**Who may benefit?**

Some risk factors put women at a higher risk of breast cancer. These include:

- An inherited *BRCA1* or *BRCA2* gene mutation (these can be passed to you from either parent)
- Strong family history of breast cancer, such as a mother or sister diagnosed at a younger age
- Lobular carcinoma in situ (LCIS) or atypical hyperplasia
- Radiation treatment to the chest in childhood or young adulthood

If you have a higher risk of breast cancer, talk with your doctor about special breast cancer screening and options to lower your breast cancer risk.

Risk-lowering options include:

- Preventive surgery (prophylactic mastectomy and/or prophylactic oophorectomy)
- Risk-lowering drugs

**Preventive surgery**

**Prophylactic mastectomy**

Bilateral prophylactic (pro-fi-LAK-tic) mastectomy (also called preventive mastectomy) is the removal of both breasts to prevent breast cancer. It lowers the risk of breast cancer by at least 90 percent.

**Breast reconstruction**

After a prophylactic mastectomy, a woman may choose to have breast reconstruction. Reconstruction is plastic surgery to restore the look and shape of a breast after mastectomy. It can be done at the same time as the mastectomy or later.

Discuss your options with your plastic surgeon. He or she can help you decide what kind of reconstruction will give you the best results. You may want to get a second opinion.

**Prophylactic oophorectomy**

Prophylactic oophorectomy (surgical removal of the ovaries) lowers the risk of both breast cancer and ovarian cancer. Women with a *BRCA1/2* gene mutation are at higher risk of both breast cancer and ovarian cancer.

**Risk-lowering drugs (tamoxifen and raloxifene)**

Both tamoxifen and raloxifene can lower the risk of invasive and non-invasive breast cancer (ductal carcinoma in situ (DCIS)). Both are pills taken once a day for 5 years. These drugs lower the risk of estrogen receptor-positive breast cancer. Neither lowers the risk of estrogen receptor-negative cancer.

The breast cancer risk is somewhat lower with tamoxifen than with raloxifene. However, raloxifene has fewer harmful side effects (see table on the back). This may make it a better choice for some women. Talk to your doctor about the risks and benefits of each.

For more information, visit komen.org or call Susan G. Komen’s breast care helpline at 1-877 GO KOMEN (1-877-465-6636) Monday through Friday, 9 AM to 10 PM ET.
### Summary Table

<table>
<thead>
<tr>
<th></th>
<th>Tamoxifen</th>
<th>Raloxifene</th>
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<tbody>
<tr>
<td>Who can take the drug?</td>
<td>• Premenopausal women ages 35 and older</td>
<td>• Postmenopausal women only</td>
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<tr>
<td>What are common short-term side effects?</td>
<td>• Hot flashes and night sweats</td>
<td>• Hot flashes</td>
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<td></td>
<td>• Irregular periods or spotting (uterine bleeding)</td>
<td>• Leg cramps</td>
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<td>• Vaginal discharge</td>
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<td></td>
<td>• Vaginal dryness or itching</td>
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<tr>
<td>What are possible health risks?</td>
<td>• Blood clots in the large veins or lungs</td>
<td>• Blood clots in the large veins or lungs</td>
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<tr>
<td></td>
<td>• Cancer of the uterus or endometrium (lining of the uterus)</td>
<td>• Stroke</td>
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<tr>
<td></td>
<td>• Cataracts</td>
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<tr>
<td></td>
<td>• Stroke</td>
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</table>

The aromatase inhibitor drugs anastrozole and exemestane have also been shown to lower the risk of breast cancer. Talk to your doctor about these options.

### Am I still at risk of breast cancer?

Yes. While risk-lowering options greatly reduce the chance of getting breast cancer, they don’t remove all risk.

It’s important to continue to get regular breast cancer screening to make sure any breast cancer that develops is caught early, when chances of survival are highest.

No need to rush! Take time to gather information, talk with your doctor, get a second opinion and discuss your options with your family and those closest to you. The best decision is one that is well thought out and one you are comfortable with.

### Questions to ask your doctor

1. Am I at higher risk of developing breast cancer?
2. What risk lowering options do I have?
3. What are the risks and benefits of each?

### Resources

Susan G. Komen®
1-877 GO KOMEN (1-877-465-6636)
www.komen.org

Facing Our Risk of Cancer Empowered (FORCE)
1-866-288-RISK (7475)
www.facingourrisk.org

### Related fact sheet in this series:

- Genetics and Breast Cancer

The above list of resources is only a suggested resource and is not a complete listing of breast health and breast cancer materials or information. The information contained herein is not meant to be used for self-diagnosis or to replace the services of a medical professional. Komen does not endorse, recommend or make any warranties or representations regarding the accuracy, completeness, timeliness, quality or non-infringement of any of the materials, products or information provided by the organizations referenced herein.