In considering the arguments for and against mammography, it is important to bear in mind that they are made strictly in the context of its use as a tool for *mass screening* of apparently healthy women. At issue is whether we know enough about the risks and benefits of mammography to offer it broadly as a public health measure, as though it were polio vaccine.

[For the present, at least, there is little controversy about its use diagnostically—for the woman with a lump in her breast, although even this has been called into question. In a recent paper in the *Journal of the American Medical Association* (7 March), investigators from Mount Sinai School of Medicine in New York report on cases in which mammography failed to confirm the presence of tumors that had been felt by doctors on clinical examination. As a result of the false-negative mammograms, they observe, surgery was delayed. They do not, however, argue against diagnostic mammography. Instead, they conclude that no one should ignore physical findings just because a lump doesn't show up on an x-ray.]

Radiobiologist Arthur C. Upton of the

Battle to Legitimize Laetrile Continues Unabated

The intensely emotional controversy surrounding Laetrile, the illegal substance used to combat cancer, has erupted into the headlines again. On 30 April, Indiana became the third state to legalize Laetrile. And in early May the Food and Drug Administration conducted two days of court-ordered public hearings on the drug in Kansas City.

The hearings stem from an injunction issued in 1975 by Oklahoma district court judge Luther Bohanon which permitted a group of terminal cancer patients to bring supplies of Laetrile across the border from Mexico, where it is manufactured, for their own use. The FDA appealed the ruling. Last October the 10th Circuit Court of Appeals ruled that the FDA's record of support of its case was "grossly inadequate" and remanded the case to Bohanon with instructions for the FDA to hold hearings and compile a better record. Findings are due within a month.

Chances are practically nonexistent that the FDA will budge one iota on its position, which is that Laetrile, which is produced from apricot pits, is an "unlicensed new drug" of dubious safety and zero efficacy against cancer (*Science*, 10 September 1976).

That stance is backed by the National Cancer Institute, the American Cancer Society, the American Medical Association, and most physicians.

Yet try as they might, none of these groups has been able to put the lid on Laetrile. Supporters of the drug (which they claim is not a drug but a natural food substance), including such groups as the Committee for Freedom of Choice in Cancer Therapy, have become more numerous and better organized than ever.

In addition to winning several court injunctions allowing patients to obtain Laetrile without harassment, they have succeeded in getting pro-Laetrile bills through the legislatures of Alaska, Florida, and Indiana. The Indiana law, passed over the veto of physician-governor Otis R. Bowen, is the most far-reaching one. It not only permits physicians to administer Laetrile but permits sale and manufacture of the substance (federal law still prohibits interstate commerce in apricot pits for manufacture of Laetrile). Related measures have been passed by one house in each of five states, and are pending in 28.

Meanwhile, Laetrile proponents think they have found a champion in Congress in the person of Representative Steven D. Symms (R–Idaho) who has introduced a "Medical Freedom of Choice" bill. This measure, which has 97 cosponsors, would repeal the 1962 amendments to the Food, Drug, and Cosmetic Act that require a drug to be proved effective as well as safe before marketing. A Symms aide explains that the purpose of the bill is to facilitate the flow of new drugs onto the market and reduce testing costs, and that it is "*not* a Laetrile bill." The effect, however, would be to remove the major stumbling block—proof of efficacy—to its marketing.

As the movement grows, the conflict has become increasingly ugly. Mixed with the political conservatism of many of Laetrile's chief promoters is a more fundamental suspicion of constituted authority and the medical establishment in particular. At the FDA hearings, for example, Emil J. Freireich of the University of Texas Medical School at Houston and the M. D. Anderson Cancer Hospital said: "You surely cannot believe that a quarter of a million of American physicians are sitting on a cancer cure just so they can get rich?" He was answered with a chorus of yeses from the audience, many of whom had been borne to the hearings on chartered buses.

The Laetrile craze may be a fad, but it has already proved to be one with an unusually long life and one that is still growing. The adamant stance of the government seems only to add fuel to the fury. The FDA insists that allowing the stuff on the market would encourage its use as an anticancer drug despite any disclaimers on the label, but there are a good many people who sympathize with cancer sufferers who believe they should be allowed to use anything they think might help them. Indeed, the *New York Times* on 5 May came out with an editorial in the form of a dialog on Laetrile that concluded "After all, shouldn't people be allowed to choose their own placebo, for better or for worse?"

Another way to try to defuse the controversy would be to bypass animal studies (which have been negative or inconclusive) and go to a human trial of the drug. The Washington *Star* quotes Lewis Thomas, president of the Sloan-Kettering Institute for Cancer Research, as saying: "ordinarily no one would think of doing a clinical trial on a drug that has essentially been found ineffective in animal tests. However, this is a special case. With all the claims being made, I now think a clinical trial would be appropriate." Such a trial, however, would be extremely difficult to devise and would be unlikely to change anyone's mind.

The Laetrile issue is like a toadstool sprung up and nurtured in a murky environment of public distrust—in government, scientific research, and, in particular, physicians. "Practicing physicians," says John Jennings of the FDA's Bureau of Drugs, have "concentrated on diseases rather than patients. Laetrile practitioners are good at treating patients. . . . It's a message to all of us that we have to recapture the confidence of the population at large."

—C.H.