

# DOCTORS GUIDE

■ The proportion of fat in women's breasts can vary from 7 to 56 per cent

■ Over the course of a menstrual cycle, breast volume varies by 13.6 per cent

'THE aim of reconstruction is to restore a natural symmetry to a woman's figure,' says Steven Thrush, a breast surgeon at the Worcestershire Royal Hospital.

'If she's having a mastectomy and has a generous breast, we might reconstruct a smaller breast and do a reduction on the other side.'

Here, we look out the main available options.

## RECONSTRUCTION

**PARTIAL:** This can be an option when the cancer is on the outside of the breast and clearing it involves removing more than 15-20 per cent of the breast, but leaving more than 50 per cent.

Tissue from elsewhere, such as the fatty pads in the armpits, is used to 'fill in' the missing parts - this is known as LICAP flap breast reconstruction.

**PROS:** The healing process is quicker, though surgeons are limited by how much tissue is available, says Mr Thrush.

**CONS:** There's a risk that breast tissue that's left behind contains cancer cells. And as more breast tissue is left with this technique, the risk may be increased, so patients tend to have radiotherapy afterwards.

**FULL:** This involves removing as much breast tissue as possible - the skin is retained, but the nipple may be removed if the cancer is close.

**THE DIEP FLAP:** Here, fat, skin and blood vessels are lifted off the wall of the lower belly and are rejoined near the chest to rebuild the breast. This technique involves an automatic tummy tuck.

**PROS:** 'As this procedure uses fat from the patient's body, the reconstruction feels and moves like breast tissue,' says Mr Thrush.

# A tummy tuck can help with rebuilding your breast

'It's warm, changes in shape and ages with the woman's body.'

'If you lose or put on weight, the flap does, too. This is considered the gold standard in breast reconstruction.'

**CONS:** It's not suitable if you have a flat tummy. Also, the operation lasts six or seven hours, patients need to be in hospital for six days and it can take three months to recover fully, says Mr Thrush, and some women may not want a long recovery time.

Due to its complexity, only some hospitals offer the procedure.

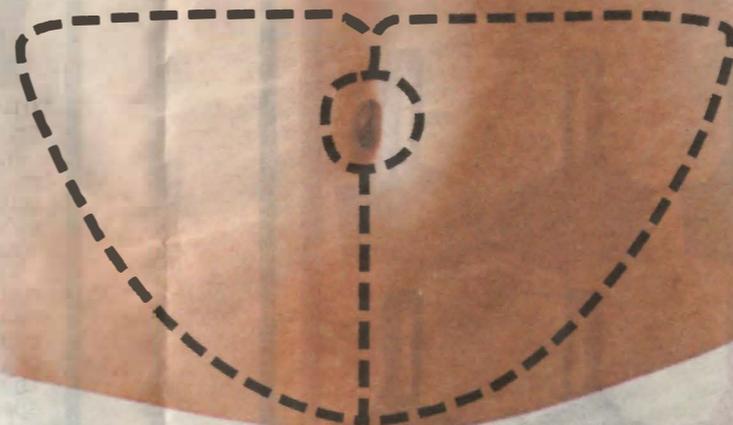
'The biggest problem is that, because it's such complex surgery, it doesn't always work - one in 40 fails,' adds Mr Thrush. 'This is devastating for the

patient, who's gone through all that surgery for nothing.'

**THE LATISSIMUS DORSI FLAP:** The latissimus dorsi is a muscle in the back, just below the shoulder and behind the armpit. We need it for twisting movements, such as opening a door.

Here, the muscle, along with skin and fat, is moved to the chest to build a new breast. It remains attached to the arm for its blood supply.

**PROS:** Unlike the DIEP flap, the blood vessels don't have to be



Picture: VOLODYMYR MELNYK / ALAMY

rejoined, so it's less complex surgery, explains Mr Thrush.

The operation takes three to four hours, patients stay in a hospital for a few days and recovery time is usually six weeks, quicker than with the DIEP.

**CONS:** There's less fat on the back to create the breast, which can affect the shape. And as the new breast is made with muscle, it can behave like one. 'So doing movements that affect the muscle can cause the breast to twitch,' says Mr Thrush.

Also, that side of the body might not be as strong as before.

## BREAST IMPLANTS

**IMPLANT** surgery involves using a silicone gel or a saline-filled silicone shell.

**PROS:** It causes very little scarring and is a much simpler operation than flap options.

'The implants are anatomically shaped [they mimic breast shape] or are round,' says Ruth Waters, a plastic and reconstructive surgeon at the Queen Elizabeth Hospital and BMI The Priory Hospital in Birmingham.

Most surgeons usually use textured implants, which allow tissue to 'stick' to them, so they're less likely to move or rotate. Smooth implants, which move freely inside the breast capsule, may create a rippling effect.

**CONS:** The breasts can feel colder or less mobile.

'The body can form hardened tissue around the implant [capsular contracture], which makes the breast uncomfortable and distorts its shape,' says Ms Waters.

Implants need to be replaced after ten to 20 years. They can change in size and sometimes rupture without symptoms, so surgeons should recommend regular MRIs.