

breast enhancement 101

WHETHER YOU'VE JUST started thinking about a breast enhancement procedure or are ready to book a consultation right now, we've sifted through the research, interviewed the professionals and patients, and created this handy guide for you. >>>

By Bonnie Staring

THE BASICS

For many of us, the mammary glands symbolize femininity, sexuality and even beauty. But they can also be a source of dissatisfaction. Some women feel their breasts are too small, others feel they sag too much. And the list goes on. Regardless of the reason, breast augmentation is a popular cosmetic procedure for Canadian women.

It's also pretty major surgery. First, there's a lot going on underneath the skin, nipples and areolae. Breasts are made up of fatty and connective tissue, ducts and lobules (groups of milk-producing glands). This combination creates a significant erogenous zone, provides nourishment for babies and can have a profound psychological impact on a woman.

WHAT'S AVERAGE?

In 1993, the average bra size in America was 34B. By 2008, it had grown to 36C. "With breast augmentation, it's always best to think about what's in proportion to your body," advises Dr. Julie Khanna, MD, FRCSC, of the Institute of Cosmetic & Laser Surgery in Oakville, Ont. "A cup size isn't the gold standard." And as Oprah pointed out to her viewers in 2005, many women have been wearing the wrong sized bra all their lives. ▶

FACT:

Breasts aren't perfectly matched.

NO TWO BREASTS ARE EXACTLY ALIKE.

"I've seen a lot of breasts.

When they're not asymmetrical, they look weird," says Dr. Khanna.

“GO TO A REPUTABLE DOCTOR AND TRUST HIS OR HER JUDGMENT.

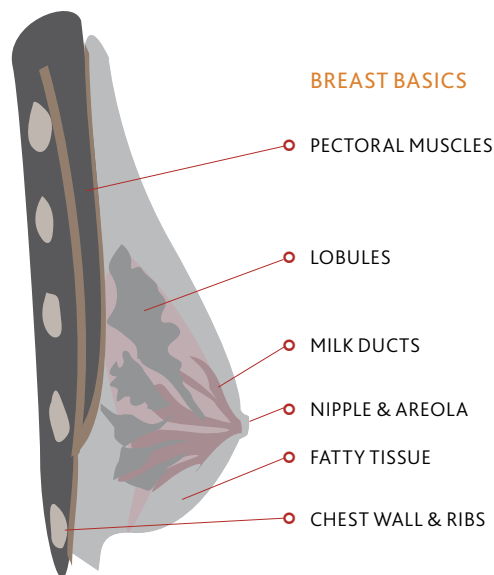
THEY LISTENED TO ME AND TALKED ME OUT OF A SMALLER IMPLANT. THEY KNEW I WOULDN'T BE SATISFIED WITH THE RESULTS, BASED ON THE DISCUSSIONS WE'D HAD. I'M GLAD I TRUSTED THEIR JUDGMENT.”

— D.M.

Women who have had breast enhancement surgery offer their opinions.

SHOULD YOU OR SHOULDN'T YOU? ■

MODEL PHOTOS: THINKSTOCK, ILLUSTRATIONS: ELIZABETH DISILVESTRE



How a breast (and implant) is measured

Get familiar with these terms to help you negotiate your way through the breast enhancement process.

- **Volume:** the amount of fullness in the breast area or the amount of liquid in an implant
- **Profile:** how much the breast projects from the muscle wall
- **Slope:** the relative contour and shape from the top of the breast to the nipple
- **Width:** the width of the implant and the “pocket” created to hold the implant
- **Height:** the length of a teardrop-shaped implant from top to bottom

▶ WHAT TO EXPECT

Implants

PROCEDURE LENGTH: one to two hours
POST-OP: a compression bandage or surgical/sports bra must be worn to reduce swelling for eight weeks
HEALING TIME: light to normal activity within the week; normal to strenuous activity in two to three weeks
COST: saline implants, approximately \$5,500 to \$6,500 per set; cohesive gel implants, approximately \$6,500 to \$7,500 per set; financing available through Medicaid (medicaid.com)

ARE YOU AN IDEAL CANDIDATE FOR BREAST SURGERY?

Here’s what your prospective plastic surgeon would like you to have.

- Good health
- A stable weight you’re happy with
- Completed development (be at least the age of 18)
- A good understanding of the process
- Reasonable and achievable expectations

“Do your homework and find a good plastic surgeon who you connect with, communicate with and who has a good team to look after you,” advises Dr. R. Stephen Mulholland, MD, FRCSC, of SpaMedica Infinite Vitality Clinic in Toronto.

THE SHAPE OF THINGS TO COME

One of the most important considerations for a patient and her plastic surgeon is how the breasts will appear post-surgery. “Patients need to have a good sense of themselves and what their figure and shape currently are,” says Dr. Mulholland. “They need to have realistic expectations.”

A plastic surgeon should be able to show you numerous before-and-after photos, and give you ample time to explain what you want—and what that looks like. “It usually takes more than one visit,” says Dr. Jerome Edelstein, MD, FRCSC, a plastic surgeon

in Toronto.

Once a patient of Dr. Edelstein has decided on an implant style, shape and size, he asks them to do the T-shirt test. “We have the patient wear a thin T-shirt with the implant tucked into a bra,” he says. “That way she gets a better idea of how it will feel as well as look.” Other surgeons use 3D imaging for a patient to see their desired result.

“I can’t give you someone else’s breasts,” says Dr. Khanna, “but I can tell you if what you see in a photo is possible.” Bringing in photos of women who have the breasts you want gives a plastic surgeon an idea of what’s important to you—and it’s more precise than saying you want something “natural-looking.”

PRE-APPOINTMENT PREPARATION

Here are some things to do before you book a consultation.

- Talk to someone who has had the same procedure
- Do an Internet search
Try: canadaba.ca, csaps.ca and plasticsurgery.org
- Check a surgeon’s qualifications by searching his or her name on rcpsc.medical.org (the Royal College of Physicians and Surgeons of Canada site)
- Bring in photos of women who have breasts you like ▶

▶ WHAT ARE THE OPTIONS?

METHOD*	INCREASED VOLUME	INCREASED PROFILE	REDUCED SAGGING
Breast Augmentation (ROUND-SHAPED IMPLANTS)	★★	★	★★
Breast Augmentation (TEARDROP-SHAPED IMPLANTS)	★★	★★	★★
Breast Augmentation (FAT GRAFTING, ONE TREATMENT)	★	★	★
Breast Lift	○	○	★★
Dietary Supplements (NUTRIBREAST)	★	★	★

LEGEND ○ NO IMPACT
 ★ LOW TO MODERATE IMPACT
 ★★ MODERATE TO HIGH IMPACT

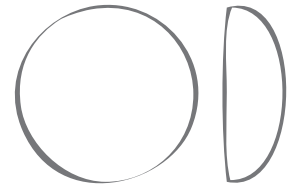
*This chart is intended to be a general reference tool and includes only the methods discussed in this article. Results vary by patient.

“WHAT SURPRISED ME AFTER MY BREAST AUGMENTATION WAS HOW MUCH YOU ACTUALLY USE YOUR CHEST MUSCLES DOING ‘EVERYDAY’ THINGS, LIKE OPENING THE FRIDGE DOOR.”

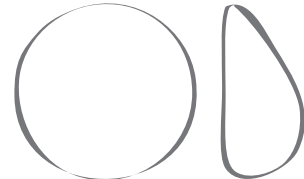
— B.R.



ROUND IMPLANT SHAPE



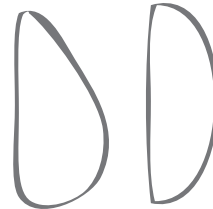
TEARDROP IMPLANT SHAPE



ROUND & TEARDROP IMPLANT LYING FLAT



SALINE & GEL HELD UP HORIZONTALLY



Cohesive Gel (Silicone) Implants

"The best way to describe them is as breast-shaped gummy bears," says Dr. Mulholland.

PROS

- Hold their shape
- Fill out the bottom region more effectively
- Better able to increase a breast's profile than a saline implant

CONS

- Larger incision required
- They don't "fall" the way saline and natural breasts do when you're reclining
- Risk of a gel fracture
- Risk of capsular contracture (for all implants)

Saline Implants

Saline implants are filled with salt water and, when touched, feel like a water balloon.

PROS

- Smaller incision required
- More options for incisions
- Can work with gravity to fill in the lower part of the breast over time
- Move with the body

CONS

- May have a "ripple effect" (folds or ripples along the edge of the implant can be felt and noticed through the skin)
- Don't feel as "real" as cohesive gel implants
- If they leak, they lose their volume rapidly
- Risk of capsular contracture (for all implants)

ALL ABOUT IMPLANTS

From the shape to the surface to the size to the style, your implants will be suited to your needs. Your plastic surgeon will take all of these variables into consideration for your procedure.

SHAPES

Whether saline or cohesive gel, implants come in two shapes: round and teardrop (anatomic).

"The round implants tend to be softer, so they alter their shape depending on your position, whereas a teardrop will hold its shape no matter what position you're in," advises Dr. Edelstein. The diagrams above demonstrate what he means.

SURFACES

Round implants come in either a smooth or textured surface. A smooth surface allows the implant to move somewhat, which is ideal for the patient who wants the lower part of her breast to fill out. A textured-surface implant adheres to the surrounding tissue better, limiting movement. "Most teardrop implants are textured to prevent rotating or shifting," adds Dr. Edelstein.

A WORD ON SILICONE

Back in the '90s the United States and Canada put a moratorium on silicone gel

implants, but the rest of the world never did. Both the FDA and Health Canada have since ruled that silicone implants are safe. "If people should worry about silicone, it wouldn't be used in more than 1,500 implantable medical devices," adds Dr. Mulholland. "From the IV that goes into your hand to heart valves and hip repair implants, silicone is everywhere."

Both saline and cohesive gel implants contain silicone. On saline implants, the silicone makes up the outer shell.

CAPSULAR CONTRACTURE

Capsular contracture occurs when the breast capsule, the scar tissue around the breast, hardens. "All patients will get a breast capsule, that's normal, but it's softer and supportive in its natural form," says Dr. Mulholland. "A hard capsule leaves the breast very firm and difficult to move." Cases of capsular contracture are rare, and treatment involves the surgical removal of the hardened tissue so that a new, softer capsule may form.

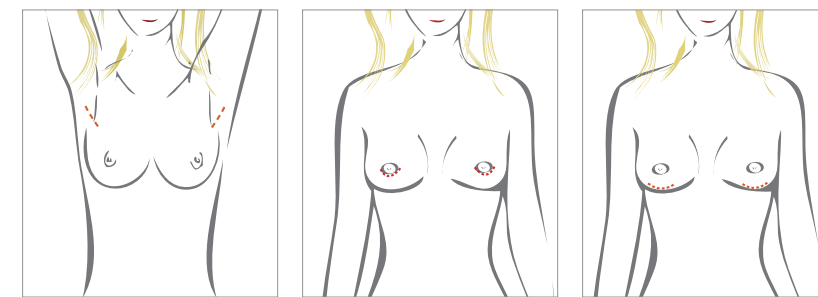
INCISIONS

There are three main incision sites for breast augmentation: the armpit, the areola and the breast crease. Smaller implants can be placed through the armpit, while the larger ones must go in through the breast area. Most plastic surgeons will avoid an areola

"MY DOCTOR SHOWED ME BEFORE-AND-AFTER PHOTOS OF WOMEN WHO WERE A SIMILAR BODY SHAPE AND SIZE TO ME, SO I GOT A BETTER IDEA OF THE RESULTS HE COULD ACHIEVE."

—T.B

IMPLANT INCISIONS (GENERAL POSITIONING)



TRANSAXILLARY INCISION PERIAREOLAR INCISION INFRAMAMMARY INCISION

"GO FOR IT! IF IT'S SOMETHING THAT REALLY BOTHERS YOU AND HAS BOTHERED YOU FOR QUITE SOME TIME, DON'T WAIT UNTIL YOU GET OLDER. THAT WILL ONLY RESULT IN LESS TIME FOR YOU TO REALLY ENJOY THEM." —B.R

incision if breastfeeding post-procedure is a concern, as using other sites reduces the risk of damaging milk ducts.

Overall, the breast crease is the most popular incision location. "If you're wearing a bikini or tank top, the armpit is the most public place," says Dr. Edelstein. "The areola and breast crease are more private and scars will only be seen by a patient's significant other, who probably will know she has implants."

POCKET PLACEMENT

An implant can be placed either over or under the pecs (pectoral muscles). Implants placed over the muscle, while they can be more obvious looking, provide a lifting effect to the breast. Under-muscle implant placement results in a more natural effect and carries less risk of disrupting the milk ducts.

FAT GRAFTING

Fat grafting is another method of breast augmentation, where fat is removed from the body (through liposuction) and then placed into the area by injection. For the right patient, this is a win-win: excess fat is relocated to where it's needed.

"If you're trying to go up more than a cup size, you're best to go with an implant," explains Dr. Sean Rice, MD, M.Sc., FRCSC, a plastic surgeon in Toronto. "Fat grafting works with a small volume, on average about 250 to 300 cc per breast."

Unlike implants, the procedure will not

change the shape of the breast; it enhances the existing shape and profile. Once fat is collected from another part of the body (like the thighs, abdomen or buttocks) using liposuction, it is prepared and injected into the breast area. Dr. Rice is the first surgeon in Canada to use the Body-Jet liposuction system, which uses a gentle harvesting process to collect fat and make it more viable for grafting.

The fat is then injected into different areas around the breast—anywhere volume is needed. Dr. Rice makes it a policy to separate and remove stem cells (which live in fat cells) from the fat collected. Also, he does not inject fat directly into breast tissue, only in the areas surrounding it. Still, there has been some concern over placing stem cells near an area where there may be dormant cancer cells, as this may trigger growth. If a patient has a family history of breast cancer, this procedure should be avoided.

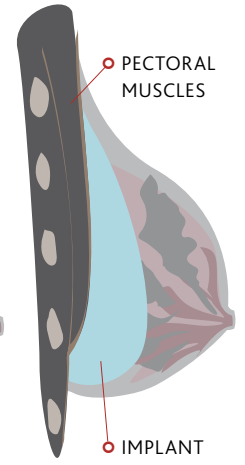
That's one of the reasons why Dr. Khanna does not perform fat grafting augmentation. "We don't really know for sure how stem cells react in the breast. The answers aren't clear yet." Dr. Khanna also cites the limited improvement in volume as another factor. "Not all fat cells survive once transplanted. At least 25 per cent don't take. Routinely, patients will need a second treatment."

It should be noted that some plastic surgeons will use fat grafting in other body areas, such as the face and buttocks, without concern.

IMPLANT UNDER THE MUSCLE



IMPLANT OVER THE MUSCLE



WHAT TO EXPECT

Fat Grafting

PROCEDURE LENGTH: liposuction and fat grafting are completed during a two-step process in the same day

POST-OP: a compression bandage must be worn over the area that received liposuction to reduce swelling

HEALING TIME: the liposuction will take longer to heal (varies depending on amount of fat removed and the site) than your breasts

COST: about \$9,000 to \$12,000; financing is available through Mediacard (mediacard.com)

RESULTS: determined after six weeks, surviving fat volume is permanent; a secondary treatment can be performed in six months

FAST FACTS

Fat Grafting

- Ideal candidates have enough fat to transfer
- A patient needs to have a substantial breast shape to begin with
- Ideal candidates have nipples at the centre of the breast, not sagging
- Don't expect a large increase; this procedure works best for a cup size or less
- Fat is injected; no breast scars
- Transferred fat feels natural, like a part of the breast
- Generally 25 per cent of the fat cells do not survive the process; you and your surgeon will be able to tell in about six weeks
- A secondary procedure may be required (including another liposuction treatment) ▶

BREAST LIFTS

A breast lift procedure serves two purposes: to remove sagging and to remove excess skin, which creates a perkier, youthful breast. “Most breast lift patients have either had a major weight loss or have had children,” advises Dr. Edelstein. “Many patients who come in for breast lifts describe their breasts as ‘deflated’ or ‘droopy.’”

Unlike breast augmentation, a breast lift doesn’t involve adding volume to the breast. “The removal of excess skin and the lifting makes the breast appear fuller, like the way it used to be,” adds Dr. Khanna.

The main disadvantage to a breast lift is scarring, which can form the shape of a lollipop or anchor (see illustrations), depending on the procedure. Patients may also experience numbness or increased sensitivity around the nipple, which should return to normal in three to six months.

The nipple and areola remain attached to the breast during the procedure and are then “lifted” into a higher position once the interior breast tissue is reshaped and excess skin is removed. “With a lift, you’re really changing the position of the areola,” says Dr. Rice.

▶ WHAT TO EXPECT

Breast Lifts

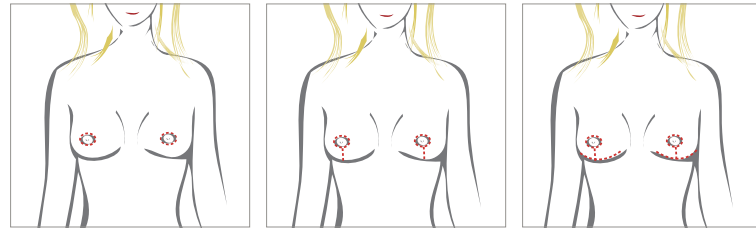
PROCEDURE LENGTH: less than two hours

POST-OP: a compression bandage or surgical bra must be worn to reduce swelling (eight weeks); a small tube may be placed under the skin to assist draining

HEALING TIME: light activities at home, one week; normal activities/work, two to three weeks; vigorous exercise, six to eight weeks

COST: about \$7,000 to \$8,000; financing is available through Medicaid (medicaid.com)

BREAST LIFT INCISIONS (GENERAL POSITIONING)



Around the areola
The first type of breast lift incision is around the areola.

Around the areola and vertically down to the crease (the “lollipop”)
The “lollipop” scar circles the areola and travels vertically toward the breast crease.

Around the areola, vertically down to the crease and along the crease (the “anchor”)
The “anchor” scar circles the areola, travels vertically to the breast crease and horizontally along the crease.

DIETARY SUPPLEMENTS

Some women forego the surgical route and turn to dietary supplements to enhance their breasts. While there are a number of products available, the NutriBreast system was developed by a doctor, contains only natural ingredients and claims to have an overall success rate of 92 per cent.

Both tablets and a lotion are offered in systems that last from three to 12 months. The formula, which includes saw palmetto, dandelion root and enzymes, encourages the growth of

Dietary Supplements

PROS

- May increase volume and fullness, and create a low to moderate lifting effect
- No surgery required/no scarring
- None of the complications of implants
- Some women claim to experience lesser PMS symptoms while on the system

CONS

- Lengthy treatment: three to 12 months, depending on desired results
- Measurable improvement takes around 12 weeks
- You must remember to take your pills
- Cannot completely lift sagging or drooping breasts
- Once completed, requires an annual maintenance period of one to two months

▶ WHAT TO EXPECT

Dietary Supplements

TREATMENT LENGTH: three to 12 months, daily pills and lotion application. Measurable improvement in 12 weeks.

COST: \$210 to \$724, depending on the length of treatment

RESULTS: generally permanent with regular annual maintenance

breast tissue. But what happens when you stop taking it?

“The breast tissue gained from NutriBreast does not ‘disappear,’” says Rebecca Powley, director of business development for NutriBreast. “However, any natural occurrences that affect a woman’s breasts (weight loss, hormonal fluctuations, aging, and childbirth) will reduce the breast tissue.”

Systems ranging from the three-month “firmer, fuller breasts” to the 12-month increase by two to three cup sizes, all from taking a pill and applying a lotion to wet skin (to promote absorption) does seem too good to be true. Powley cautions that NutriBreast may not be as effective on women nearing or experiencing menopause.

Not everyone is convinced breast augmentation can happen by dietary supplements. “My experience has been from patients, and it’s been kind of on the negative side, because some have tried it and it doesn’t seem to be effective,” says Dr. Edelstein. “I could be biased, because if it works, then I wouldn’t have patients.”

COMMON QUESTIONS

Q: Should I have breast augmentation now or wait until after I’m done having children and breastfeeding?

Dr. Edelstein: Women have difficulty breastfeeding whether or not they have implants. If a woman is planning on having children soon, I’d say wait, not because the implants will impede her breastfeeding, but because her breasts and nipples will change shape through pregnancy and breastfeeding. But if that’s off in the future, I’d suggest she get the breasts she wants now.

Dr. Mulholland: Let’s say you have a woman in her early or mid-twenties, and she’s thinking about having children in the next five to eight years. Should she go without the esthetic breast enhancement, the figure and the shape she would love for that decade? There’s no right answer to this question. Ten years is a long time.

Q: Do you lose sensitivity after a breast augmentation or breast lift?

Dr. Mulholland: About one per cent of patients will experience areas of numbness which last more than six weeks and most will be resolved in about six months. Less than one per cent of patients will have hypersensitivity in that area, the opposite effect, which is caused by stretching the nerve, for a period lasting anywhere from six weeks to six months.

Q: What about post-procedure cancer screening?

Dr. Rice: Ensure the technician is aware of any procedures you have had before having a mammogram or other test. Most surgeons will ask patients to have a mammogram prior to and then six months following her procedure, to provide her health-care team with a new baseline to compare future tests to.

Dr. Mulholland: What we can tell, unequivocally, is that breast implants have no relationship to the causing of breast cancer. What we can do is look at large studies, like one which appeared in *The New England Journal of Medicine*, which reveals that women who have received breast implants tend to find their cancer one stage smaller than non-augmented women. And that may be because they’re more breast-focused, checking their breasts on a more regular basis. And it would be easier to feel a little half-centimetre lump [on a smaller breast gland] than on a non-augmented woman who may have a large C or D cup. ❏