...elective abortion.

- *13[1-13] out of 14 studies[14] –since 1957 –show more breast cancer among American women who chose abortion (27 of 33 studies worldwide[15-33]).*
- *The only study on American women which relied entirely on medical records of abortion (not interviews after the fact) reported a 90% increased risk of breast cancer among women who had chosen abortion[4].*
- *Even Planned Parenthood's own expert admits that a young woman who aborts her first pregnancy is more likely to get breast cancer later on, than a young woman who carries her first pregnancy to term[34].*
- *A woman who is pregnant when diagnosed with breast cancer or who gets pregnant after breast cancer is much more likely to be cured if she has the baby, instead of an abortion[35].*
- *The Royal College of Obstetricians and Gynæcologists has acknowledged the finding of the 1996 "Comprehensive review and meta-analysis" by Dr. Joel Brind et al.[36]: a significant, 30% average increased risk with abortion. The Guideline reads: "the Brind paper had no major methodological shortcomings and could not be disregarded".[37]*

References

1. Pike *et al.* (1981) *Br J Cancer* 43:72-6
2. Brinton *et al.* (1983) *Br J Cancer* 47:757-62
3. Rosenberg *et al.* (1988)*Am J Epidemiol* 127:981-9
4. Howe *et al.* (1988) *Int J Epidemiol* 18:300-4
5. Laing *et al.* (1993) *J Natl Med Assoc* 85:931-9
6. Laing *et al.* (1994) *Genet Epidemiol* 11:A300
7. White *et al.* (1994) *J Natl Cancer Inst* 86:505-14; Daling *et al.* (1994) *J Natl Cancer Inst* 86:1584-92
8. Newcomb *et al.* (1996) *JAMA* 275:283-7
9. Daling *et al.* (1996) *Am J Epidemiol* 144:373-80
10. Wu *et al.* (1996) *Br J Cancer* 73:680-6
11. Palmer *et al.*(1997)*Cancer Causes Control* 8:841-9
12. Marcus *et al.* (1999) *Am J Pub Health* 89:1244-7
13. Lazovich *et al* (2000) *Epidemiol* 11:76-80
14. Moseson *et al.* (1993) *Int J Epidemiol* 22:1000-9
15. Segi *et al.* (1957) *GANN* 48 (Suppl.):1-63
16. Watanabe & Hirayama (1968) *Nippon Rinsho* 26:1853-9 (in Japanese)
17. Dvoirin & Medvedev (1978) *Meth Prog Breast Cancer Epidemiol Res, Tallin 1978.* USSR Acad Sci pp.53-63 (in Russian)
18. Nishiyama (1982) *Shikoku Ichi* 38:333-43 (in Japanese)
19-22. Lé *et al.*. (1984); Luporsi (1988); Rohan (1988); Andrieu *et al.* (1994); in Andrieu *et al.* (1995) *Br J Cancer* 72:744-51
23. Hirohata *et al.* (1985) *Natl Cancer Inst Monogr* 69:187-90
24. Ewertz & Duffy (1988) *Br J Cancer* 68:99-104
25. Lipworth *et al.* (1995) *Int J Cancer* 61:181-4
26. Rookus & van Leeuwen *J Natl Cancer Inst* 88:1759-64
27. Bu *et al.* (1995) *Am J Epidemiol* 141:S85
28. Talamini *et al.* (1996) *Eur J Cancer* 32A:303-10
29. Burany (1979) *Jugosl Ginekol Opstet* 19:237-47 (Serbo-Croat)
30. Adami *et al.* (1990) *Br J Cancer* 62:122-6
31. La Vecchia *et al.* (1993) *Int J Cancer* 53:215-9
32. Zaridze *et al.* (1988) "unpublished" in Ref. #19 above
33. Melbye *et al.* (1997) *N Engl J Med* 336:81-5
34. Rosenberg (1999) NE FL Women's Health v. State of FL, FL Circuit Ct, 2nd circ., videotape deposition of 11/18/99, pp. 77-8.
35. Clark & Chua (1989) *Clin Oncol* 1:11-18
36. Brind *et al.* (1996) *J Epidemiol Community Health* 50:481-96
37. Evidence-based Guideline #7 (2000) RCOG Press, pp. 29-30
38. Stewart *et al.* (1993) *J Clin Endocrinol Metab* 76:1470-6
39. Witt *et al.* (1990) *Fertil Steril* 53:1029-36
40. Kunz & Keller (1976) *Br J Ob Gyn* 83:640-4
41. MacMahon *et al.* (1970) *Bull Wld Health Org* 43:209-21

The ***Breast Cancer Prevention Institute*** is a research and educational 501(c)(3) public charity.
Literature and speakers available for lay and professional audiences.
Contributions are tax-deductible.
Single copies of this brochure are distributed free of charge.
For 2-99, send 25¢ each, for 100+, send 20¢ each. Add $5. S&H

BREAST CANCER Prevention INSTITUTE
9 Vassar Street, Poughkeepsie, NY 12601
Call toll-free: 1-86-NO CANCER (1-866-622-6237)
www.bcpinstitute.org

The single *most avoidable* risk factor for breast cancer is...

The ESTROGEN Connection:

Why induced abortions raise breast cancer risk—and most miscarriages don't

The type of female sex hormone called estrogen, is the most potent stimulator of breast cell growth. In fact, *the actions of most known risk factors for breast cancer are attributable to some form of estrogen overexposure.*

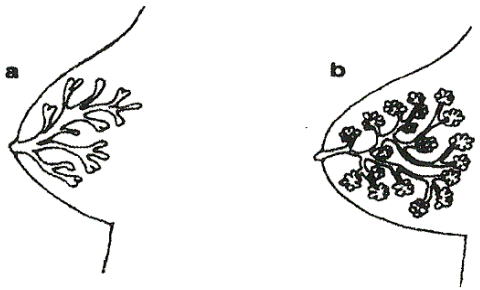
In a normal pregnancy, the mother's ovaries begin producing extra estrogen within a few days after conception[38]. *The level of estrogen in her blood rises by 2,000% by the end of the first trimester—to a level more than six times higher than it ever gets in the non-pregnant state*[39,40].

It is the undifferentiated cells in the breasts which estrogen stimulates to proliferate, so that there will be enough milk-producing tissue to feed the baby after birth. Only the undifferentiated cells are vulnerable to carcinogens, and can ultimately grow into cancer cells.

Importantly, during the last 8 weeks of pregnancy, other hormones differentiate these cells into milk-producing cells. In the process the growth potential—and cancer-forming potential—of these cells is turned off. *That is why a full-term pregnancy lowers the risk of breast cancer later in life*[41].

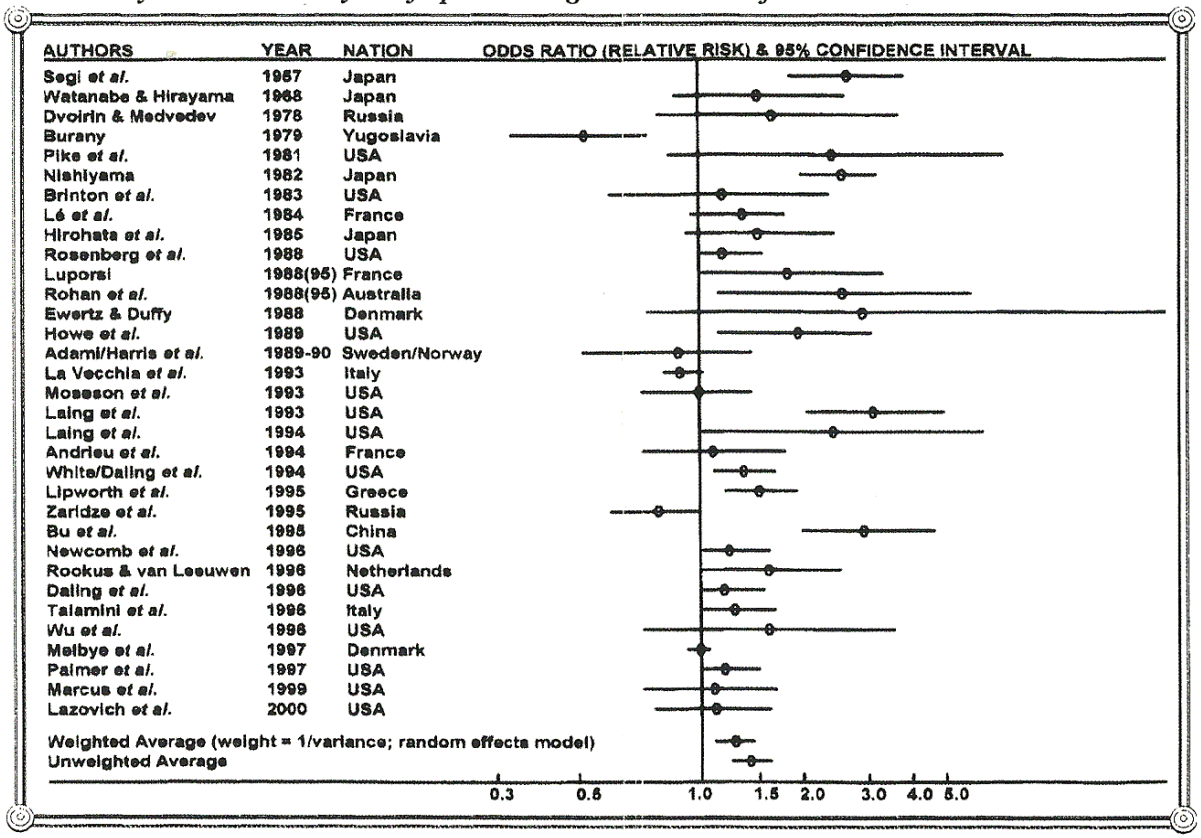
Therefore, if a woman who has gone through some weeks or months of a normal pregnancy chooses abortion, she is left with more of these cancer-vulnerable cells in her breasts than were there before she got pregnant, which raises her risk of breast cancer later in life.

In contrast, most pregnancies which abort spontaneously do not generate normal quantities of estrogen[39,40]. Thus *most miscarriages* (at least 1st trimester miscarriages) *do not raise* breast cancer risk[36].



Schematic representation of tissue structure of **a.** mature breast of a never-pregnant woman; **b.** breast at end of full-term pregnancy

Summary and meta-analysis of epidemiological evidence of the abortion-breast cancer link



Explanatory notes:

Each study above is listed by first author's name, year of publication, and nationality of women studied. On the right-hand side of the figure, the horizontal line with a central circle, given for each study, represents (on a log scale) the 95% confidence interval (CI) for the effect of induced abortion on the entire population studied, with the central circle representing the "point estimate" of "relative risk"(RR). This RR value represents how many times more likely to develop breast cancer, in that particular study, is a woman who had at least one induced abortion, relative to a woman who has not had an induced abortion. For example, in the 1984 French study of Le *et al* shown above, the point estimate of RR is 1.5, with a 95% CI that spans from 1.0 to 2.2. In other words, the study found that women who had at least one abortion were, on average, 50% more likely to develop breast cancer, and that one can be 95% certain that the increased risk is between 0% and 120%.

Point estimates to the right of the vertical line of unity (RR = 1) indicate increased risk; while those to the left indicate decreased risk. If the 95% CI does not cross the line of unity, the results are said to be statistically significant. Narrower 95% CI's denote greater certainty about the RR value, reflecting larger studies with greater statistical power. Thus, the figure illustrates the fact that of the 33 published worldwide studies, 27 show increased risk, 17 of which are statistically significant. The pooled average from all the studies combined, calculated by two different methods, is shown at the bottom. It clearly indicates a significant risk increase averaging 30 to 40%.

The 1981 study of Pike *et al* is limited to women with any abortions before first full-term pregnancy, the 1988 study of Ewertz and Duffy and the 1996 study of Wu *et al.* are limited to women with no children, and the 1957 study of Segi *et al* is limited to women with children.