

operative sexual activity was nil for a 6-week period. Microscopic examination of his semen after that length of time revealed active spermatozoa. He was convinced my surgery had been poorly performed. Resumption of sexual activity, however, (using condom protection) soon used up the supply held in the seminal vesicles, and within 2 weeks, there were no active sperm found on repeat microscopic examination of his semen. Both of us were relieved.

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Immigration Yields

Kelman (Letters, 15 May) suggests that "from a purely scientific point of view, it is inefficient and ineffective to tell Americans to abort their children and kill their old folks because of the population crisis, and at the same time allow a net positive migration of over 4 million each decade." Obviously, it is a waste of time to tell Americans to do anything they do not feel like doing; it is equally obvious that it is very good business to import 4 million, skilled or educated adults ready made (so to speak) instead of rearing and educating the same number of Americans; it would still be profitable, even if countries of the immigrants were repaid the costs (food, housing, and education) of raising them, plus a reasonable profit because of the lower costs of most foreign educational systems.

Americans have been in the past and continue to be beneficiary of a huge foreign aid program, not at least from the underdeveloped countries.

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Kelman would solve the population crisis in the United States "instantly" by stopping all immigration. His solution is as "irrelevant" and "extreme" as that of Hanzlik whom he challenges.

Francis A. Walker, one-time director of the U.S. Census, contended that our total population up to his time (late 19th century) was in no way affected by immigration; that, had there been no immigration, an equal increase in population would have resulted from an increase in births. Population

growth, as revealed by the census counts, supports his thesis. If the population data from 1790 to 1960 are plotted on a semilog graph they show a steady growth. It is an easy matter to fit a mathematical growth curve to these figures (or even to draw a smooth curve through them) in order to portray the direction of long-time growth. This growth rate is astonishingly steady, with a high degree of linearity from 1790 to 1860 and a very slowly declining rate of growth thereafter; there are only three deviations of sufficient magnitude to be recognized easily on the chart. Population figures for 1830 and 1840, maybe even 1850, show a slight dip below the hypothetical linear trend; the figures for 1870 show a considerable fall; and the data for 1940, 1950, and 1960 the greatest dip of all. These facts support the hypothesis that a vast complex of economic, sociological, and biological forces bear upon population reproduction, and that they tend to produce growth in numbers but, in time, at a declining rate—all in a complex relation of human needs to resources, and that, in an environment such as the United States, the end result will be a stationary population (zero growth). The exceptions to this steady evolution toward a stationary population have always, in the U.S., been a temporary downward thrust of growth rates, due to some fairly catastrophic situation, followed by a catching-up. There has been no catastrophic upward surge in the U.S. to a position in excess of the long-time trend. . . .

Some single-factor solutions to the population "explosion" may be less effective than claimed. Birth control and family planning, for example, can be supported on their merits, but they may not be adequate to control or slow down a population explosion. Rather than wait for the slowdown indicated by the existing curve of U.S. population growth, it would be well to have some far more extensive and comprehensive studies of the relation of population growth to family income and level of education. . . .

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FDA's Altered Memo

Boffey's review of Turner's book *The Chemical Feast* (17 Apr., p. 349) referred to Marvin Legator's memo,

written in January 1969, in which he recommended that "the use of cyclamates should be immediately curtailed, pending the outcome of additional studies." Boffey reported: "The memo was passed to Legator's superior, Edwin L. Hove, who disagreed with the recommendation and deleted it from the memo." He repeated the charge made in the book that I had forwarded the memo, retyped and altered, without informing either Legator or the FDA Commissioner or the person to whom the memo was actually addressed (the Associate Commissioner for Science at the FDA) of the deletion.

In his memo Legator repeated a verbal report he had heard from a reputable source that *N*-hydroxylated cyclohexylamine had been identified in the blood serum of two men receiving cyclamate. Legator felt this to be very important because some *N*-hydroxylated compounds are known to cause cancer, and therefore he recommended that the use of cyclamate be immediately curtailed. To me that recommendation seemed pretty far out. As I did not wish to concur with it, I wrote on the margin: "I do not concur; insufficient basis" and then I forwarded the memo to my boss, the Director of the Bureau of Science. The memo intact except for my margin note was received in the Bureau Director's office.

The deletion in the memo of both the recommendation and my note had occurred when it was retyped by order of my boss, the acting Bureau Director, prior to forwarding it in final form to the Associate Commissioner. I did not make the decision to delete Legator's recommendation, and I am no longer certain where it was retyped. I have authenticated documents which trace the step-by-step progress of the memo through official channels. Many of the other "finds" reported in Turner's book are perhaps as irrelevant, inaccurate, and false as the issue of the Altered Memo. . . .

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Turner's book charged that a crucial memorandum had been altered at the FDA without informing the originator or the addressee, and that Hove was the one who altered it. Hove does not refute the substance of Turner's charge that the memorandum was altered, but he says the altering was done by someone else.—PMB.