Breast cancer has come into the spotlight over the last 40 years and numerous factors have been associated with breast cancer risk. BCAction understands that some risk factors are out of a woman’s control, such as her biological sex or the fact that she will age. Some are within her ability to affect and thereby reduce her risk, such as her alcohol intake and birth control choices. But we also know that not everyone has options. Not everyone has access to pesticide-free produce, hormone-free dairy, or a safe and convenient means of getting exercise. So while some risk factors can be addressed on a personal level, many need to be addressed through changes in public policy, for which BCAction continues to advocate. In addition, there is often confusion and misinformation about what is and is not a risk factor. Here we untangle some of the facts from the fiction:

Sorting Through “Risk Increasers”

Abortion: Hormonal changes in a woman’s body throughout her life, including during pregnancy, can lead to changes in her breasts. For this reason, a possible link between abortion and breast cancer became a subject of investigation starting in the 1950s. Early studies were flawed and generated inconsistent evidence, but with improvement in the study designs beginning in the mid-1990s, it has been shown that there is no association between induced or spontaneous abortion and breast cancer.\(^{[1,3,4]}\)

Alcohol: It is common knowledge today that estrogen has the ability to promote the growth of breast cancer cells. Alcohol can affect estrogen levels in the body, which may explain some of the increased risk associated with consumption.\(^{[5]}\) In general, this risk increases after about one daily drink for women and two daily drinks for men.\(^{[6]}\) The earlier long-term, heavy alcohol use begins, the greater the cancer risk.\(^{[7]}\)

Antiperspirants: Parabens used as preservatives, phthalates used as plasticizers and in “fragrance,” and aluminum-based compounds all mimic estrogen in the body and act as hormone disruptors.\(^{[8,10]}\) These are often ingredients in antiperspirants. Because of estrogen’s relationship to breast cancer, some scientists have suggested that continued use of some antiperspirants may contribute to the development of breast cancer.\(^{[10]}\)

More research is needed to specifically examine whether the use of deodorants or antiperspirants can cause the buildup of these hormone disruptors in breast tissue. Additional research is also necessary to determine whether these chemicals can either alter the DNA in some cells or cause other breast cell changes that may lead to the development of breast cancer.\(^{[10]}\) Until more is known, we suggest exercising caution by reading ingredient labels.

Birth Control Pills, or oral contraceptives, contain hormones, and because many breast cancers are related to hormone disruption, they have been a concern for consumers. The results of population studies to examine associations between oral contraceptive use and cancer risk have not always been consistent. Overall, however, the risk of endometrial and ovarian cancers appear to be reduced with the use of oral contraceptives, whereas the risk of breast cancer appears to be slightly increased.\(^{[12]}\)

The estrogen content of oral contraceptives is lower today than when first introduced in the 1960s but BCAction urges caution until we know more about the long-term use of current oral contraceptives.

Bras: The idea that bras increase breast cancer risk is based on the theory that bras slow the flow of fluids and cause breast tissue to retrain toxins. This is not in line with how breast cancer develops. More importantly, there is no scientific evidence of a link between bras and breast cancer.

High-Fat Diet & Obesity: The data is certainly confusing. On the one hand, high dietary fat intake during pre-menopausal years has been associated with an increase in breast cancer risk.\(^{[13,15]}\) On the other hand, some studies suggest that premenopausal obesity reduces the risk of breast cancer, while post-menopausal obesity increases the risk.\(^{[15]}\) A large study by the Women’s Health Initiative found no link between dietary fat intake and breast cancer.\(^{[16]}\) Scientists stress the need for more conclusive evidence, but we do know that being obese is associated with a poorer prognosis and a higher mortality rate for women diagnosed with breast cancer.\(^{[16]}\)

(*Note: Obese is defined by the National Institutes of Health as having a body mass index, or BMI, of 30 or more. Your BMI is a measurement of weight proportionate to height.)*

Hormone Therapy (HT): As breast cancer is an estrogen-driven disease, it is not surprising that estrogen replacement therapy and hormone therapy (HT) combining estrogen with progestin have been shown to increase the risk of breast cancer.\(^{[17]}\) A recent study on breast cancer incidence showed that trends in breast cancer risk parallel the use of menopausal hormone therapy.\(^{[18]}\) It has been recommended that research into hormonally active pharmaceutical products be extended and improved before those products are marketed\(^{[18]}\) and BCAction suggests that a thorough analysis of personal risk vs. benefit be done by a woman with her doctor before using HT.
Breastfeeding reduces a woman’s lifetime number of menstrual cycles, and thus her cumulative exposure to endogenous hormones, which slightly decreases breast cancer risk. Breastfeeding has direct effects on breast cells, causing them to mature so they can produce milk. Some researchers hypothesize that these differentiated cells are more resistant to becoming transformed into cancer cells than cells that have not undergone differentiation. Preliminary findings of a Harvard Nurses’ Health Study indicated that breastfeeding is associated with a lower incidence of breast cancer for women who have a sibling, parent or grandparent with breast cancer. The findings will need to be replicated in order to rule out other factors.

Diet/Nutrition: It is understood that good nutrition helps to lay a foundation for overall health and it may reduce the incidence of breast cancer and the risk of breast cancer progression or recurrence. There are many studies in progress to help further understand how diet and cancer are related, yet how much they directly reduce one’s risk of developing breast cancer is still unknown. Avoiding certain hormone disruptors, such as BPA, and eating fresh food when possible would be advisable. BCAAction continues to advocate for greater access to hormone- and pesticide-free food for all consumers.

Exercise: Evidence linking exercise to a decrease in breast cancer risk is far from conclusive, but according to the NCI, exercising four or more hours a week may decrease hormone levels which may help lower breast cancer risk. Excess body fat is associated with many adverse health concerns that include various types of cancer, and there’s no down side to doing what we can to maintain an optimum weight.

A Final Note: Where we live, work and play are significant factors in determining our involuntary exposure to toxins that increase our breast cancer risk, as well as to what extent accessibility relates to our lifestyle choices. BCAAction advocates for systemic change that stops breast cancer before it starts because everyone, regardless of income, race, education, gender identification or age, is entitled to live in an environment that allows us to thrive. We don’t all have the same healthy options, but knowing about risk factors helps us make the best choices possible for ourselves.

Breast Cancer Action is a national grassroots education and advocacy organization. We believe that breast cancer is a public health crisis, and a social justice issue. We advocate for systemic change to end this breast cancer epidemic, while supporting women at risk of and living with breast cancer. We do not take money from any corporation or organization that profits from or contributes to breast cancer which allows us to remain an independent and unapologetic voice for those affected by this disease. For more information to www.bcaction.org
References


vii Ibid


xxi Ibid.

xxii Ibid.


xxvii Rudel, R. et al. Food Packaging and Bisphenol A and Bis(2-Ethylhexyl) Phthalate Exposure: Findings from a Dietary Intervention. Environmental Health Perspectives (March 2011)


Vastag, B. *Raloxifene Prevails in STAR Trial, May Face Easier Road to Acceptance Than Previous Drugs.* Journal of the National Cancer Institute (June 2006), 98(11): 733-735.


Ibid.