Background: In contrast to developed countries, where breast cancer (BC) mortality has dropped in the past decade, BC associated deaths are still rising in Brazil. The absence of better structured screening programs and the lack of population awareness about the disease are among the factors for the high BC mortality in the country. Emphasizing the importance of mammography is a key factor in increasing the rate of early diagnosis and, therefore, the chances of cure. In this study, we aimed to quantify the population's recognition of mammography as an important exam, and evaluated factors associated with the awareness of its importance. Methods: A cross-sectional study was conducted with 1,344 women between 40 and 65 years old in 17 state capitals in Brazil. Women answered the following question: “In your opinion, what are the means that a person has to discover that she has breast cancer?” If a woman cited mammography in her answer, she was considered as aware in our analyses. Women also responded a questionnaire that included socio-economic status, educational level, healthy lifestyle behaviors, insurance plan coverage, and family history of BC, in order to identify possible predictors of greater awareness. The relationship between predictors and awareness was evaluated through univariate and multivariate modified Poisson regression. Results: Mean age was 51 ± 7 years; 53.5% of women were between 40 and 49 years old. 30% of the sample was from the higher and 18% from the lower social class. 12% had a positive BC family history, 75% used to visit their gynecologist at least once a year, 35% have a private health insurance, and 21% were current smokers (former smokers = 23%). Only 48.5% cited mammography as a tool to discover breast cancer. In the univariate analysis, younger age, higher level of physical activity, no current or past smoking habit, private health insurance, family history of BC, regular attendance to a gynecologist, and higher income, educational level and social class were all associated with higher awareness (p<0.05 for all variables). In the multivariate model, which included all the former variables except for income and education (which had high collinearity with social class), the relative risks for greater awareness were the following: higher social class = 1.30 (1.05 – 1.61), BC family history = 1.11 (0.96 – 1.29), annual visit to gynecologist = 1.43 (1.18 – 1.75), no history of smoking = 1.17 (1.01 – 1.37), frequent physical activity = 1.10 (0.985 – 1.24), age < 50 = 1.19 (1.06 – 1.33), private insurance = 1.20 (1.06 – 1.36). Conclusions: In this sample, with nationwide distribution, the awareness about the importance of mammography was low. Higher socio-economic status and healthy lifestyles were associated with a higher awareness of the exam's importance. The greater mammography awareness observed in younger women might reflect a higher general interest in its own health in this group, as well as its regular contact with reproductive health services.