Here are some of the American Cancer Society guidelines for nutrition and physical activity for cancer prevention:
Maintain a healthy weight throughout life
•?Balance calorie intake with physical activity.
•?Avoid excessive weight gain throughout life.
•?Achieve and maintain a healthy weight if currently over-weight or obese.
Adopt a physically active lifestyle
•?Adults should engage in at least 30 minutes of moderate to vigorous physical activity, above usual activities, on 5 or more days of the week; 45 to 60 minutes of intentional physical activity is preferable.
•?Children and adolescents should engage in at least 60 minutes per day of moderate to vigorous physical activity at least 5 days per week.
Eat a healthy diet, with an emphasis on plant sources
•?Choose foods and drinks in amounts that help achieve and maintain a healthy weight.
•?Eat 5 or more servings of a variety of vegetables and fruits each day.
•?Choose whole grains over processed (refined) grains.
•?Limit intake of processed and red meats.
If you drink alcoholic beverages, limit your intake
•?Women should drink no more than 1 drink per day (or 2 per day for men).
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Age-specific probabilities of developing invasive female breast cancer

Age	Probability if current developing breast cancer in the next 10 years	Or 1 in —
20	0.06%	1,681
30	0.43%	232
40	1.45%	69
50	2.38%	42
60	3.45%	29
70	3.74%	27
Lifetime risk	12.15%	8

American Cancer Society, Surveillance Research, 2011

Breast cancer begins in breast tissue, which is made up of glands for milk production, called lobules, and the ducts that connect the lobules to the nipple. The remainder of the breast is made up of fatty, connective, and lymphatic tissue. Most masses are benign; that is, they are not cancerous, do not grow uncontrollably or spread, and are not life-threatening. Some breast cancers are called in situ because they are confined within the ducts (ductal carcinoma in situ or DCIS) or lobules (lobular carcinoma in situ or LCIS) where they originated. Many oncologists believe that LCIS (also known as lobular neoplasia) is not a true cancer, but an indicator of increased risk for developing invasive cancer in either breast. The majority of in situ breast cancers are DCIS, which accounted for about 83 percent of in situ cases diagnosed during 2004-2008. LCIS is much less common than DCIS, accounting for about 11 percent of female in situ breast cancers diagnosed during 2004-2008. Other in situ breast cancers have characteristics of both ductal and lobular carcinomas or have unspecified origins. Most breast

cancers are invasive, or infiltrating. These cancers started in the lobules or ducts of the breast but have broken through the duct or glandular walls to invade the surrounding tissue of the breast.

How has the occurrence of breast cancer changed over time?

In situ breast cancer:

Incidence rates of in situ breast cancer rose rapidly during the 1980s and 1990s, largely because of increases in mammography screening. The increase was greater in women 50 years of age and older than in those younger than 50. Since 1999, incidence rates of in situ breast cancer have stabilized among women 50 and older, but continue to increase in younger women. The stabilization in incidence among women 50 years of age and older likely reflects trends in mammography screening rates, which peaked in 2000 and then stabilized at a slightly lower rate. It may also reflect a reduced pool of prevalent cases as a result of widespread screening.

Invasive breast cancer:

Much of the historic increase in breast cancer incidence reflects changes in reproductive patterns, such as delayed childbearing and having fewer children, which are recognized risk factors for breast cancer. However, between 1980 and 1987, breast cancer incidence rates increased rapidly, due largely to greater use of mammography screening leading to increased detection of breast cancers too small to be felt. Detecting these tumors earlier has the effect of inflating the incidence rate because tumors are being detected 1 to 3 years before they would have been diagnosed if they continued to grow until symptoms developed. Rates stabilized in the early 1990s, followed by a slower increase during the latter half of the 1990s. This trend may reflect further increases in the prevalence of mammography screening, rising rates of obesity, and menopausal hormone use. Between 2002 and 2003, breast cancer rates dropped sharply (nearly 7%). This rapid decline is likely due to decreased use of menopausal hormones following the 2002 publication of the Women's Health Initiative randomized trial results. Similar reversals in breast cancer trends have been observed internationally, as well. The decline may also reflect recent trends in mammography screening. The percentage of women 40 years of age and older who reported having a mammogram within the past 2 years peaked in 2000, declined slightly, and has since stabilized. Since 2003, breast cancer incidence rates have remained relatively stable.

Age: During the early 1980s, incidence rates of invasive breast cancer increased among both women 50 years of age and older and those younger than 50 (5.4% per year and 3.2% per year, respectively). Among women 50 years of age and older, incidence rates remained constant from 1987-1993, increased at a slow rate during 1993-1999 (1.9% per year), declined during 1999-2005 (2.6% per year), and have since stabilized. Among women younger than 50 years of age, incidence rates have remained stable since 1985.

Race/Ethnicity: Overall breast cancer trends largely reflect the trend among white women. Breast cancer incidence rates among white women increased rapidly (4.1% per year) during the 1980s (largely due to the introduction of mammography screening) and then stabilized from 1987-1994. Subsequently, rates increased again and peaked in 1999. Between 2002 and 2003, breast cancer incidence rates dropped sharply (likely related to declines in menopausal hormone use) and then stabilized.11 Among African American women, the incidence rate also increased during the 1980s; however, the rate has been stable since 1992.3 The lack of a decline in incidence among African American women may be due to historically lower rates of combined menopausal hormone use and the lack of a significant decrease in mammography

screening rates similar to that seen in white women. Incidence data are available for women of other races and ethnicities only since 1992. During 1999-2008, incidence rates did not change significantly among Asian Americans/Pacific Islanders, Hispanics/Latinas, or American Indian/Alaska Natives.3 Rates for American Indians and Alaska Natives are less stable than for other racial and ethnic groups because high-quality data for this group are only available from limited geographic areas.

Tumor size: During 1988-1999, the incidence rate of smaller tumors (? 2.0 cm) among women of all races combined increased by 2.0% per year; between 2002 and 2003, the rate for small tumors dropped sharply and then was relatively stable, similar to the overall trend. For tumors larger than 2 cm, the rate has remained relatively stable since 1993. Incidence rates of breast cancer by tumor size differ between white and African American women. African American women are less likely to be diagnosed with smaller tumors (?2.0 cm) and more likely to be diagnosed with larger tumors (> 5.0 cm) than white women. Incidence rates of smaller tumors have been relatively stable among white women, but have increased among African American since 2001. In both groups, incidence rates of tumors larger than 5 cm have been level.

Stage: Among all women combined, incidence rates of localized breast cancer increased through most of the 1980s and 1990s. From 1999-2004, rates of localized tumors declined 2.6% per year on average, and have since stabilized. The incidence of regional-stage disease increased during 1994-2000 and has since decreased on average by 1.5% per year. African American women have higher rates of distant-stage breast cancer compared to white women. Rates of distant-stage breast cancer among African American women have increased slightly (0.7% per year) since 1975, whereas rates among white women have remained stable.