increase the age-specific risk of death by 3 percent, according to the 1969 FDA report. Many of the 9 million women taking the birth control pills in the United States today are not merely taking the pill for 1 or 2 years in order to space the next pregnancy, but are attempting to use the pill chronically as a form of sterilization. No one, as the FDA report was careful to point out, has the slightest idea what long-range effects may result from such chronic use of the pill for 15, 20, or even 30 years. It can be said, however, that 9 million women

is a very large scale experiment.

This aspect of the pill is alarming to others than myself. The respected and authoritative British journal "The Lancet" published a very sobering leading article on this question last October 11. After listing over 50 separate metabolic side effects produced by the oral contraceptives The Lancet dryly commented: "These changes are unnecessary for contraception and their ultimate effect on the health of the user is unknown. But clearly they cannot be ignored, since they raise the possibility of irreversible structural changes, such as arteriosclerosis, after 10 or 20 years. In view of these doubts, the wisdom of administering such compounds to healthy women for many years must be seriously questioned."

It seems to me extremely unwise to officially license, sponsor, and encourage a long-range experiment such as we now have in progress on the effects of chronic ingestion of synthetic hormones by millions of women. Even if one ignores the findings of altered metabolism in the direction of diabetes and the elevated serum triglyceride levels suggesting a serious potential hazard of arteriosclerosis, the nagging

specter of cancer remains.

Cancers do not develop overnight. The lag period from the induction, the alteration of the first few cells, to the appearance of some fully developed and clinically recognizable cancers can take as much as 20 years. There is no reason to believe that the situation with respect to hormonally sensitive target organs such as the breast among women

taking oral contraceptives is any different.

Shall we have millions of women on the pill for 20 years and then discover it was all a great mistake? Breast cancers have been induced in at least five different species of animals by treatment with the same synthetic hormones being marketed in the oral contraceptives. Every important agent which has been shown to exert a site-specific carcinogenic effect in humans has been shown to cause cancer in animals. There is no reason to presume that the single exception to the interspecific transferability of such experiments will turn out to be the oral contraceptives, however much we may wish it.

There is even less reason for such a presumption since these steroid compounds have been shown to produce breast cancer in human males, a very rare finding under other circumstances. And since there are excellent alternative contraceptive methods which entail no such risks, it is manifestly unsound policy to encourage the chronic use of these

potentially hazardous agents.

Mr. Duffy. Excuse me, Dr. Davis, I would like to ask you a question at this point. When you say these alternate methods of contraception entail no such risks are you just talking about the risk of breast cancer or are you talking about all the risks that you had mentioned to this point?