According to the Breast Cancer Fund, a woman’s risk of contracting breast cancer was 1 in 22 in the 1940s. Today, it is 1 in 7. There is no end to the theories as to why this risk has increased. “Endocrine disrupters” (chemicals that mimic hormones) are a likely suspect. They are wreaking havoc on wildlife and clearly affect brain cells in the developing embryo. So far, however, studies have failed to show a link between breast cancer and blood levels of these chemicals. Still, they remain suspect—especially in combination with other factors.

Mainstream dogma is that exposure to estrogen causes breast cancer. By “estrogen,” the mainstream means the body’s own estrogens. This line of thinking always links variables (such as having/not having children or the age at which menopause occurs) to estrogen exposure and, hence, breast cancer risk. While this viewpoint appears to have some validity, a few things are wrong with it, including the thorny question of why, all of a sudden, exposure to something that has been a part of the human body for eons would cause cancer. It also skirts the question of why long-term use of birth control pills containing estrogens does not increase the risk of breast cancer.

Genes are another possible explanation for breast cancer. This depressing theory implies that whether or not people get breast cancer is beyond their control and that nothing can be done about it, except having the breasts removed as a preventive measure. New research may put an end to the notion that there is nothing a person can do about “bad genes.”

“Bad genes” do not necessarily come from parents. Sometimes they come from the environment. Eighty-five percent of the “family risk” for breast cancer may come from something besides an inherited gene. Moreover, it has now been discovered that there are genes that can modify “bad genes.” In other words, you may not have to live with “bad genes.”

In addition, a new study shows that even if a person has a genetic predisposition toward breast cancer, the cancer does not necessarily activate unless the person encounters something in the environment that activates it. For some women, that “something” could be meat. For the first time, eating meat has been linked to genes and breast cancer. Families tend to share not only genes but recipes as well, and it is becoming clear that what you eat may be more important than what you were born with.

In studies that search for the cause of breast cancer, certain things consistently emerge. One is that diets rich in vegetables, soy, and green tea reduce cancer risk, and diets rich in animal fats (especially from red meat) increase risk. In a study from the Barbara Ann Karmanos Cancer Institute at Wayne State University in Detroit, beef, pork and vegetables accounted for 85% of the alterations to DNA in women, with meat causing damage and vegetables preventing it. Damaged DNA lays the groundwork for cancer.

The case of red meat is interesting not only because cooking it creates carcinogens, but also because the use of hormone implants in cows (which dates back about 50 years) coincides with the beginning of a major increase in breast cancer in North America. Countries with the highest rates of breast (and prostate) cancer also are the countries that allow such implants. North America’s breast cancer rate is the world’s highest—higher than all of South America and northern and southern Europe combined. Australia and New Zealand, which allow hormones to be implanted in cattle, have similarly high rates of breast cancer. In Europe, such implants are banned.

It is not hard to figure out why. Cattle implants contain 17 beta-estradiol and other strong steroids, including synthetic estrogens. Cows are repeatedly implanted, and the implants are in the cows when they are slaughtered. Guidelines published by the US Department of Agriculture and the University of Nebraska advise implanting the strongest drug last, 70 days before slaughter. The strongest implants last 90-120 days. Besides being in the cows at the time of slaughter, over time the hormones build up in fat. Fifty percent of the hormones contained in a steak may be in the fat. Neither the FDA nor the USDA monitors the use of hormone implants, or tests for residues in beef. Testing for the metabolites of estradiol alone would be a major undertaking, as there are more than a dozen such
metabolites, and this is just one estrogen. Cows are given other hormones as well, including "male" hormones. Heifers are fed melengesterol acetate, a synthetic progesterone used for birth control and promoting rapid weight gain.

It has been demonstrated that a diet high in beef fat activates hormone-related genes. Zeranol, a synthetic estrogen cow implant, causes breast cancer cells to grow in the test tube. The amount of Zeranol needed to cause this growth is 30 times less than the amount that the FDA deems to be safe. Zeranol, a synthetic estrogen cow implant, causes breast cancer cells to grow in the test tube. The amount of Zeranol needed to cause this growth is 30 times less than the amount that the FDA deems to be safe. A follow-up study being conducted at Ohio State University hopes to ascertain how much Zeranol ends up on the dinner plate and in the tissue of women with breast cancer. The study, which began in 2002, is still in progress. Data from approximately 200 women have been collected and are being analyzed. This important study may shed some light on at least one hormone implant. Studies on the total amount of all hormones added to American beef have yet to be conducted.

Researchers concluded that the use of hormone replacement therapy is not associated with increased breast cancer.

No large, long-term studies have been conducted, but two reports on all the smaller studies both state that there is no increased risk of recurrence or new cancer in the opposite breast—receptor positive or negative.

Premarin® and Prempro™ do not appear to have the same propensity to promote breast cancer following treatment. A report from the University of California, Irvine, found 13 recurrences in 145 women taking Prempro™ for an average of 2.5 years after treatment for breast cancer. Another report from South Africa had similar results. In 20 women taking Prempro™ and 4 taking tibolone (another hormone replacement drug), no recurrences were reported after three years of observation. This contrasts sharply with the more than four times increased risk for breast cancer in women taking tibolone, and almost three times increased risk in women taking Prempro™, reported for women who have never been treated for breast cancer.

At this time, no compelling published evidence exists to suggest that taking hormone replacement therapy after treatment for breast cancer increases the risk of recurrence or new cancer in the other breast. Some caveats should be noted, however. Large, long-term studies have not been conducted, and until they are, nothing is definite. Second, important differences exist between hormone replacement therapies. For example, in one study, the drug