexual problems after cancer is not clear. Any impact these options have on sexual experience is subtle and may relate more to a woman’s feelings of being desirable than anything else.

Under any circumstance, women should pay attention to a loss of sexual desire or ability that may follow cancer treatment. Practical advice on lovemaking techniques by a clinician can help, and it’s important to maintain an open attitude towards discussing loss and sexual issues to prevent anxiety and sadness as you search for ways to keep your sex life satisfying.

As with any life-changing issue, women with breast cancer can benefit from engaging in honest conversations about their adjusted body image and sex life. Though these conversations can be difficult or uncomfortable, there is often great relief associated with being open about physical, emotional, and sexual challenges associated with cancer — whether you talk with a professional, a partner or a friend.

My husband was very supportive through the entire process. His comment was: ‘I didn’t marry your breasts, I married you!’

— Judy
For women who are single, finding yourself in a new intimate relationship can bring concerns about when to share information about your breast cancer with a partner, or how to reveal a scar on your breast. To get past these concerns, it can be especially helpful to talk with other breast cancer survivors.

In relationships, partners can be loving and supportive of a woman’s changing body image by expressing acceptance and offering encouragement as a woman makes wardrobe or other changes to transition from a pre-cancer to a post-cancer body.

Some say that surviving cancer has helped them savor the beauty and joy they find in their families. Very few couples blame a cancer experience for creating distance in their relationships.

You’ve heard it before, and it’s true. Regular exercise is shown to improve your physical functioning, self esteem, and quality of life after cancer. It will also help you manage any physical side effects from breast surgery and improve your mental outlook.

Breast surgeons will often recommend exercises to prepare your body for surgery and to aid in recovery after surgery and cancer treatment. You might also want to ask for a physical therapy evaluation if you are having radiation or a flap procedure. Check if you are covered by insurance for physical therapy first. It helps to find a way to build more exercise into your life with anything that inspires you.

Try not to underestimate the value of exercise in your life after cancer. Incorporate a realistic exercise plan into your life now so that you can adjust as time goes on and you gain strength. If it’s hard to start, think of it as a habit that you have to create in your life, to make your life better.
Exercise tailored to your level of energy (because your energy will be reduced in the short term after cancer treatment) will:

- Keep or improve your physical abilities
- Improve your self-esteem
- Improve your sexual functioning
- Lower risk of anxiety and depression
- Reduce impact from cancer treatment side effects such as fatigue and weakness
- Aid with sleeping
- Improve clarity with learning and thinking
- Lower risk of heart disease and osteoporosis and other health problems

Individuals who complete their treatment for cancer often fear that cancer will return. Reconstruction surgery poses no threat to women with respect to recurrence. Though some women fear that implants would hinder the detection of a recurrence, studies have shown that reconstruction does not cause breast cancer to return, nor do implants and flaps disguise the return of breast cancer or hide its detection.

It will be important to ask your doctor or nurse for a ‘survivorship care plan’ specifically for you, so you can know exactly what follow-up care you’ll need after treatment and surgery. For example, you should continue to have regular mammograms on a “healthy” breast and a reconstructed breast. Breast changes or abnormalities will still be visible in a reconstructed breast if technologists are trained to move implants in order to obtain adequate radiology images.

On implant reconstructed breasts, the current FDA recommendation is to have a MRI once every three years to check the status of the implant. Often, a plastic surgeon will want to see you annually to make sure all’s well with the reconstruction.
In most cases the **Federal Women’s Health and Cancer Rights Act of 1998** requires that insurance companies cover the cost of reconstructive breast and nipple surgery for women who’ve undergone a mastectomy. This includes coverage for procedures on the uninvolved breast that restore and achieve symmetry so that your breasts match.

In some cases, an insurance company may not pay for a breast prosthesis and reconstructive surgery. This means, if you have been reimbursed for a breast prosthesis, then choose to have reconstruction at a later date, the insurance company may choose not to cover the costs of your breast reconstruction surgery. Be sure that you are completely informed about your insurance company’s policies for coverage.

If you are not covered by an insurance plan, you can pursue several options to help cover the cost of reconstructive surgery. For example, university medical centers could have programs to support patient expenses at more reasonable rates; and in some cases state aid is available to support patients in need.

Contact the Patient Advocacy Foundation ([www.patientadvocate.org](http://www.patientadvocate.org)) or My Hope Chest ([www.myhopechest.org](http://www.myhopechest.org)) to learn more about available financial resources.

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*I had problems with a prosthesis because I’m very chesty. I think I’ll have a reduction and go as small as possible. I’m very excited about it!*

— Peggy
Because cancer exposes you to the fragility of life, it gives you an opportunity to do things you’ve left undone. You may wish to reconnect with family and friends, find new meanings for your life, and you might notice that you have acquired stronger coping skills and wisdom along the way.

So much happened so fast that you have not had time to process what has occurred. Often, it is after treatment is complete that a flood of feelings emerge. This can surprise you and your whole support system. No one is prepared for this. Seeking support from a Cancer Support Community affiliate or online can be extremely helpful at this time.
In the period after treatment, many people reflect on what they have been through and acknowledge the positive things that have come out of the cancer experience. Your task is to create a “new normal.”

The losses incurred by the cancer will become less painful and significant over time, and you will appreciate an increased sense of compassion and a different understanding of what’s really important in your life, for example.

Cancer may give you a greater sense of acceptance, and for some, a desire to “give back.” It will show you a different orientation to time – allowing you to live in the present and do things now rather than later. It may help you gain or have a greater appreciation for every moment and reprioritize the value of things in your life.

You may feel that support groups or counseling are for people with worse problems than you – or the idea of speaking with strangers would not be comfortable. The truth is, this is a time when supportive services could help you find ways to talk about and understand what you’re going through in a way that can only come from people who have experienced similar stressors.

Opening lines of communication with people who really understand what you are experiencing can help you improve your ability to cope, your ability to regain control over your situation, and your sense of security in having people you can count on.

Support can also be used to help you stay on track in terms of practical things like exercise, diet, and your overall health. For example, take advantage of friends who can help you get into an exercise routine to lose weight, improve your mental outlook, and help you find your new normal.

While my own family and friends have provided invaluable support and love to me, there’s a special connection I feel when I talk with other survivors who share the same experience as me.

— Sharishta
You know what’s been most important to me? It was meeting people who were long term survivors at Gilda’s Club. I am so honored to know these women. It just speaks to my heart and gives me pleasure because I know there is a future.

— Sandy

**FINDING SUPPORT**

There are many ways to get the support you need. Part of the challenge is accepting that you need support, and that it’s okay.

The following organizations can connect you with support groups, informative resources, one-on-one counseling, online bulletin boards, or with other women who can speak from experience about breast cancer treatment or reconstruction.

- **Cancer Support Community**
  www.cancersupportcommunity.org
  888-793-9355

- **Bright Pink**
  www.bebrightpink.org
  BrightPink@bebrightpink.org

- **Facing Our Risk of Cancer Empowered**
  www.facingourrisk.org
  866-288-7475

- **Living Beyond Breast Cancer**
  www.lbcc.org
  888-753-5222

- **Young Survival Coalition**
  www.youngsurvival.org
  877-972-1011
**Quick Reference: Breast & Reconstruction Options**

**Breast Reconstruction Options**

<table>
<thead>
<tr>
<th>Type of Reconstruction</th>
<th>Eligibility</th>
<th>Process at Time of Mastectomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saline Implant – Direct to Implant/</td>
<td>• Good for women who are slender and small-breasted and women who have had</td>
<td>• Implant is placed between layers of chest muscle under breast skin during the same surgery as the mastectomy.</td>
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<tr>
<td>One Stage Implant</td>
<td>a previous sub-muscular augmentation.</td>
<td>• ADM Acellular Dermis will usually be used.</td>
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<tr>
<td></td>
<td>• Smokers or obese women may not be eligible.</td>
<td></td>
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<tr>
<td>Saline Implant – Two Stage Tissue</td>
<td>• Good for women with chest skin and muscles that are tight and well-toned.</td>
<td>If chest skin and muscles are tight, reconstruction is done in 2 steps:</td>
</tr>
<tr>
<td>Expander</td>
<td>• Smokers or obese women may not be eligible.</td>
<td>• First a tissue expander or expandable implant is placed in the mastectomy area.</td>
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<tr>
<td></td>
<td></td>
<td>• The surgeon adds saline to increase the size of the expander at regular intervals in the office.</td>
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<td></td>
<td></td>
<td>• When the expander is a bit bigger than the desired size, it is replaced with a smaller permanent implant in a second surgery.</td>
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<tr>
<td>PROCESS AFTER CANCER TREATMENT</td>
<td>BENEFITS*</td>
<td>CONSIDERATIONS /RISKS</td>
</tr>
<tr>
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<tr>
<td>• Radiation therapy may cause the implant to develop capsular contracture (get hard). • Remaining breast may be sized to match the reconstructed breast with implants.</td>
<td>• Ask to see and touch your different implant options. • Ask to talk with other women who have had the procedure you are interested in.</td>
<td>• Less surgery, anesthesia, pain and faster recovery than tissue flap procedures. • Risk of rupture, leak, deflation (1 in 10 in first 10 yrs.) • Implant may shift in place which may require an additional surgery. • Area around the implant may scar and harden (capsular contracture). • Infection after surgery is a risk. • Removal or replacement requires additional surgery.</td>
</tr>
<tr>
<td>• 2nd surgery (removal of the expander and placement of the implant) may be delayed until after chemotherapy and/or radiation therapy is completed.</td>
<td>• Uses saline implants with valves that allow for expansion after surgery and can create the desired size. Skin stretches and droops in a natural curve. • Ask to see and touch your different implant options.</td>
<td>• Similar to Direct to Implant except two surgeries rather than one. • More office visits required to complete expansion process. • A second surgery is required to remove the tissue expander and place the permanent implant.</td>
</tr>
</tbody>
</table>

* Under all circumstances ask to talk with other women who have had the procedure you are interested in.
# BREAST RECONSTRUCTION OPTIONS (CONTINUED)

<table>
<thead>
<tr>
<th>TYPE OF RECONSTRUCTION</th>
<th>ELIGIBILITY</th>
<th>PROCESS AT TIME OF MASTECTOMY</th>
</tr>
</thead>
</table>
| Silicone/Saline Implant                            | • Good for women who are slender and small-breasted, and for women who prefer less surgery.  
• Women who are smokers or obese may not be eligible. | • Implant is placed where breast tissue was removed at the time of mastectomy               |
| TRAM (transverse rectus abdominus muscle) Flap – Pedicle Flap | • Women who are smokers, obese or very thin may not be eligible.  
• Women who have had radiation are not candidates for tissue expansion, but women who have adequate abdominal fat may consider this option. | • Skin, fat and muscle will be moved from the abdomen to chest area through a tunnel created by the surgeon under the skin.  
• Recovery from surgery may require several days in the hospital and several weeks off from work. |
<table>
<thead>
<tr>
<th>PROCESS AFTER CANCER TREATMENT</th>
<th>BENEFITS*</th>
<th>CONSIDERATIONS /RISKS</th>
</tr>
</thead>
</table>
| • If radiation or chemotherapy is recommended after mastectomy, placement of an implant may be delayed until after treatment is complete. | • Sized to match remaining breast – implants come in different shapes and sizes.  
• Ask to see and touch your different implant options. | • Deflation with leak – Saline will be slowly reabsorbed by the body  
• Silent rupture of a silicone implant may be detectable only with MRI.  
• Implant may shift in place.  
• Infection after surgery.  
• Removal or replacement requires additional surgery. |
| • If radiation or chemotherapy is recommended after mastectomy, TRAM flap may be delayed until after treatment is complete. | • Since the reconstructed breast is made from your own skin and fat it will be more similar to natural breast tissue.  
• Your tummy will be flatter although the scar is higher than a “tummy tuck” scar (may change the look of your belly button). | • TRAM surgery and recovery times take longer than implant surgery.  
• There will be 2 surgical sites and 2 scars.  
• Abdominal hernia and abdominal bulge is possible due to the removal of supportive abdominal muscle.  
• Flap may die and have to be removed. A pedicle flap is less likely to completely fail than a free flap.  
• There is a risk for infection and problems with healing.  
• You will need additional surgery to create a nipple and areola. |

* Under all circumstances ask to talk with other women who have had the procedure you are interested in.
<table>
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</thead>
<tbody>
<tr>
<td>TRAM (transverse rectus abdominus muscle) Flap – Free Flap</td>
<td>• Women who are smokers, obese or very thin may not be eligible.</td>
<td>• A section of skin, fat, muscle and blood vessels are cut free from their location in the abdomen, relocated to the chest area and reconnected to the blood supply using microsurgery. Surgery can take many hours.</td>
</tr>
</tbody>
</table>
| Latissimus Dorsi Flap (Lat Flap)                      | • Women who have had radiation therapy and are not candidates for tissue expansion may consider this option.  
• Best for women with average amounts of body fat and small-to-medium-size breasts.  
• Women with vascular disease, diabetes or connective tissue disease may not be eligible.  
Women who are overweight or obese and smokers may not be eligible. | • Skin and muscle will be moved from the upper back to the mastectomy area through a tunnel created by the surgeon under your skin. An implant is placed under the flap to create the desired volume.                                                                                     |
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<thead>
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<th>BENEFITS*</th>
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</tr>
</thead>
</table>
| • If radiation or chemotherapy is recommended after mastectomy, TRAM flap may be delayed until after treatment is complete. | • Feels like a natural breast and is warm and soft because of good circulation.  
• Moves like your natural breast because it is also fat tissue.  
• Because abdominal muscles are used, you will also have a tummy tuck.  
• Should last for your lifetime. | • TRAM surgery and recovery takes longer than implant surgery.  
• Surgical time for a TRAM free flap is longer than for a pedicle flap.  
• You will have 2 surgical sites and 2 scars.  
• Abdominal hernia and abdominal bulge is possible with the removal of abdomen muscles.  
• Flap may die and have to be removed. A free flap is more likely to fail than a pedicle flap (5% failure rate).  
• There is a risk for infection and healing problems.  
• You will need additional surgery to create a nipple and areola. |
| • If radiation or chemotherapy is recommended after mastectomy, Latissimus Dorsi Flap may be delayed until after treatment is complete. | • Transplanted skin will be a close color match for your breast skin. The breast will feel warm and flexible.  
• Should last for your lifetime. | • You will have 2 surgical sites and 2 scars.  
• Some women experience weakness in the back, shoulder and arm muscles and require physical therapy.  
• There is a risk for infection and problems with healing.  
• You will need additional surgery to create a nipple and areola.  
• Since an implant is placed there are similar risks to implant surgery such as deflation, capsular contracture etc. |

* Under all circumstances ask to talk with other women who have had the procedure you are interested in.
## Breast Reconstruction Options (Continued)

<table>
<thead>
<tr>
<th>Type of Reconstruction</th>
<th>Eligibility</th>
<th>Process at Time of Mastectomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIEP (deep inferior epigastric perforator) Flap</td>
<td>- Women who are smokers, very thin or have already had a procedure to remove abdominal skin and fat are not eligible.</td>
<td>- Skin, fat and blood vessels are moved from the upper abdomen to the chest area and then reconnected to the blood supply using microsurgery. A small implant can be placed under the tissue flap if necessary. Surgery can take many hours.</td>
</tr>
</tbody>
</table>
| SIEA (superior inferior epigastric artery) Flap   | - Women who are smokers, very thin or have already had a procedure to remove abdominal skin and fat are not eligible. | - Skin, fat and blood vessels are moved from the lower abdomen to the chest area and then reconnected to the blood supply using microsurgery. A small implant can be placed under the tissue flap if necessary.  
- Surgery can take many hours. |
<table>
<thead>
<tr>
<th>PROCESS AFTER CANCER TREATMENT</th>
<th>BENEFITS*</th>
<th>CONSIDERATIONS /RISKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>If radiation or chemotherapy is recommended after mastectomy, DIEP flap may be delayed until after treatment is complete.</td>
<td>No muscle is removed so there is minimal risk of an abdominal hernia (unlike TRAM flap). There may be less pain, faster recovery than TRAM flap. Similar to a TRAM flap your tummy will be flatter.</td>
<td>More time in surgery than TRAM flap. You will have 2 surgical sites and 2 scars. If the procedure fails, the flap will die and must be removed – new reconstruction may not be done for 6-12 months. There is a risk for infection and problems with healing. You will need additional surgery to create a nipple and areola.</td>
</tr>
<tr>
<td>If radiation or chemotherapy is recommended after mastectomy, SIEA flap may be delayed until after treatment is complete.</td>
<td>SIEA takes slightly smaller section of skin and fat. SIEA blood vessels are not located within muscle so abdominal muscles are never disturbed. There is minimal risk of an abdominal hernia (unlike TRAM flap). Less pain, faster recovery than TRAM flap. Similar to a TRAM flap your tummy will be flatter.</td>
<td>There is a risk for infection and problems with healing. You will need additional surgery to create a nipple and areola.</td>
</tr>
</tbody>
</table>

* Under all circumstances ask to talk with other women who have had the procedure you are interested in.
### Breast Reconstruction Options (Continued)

<table>
<thead>
<tr>
<th>Type of Reconstruction</th>
<th>Eligibility</th>
<th>Process at Time of Mastectomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>IGAP (inferior gluteal artery perforator) Flap</td>
<td>• Women without adequate abdominal fat are good candidates for IGAP.</td>
<td>• Fat, skin and blood vessels are removed from the lower buttock to the chest area and then reconnected to the blood supply using microsurgery. A small implant can be placed under the tissue flap if necessary.</td>
</tr>
<tr>
<td></td>
<td>• Smokers and women who have previously had lower buttock skin and fat removed or have had liposuction on the lower buttock are not eligible.</td>
<td>• Surgery can take many hours.</td>
</tr>
<tr>
<td>SGAP (superior gluteal artery perforator) Flap</td>
<td>• Women without adequate abdominal fat are good candidates.</td>
<td>• Fat, skin and blood vessels are removed from the upper buttock to the chest area and then reconnected to the blood supply using microsurgery. A small implant can be placed under the tissue flap if necessary.</td>
</tr>
<tr>
<td></td>
<td>• Smokers and women who have previously had upper buttock skin and fat removed or have had liposuction on the upper buttock are not eligible.</td>
<td>• Surgery can take many hours.</td>
</tr>
<tr>
<td>PROCESS AFTER CANCER TREATMENT</td>
<td>BENEFITS*</td>
<td>CONSIDERATIONS /RISKS</td>
</tr>
<tr>
<td>--------------------------------</td>
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</tr>
</tbody>
</table>
| • If radiation or chemotherapy is recommended after mastectomy, IGAP flap may be delayed until after treatment is complete. | • No muscle is cut or moved resulting in quicker recovery time.  
• Buttock lift results from removal of gluteal skin and fat. | • There will be 2 surgical sites and 2 scars.  
• If the procedure fails, the flap will die and must be removed – new reconstruction may not be done for 6-12 months.  
• There is a risk for infection and problems with healing.  
• You will need additional surgery to create a nipple and areola. |
| • If radiation or chemotherapy is recommended after mastectomy, SGAP flap may be delayed until after treatment is complete. | • No muscle is cut or moved resulting in quicker recovery time.  
• Buttock lift results from removal of gluteal skin and fat. | • There will be 2 surgical sites and 2 scars.  
• If the procedure fails, the flap will die and must be removed – new reconstruction may not be done for 6-12 months.  
• There is a risk for infection and problems with healing.  
• You will need additional surgery to create a nipple and areola. |

* Under all circumstances ask to talk with other women who have had the procedure you are interested in.
## Nipple and Areola Options

<table>
<thead>
<tr>
<th>Types</th>
<th>Procedure</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| Nipple/Areola Reconstruction | • Under local anesthesia or sedation the surgeon folds tissue from the reconstructed breast to create the nipple.  
• ADM may be implanted to maintain projection.  
• The areola is most commonly reconstructed with a skin graft from the lower abdomen.  
• 3-4 months after breast reconstruction | • Completes the reconstruction process.  
• Breast will look more like a natural breast. |
| Nipple-Sparing Mastectomy | • Women with small, early stage cancer located in outer part of breast (distant from nipple) and with no skin involvement may have nipple and areola left in place when breast tissue is removed. | • Patient maintains her own nipple although it will be flatter and not sensitive. |
| Adhesive Nipples       | • Latex nipples are held in place with fluid adhesive.  
• Silicone nipples don’t require ‘glue.’ | • Easy to remove and reusable.  
• Come in different colors. |
| Nipple Tattoo          | • A tattooing process called micropigmentation is used to create the appearance of a nipple 3-4 months after breast reconstruction.  
• Colors are mixed to match the shade desired.  
• Takes less than an hour. | • Completes the breast reconstruction process.  
• Can cover scarring. |
<table>
<thead>
<tr>
<th>RISKS</th>
<th>CONSIDERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tenderness at site of tissue harvest.</td>
<td>• Nipple does not have sensation of original nipple&lt;br&gt;• Two hour, outpatient procedure.&lt;br&gt;• Separate office visit to tattoo coloring of nipple.&lt;br&gt;• To ensure the skin graft stays, a bolster dressing is worn for several days which cannot get wet.&lt;br&gt;• Minimal pain.</td>
</tr>
<tr>
<td>• Nerves are cut so there is little or no sensation in nipple. Inadequate blood supply can wither or deform the nipple.&lt;br&gt;• Patients should ask their breast surgeon if there will be an increased risk of the cancer recurring.</td>
<td>• MD may give nipple a dose of radiation during or after surgery to reduce risk of cancer recurrence.&lt;br&gt;• May look out of place in women with large breasts.&lt;br&gt;• Surgery not yet widely available.</td>
</tr>
<tr>
<td>• Tenderness or pain varies.&lt;br&gt;• Scarring or infection can occur.</td>
<td>• Both latex and silicone can be custom-made to match your remaining nipple.</td>
</tr>
<tr>
<td></td>
<td>• Nipple tattooing does not create sensation in the area.&lt;br&gt;• May require more than one session to achieve desired color.&lt;br&gt;• Color fades over time; process may need to be repeated.</td>
</tr>
</tbody>
</table>
**Areola reconstruction** – use of tattooing to re-create the appearance of the areola (colored area around the nipple)

**BRCA1 and BRCA2** – genetic mutations that lead to an increased risk of developing breast and ovarian cancer

**Breast form or prosthesis** – a silicone, foam rubber, fiberfill or cotton breast-like shape, worn inside the bra or attached to the body with adhesive strips, to re-create the form and weight of the breast

**Breast-conserving surgery** – surgery to remove breast cancer and a small amount of surrounding tissue without removing the entire breast; see lumpectomy, partial mastectomy and segmental mastectomy

**Breast reconstruction** – surgery performed after mastectomy to rebuild the breast, restoring its shape and size through use of an implant or tissue from another part of the body

**Capsular contracture** – formation of scar tissue around a breast implant, which can lead to pain, hardening and a distorted shape

**Cell enhanced breast reconstruction** – surgical procedure to inject fat tissue, rich in stem cells, which has been subjected to a special process to enhance its ability to adapt to a new site, into a lumpectomy site to restore the full curve of the breast

**DIEP (deep inferior epigastric artery perforator) flap** – a free flap surgery using fat and skin, but not muscle, from the upper abdominal area to reconstruct the breast

**Direct to implant** – surgery with an implant performed in one stage, at the same time as a mastectomy; also called single stage reconstruction

**Drain** – thin tube placed at surgical site to remove excess fluid and blood; also called surgical drain

**Expander implant** – surgery performed in two steps, using a tissue expander first to increase the space between the skin and chest muscle, followed by placement of an implant; also called two-stage reconstruction or two-stage delayed reconstruction
**Free flap** – surgical procedure where tissue is cut away from its original location and attached to a new blood supply in the chest area

**Gluteal free flap** – surgery using tissue from the buttocks, to recreate the shape of the breast; see also IGAP and SGAP

**IGAP (inferior gluteal artery perforator) flap** – free flap surgery using fat and skin from the lower buttock to rebuild the breast

**Immediate reconstruction** – surgery to reconstruct the breast occurs at the same time as a mastectomy

**Implant** – silicone form, filled with either saline (sterile salt water) or silicone gel, used in breast reconstruction to restore the shape of the breast

**Latissimus dorsi flap** – surgery using tissue from the upper back, which is tunneled under the skin to the breast area, creating a pocket for an implant

**Lumpectomy** – surgery to remove a breast tumor (‘lump’) and a small amount of surrounding normal tissue

**Lymph node dissection** – removal of lymph nodes under the arm for biopsy

**Microsurgery** – use of an operating microscope to enhance reconnection of blood vessels and nerves

**Modified radical mastectomy** – surgery to remove the breast, many lymph nodes, the lining over the chest muscles and part of the chest wall muscles

**Nipple reconstruction** – surgery to recreate a nipple using tissue from the reconstructed breast, opposite nipple, ear, eyelid, groin, inner thigh or buttocks

**Nipple-sparing mastectomy** – surgery where nipple is not removed, performed when cancer is at an early stage and the tumor is located in the outer area of the breast, far from the nipple

**One-stage reconstruction** – see direct to implant

**Partial mastectomy** – surgery to remove the part of the breast where cancer is found and some surrounding normal tissue

**Pedicle flap** – surgical procedure where tissue remains attached to its original blood supply and is tunneled under the skin to the breast area

**Radical mastectomy/Halsted radical mastectomy** – surgery to remove the breast, chest wall muscles under the breast and all the lymph nodes
Segmental mastectomy – see partial mastectomy

SGAP (superior gluteal artery perforator) flap – free flap surgery using fat and skin from the upper buttock to reconstruct the breast

SIEA (superficial inferior epigastric artery) flap – free flap surgery using skin and fat from the lower abdominal area to rebuild the breast

Tissue expander – balloon-like form placed under the skin and muscle where the breast was removed; can be gradually inflated to allow space for a permanent implant

Tissue flap procedure – surgery using tissue from another part of the body (abdomen, back, thighs or buttocks) to rebuild the breast

Total mastectomy – surgery to remove the breast and some lymph nodes

TRAM (transverse rectus abdominis muscle) flap – surgery using tissue from the abdomen, including skin, fat, blood vessels and at least one abdominal muscle, to rebuild the breast

Two-stage reconstruction or two-stage delayed reconstruction – see expander implant

**ADDITIONAL RESOURCES**

In addition to the organizations listed as partners in this booklet, you may also want to seek information from:

- [www.yourbreastoptions.com](http://www.yourbreastoptions.com) provides comprehensive information about breast health, breast cancer awareness and reconstruction options, including testimonials
- [www.myhopechest.org](http://www.myhopechest.org) a foundation dedicated to finding resources for women who wish to undergo reconstruction after cancer
- [www.breastreconstruction.org](http://www.breastreconstruction.org) a comprehensive online resource focused on breast reconstruction
- [www.cancer.org](http://www.cancer.org) the American Cancer Society, with active bulletin boards and in-depth online resources
- [www.breastcancer.org](http://www.breastcancer.org) covering many aspects of breast cancer and its treatment, including information about reconstruction
- [www.fertilehope.org](http://www.fertilehope.org) helps cancer patients facing the risk of infertility
THE CANCER SUPPORT COMMUNITY
The Cancer Support Community is likely the largest psycho-social support organization in the world with a mission to ensure that all people impacted by cancer are empowered by knowledge, strengthened by action, and sustained by community.

BRIGHT PINK
Bright Pink believes in the beauty and strength of women. It exists to enlighten and empower high risk individuals to take control of their breast and ovarian health by providing education, support and a sense of community for a better, brighter future.

FACING OUR RISK OF CANCER EMPOWERED (FORCE)
FORCE is the only international nonprofit organization devoted to improving the lives of individuals and families affected by hereditary breast and ovarian cancer or a BRCA mutation.

LIVING BEYOND BREAST CANCER (LBBC)
Living Beyond Breast Cancer’s mission is to empower all women affected by breast cancer to live as long as possible with the best quality of life.

YOUNG SURVIVAL COALITION (YSC)
Young Survival Coalition (YSC) is the premier international organization dedicated to the critical issues unique to young women and breast cancer.
The Cancer Support Community and our partners provide this information as a service. This publication is not intended to take the place of medical care or the advice of your doctor. We strongly suggest consulting your doctor or other health care professional to answer questions and learn more.

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