

an opportunity to play a role in the formulation of budgets.

David said that he considers "high priority" problems to include unemployment in the aerospace industry, "gyrations" in support of basic research, the relationship between biomedical research and medical service, and national energy needs. "But you know," he said, "we don't control events here. We're in a position to take a broad view and to make recommendations to people who do. But I'm not sounding off on anything until I know my way around a good deal better. What I can say is that I took this job with the

assurance that there is backing in the White House for doing a lot of things that are necessary for improving our science and technology and for making use of them for national needs. There is a real willingness to do what is necessary." David added that he sees himself dealing with four constituencies: the science and engineering communities, the White House staff, the government research organizations, and the public. "But I'm not here as a lobbyist for any of them. I'm here, in my view of it, to provide the best advice available concerning the problems that come under this office."

Considering the political preoccupation of the Nixon administration, and the budgetary pressures that restrict its choices, it is doubtful that the relatively obscure Office of Science and Technology can become a central point for re-ordering priorities to the satisfaction of any of David's constituencies. Not even a blend of Fermi and Talleyrand could do that from the slim power base that is OST. But 3 hours of conversation with David, plus the recollections of people who know him, do not suggest that he came to Washington to sink out of sight passively.

—D. S. GREENBERG

Cyclamates: House Report Charges Administrative Alchemy at HEW

At a Saturday morning press conference in October 1969, Robert Finch, then Secretary of Health, Education, and Welfare, announced that cyclamate artificial sweeteners—which Americans were consuming at the rate of 16 million pounds per year—had been found to cause cancer in rats and would no longer be sold as foods. Following Finch's announcement HEW established regulations permitting the sale of foods containing cyclamates as non-prescription drugs; but this decision was reversed in August of this year, and all sales of cyclamates were banned.

This curious series of events led the House Intergovernmental Relations Subcommittee, headed by Representative L. H. Fountain (D-N.C.), which has long been critical of both HEW and the Food and Drug Administration, to investigate the regulation of cyclamates. The subcommittee's report,* released last week, provides some interesting insights into the administration of FDA and its parent organization, HEW.

Cyclamates were first marketed in the early 1950's, but their use, like that

of saccharin, was confined to diet foods used mainly by diabetics and severely obese persons. In 1958, on the basis of early clinical trials and their limited use, cyclamates were placed on the Generally Recognized as Safe (GRAS) list of products so that no restrictions were imposed on their use.

About 1960 cyclamate consumption soared, mainly because of clever marketing techniques of soft drink companies. The subcommittee's report notes that, at the time of their increasing popularity, cyclamates had not been subjected to the rigorous screening tests that normally would have been applied to a food additive consumed in large quantities by healthy people.

A series of studies, many of them financed by the sugar industry, revealed a variety of possibly harmful effects of cyclamates. At hearings on cyclamates before Fountain's subcommittee testimony revealed that, as early as 1962 and increasingly after 1962, the FDA had reason to believe that cyclamates were not generally recognized as safe. FDA officials testified that, indeed, cyclamates should have been removed from the GRAS list long before they had been, but offered no explanations.

Cyclamates finally were removed from the GRAS list by Finch—not the FDA—when cancer was added to the list of possible side effects. Rats fed high doses of cyclamates at Abbott

Laboratories, the principal manufacturer of the artificial sweeteners, developed a rare type of kidney tumor. This result, later confirmed in FDA and other laboratories with much lower doses of cyclamates, forced HEW to invoke the 1958 Delaney Amendment to the Food, Drug, and Cosmetic Act, which prohibits the sale of any food component shown to cause cancer in man or animals. There is still no evidence that cyclamates cause cancer in humans.

Finch, according to the Fountain report, did not want to eliminate the sale of products containing cyclamates completely, and he announced at the October press conference that cyclamates would remain available to people with such conditions as obesity and diabetes.

One can only speculate on Finch's reasons for stating unequivocally at that time that these products would continue to be sold. An FDA official mentioned in his testimony before the Fountain subcommittee that California fruit growers had just completed the canning season at that time and that a significant portion of fruit had been canned with cyclamates, but the subcommittee's report does not mention this factor. A few months after the cyclamate ban, the *Washington Post* reported that HEW was planning a legislative strategy for the elimination of the Delaney Amendment.

After Finch made his announcement in October, HEW convened an ad hoc Medical Advisory Group on Cyclamates, and after studying the available data the advisory group suggested that cyclamates remain available to people with conditions such as obesity and diabetes, the course of action that Finch had already stated would be followed.

FDA was then asked to find some

* Copies of both the Report on the Regulation of Cyclamate Sweeteners and the transcript of the Hearings on Cyclamate Sweeteners which preceded the report can be obtained free of charge from the House of Representatives, Intergovernmental Relations Subcommittee of the Committee on Government Operations, Washington, D.C. 20515.

legal means by which Finch's decision could be implemented. It accomplished this task by declaring that cyclamates were no longer food additives, but would be considered a new drug which was in no way a food additive even though its principal usage was in such items as canned peaches and soft drinks. The reason for FDA's denial of food status to cyclamates was that the law specifies that any food item that causes cancer in animals or man cannot be sold. The Delaney Amendment does not apply to drugs.

Aside from these problems of nomenclature, there were other difficulties with marketing cyclamates as drugs. Since 1962 FDA has required proof of efficacy before any new drug

can be offered for human consumption. No such proof had been presented for cyclamates, and, in fact, there was reason to believe that they were not effective. A report in *Nature* [L. M. Dalderup and W. Visser, **221**, 91 (1969)] shows that cyclamates stimulated the appetites of rats, causing greater gain in weight and more efficient utilization of food. Clearly, the rechristening of cyclamates as drugs was a decision of administrative expediency and did not involve the normal procedures of scientific evaluation.

After the Fountain subcommittee hearings on cyclamates last June, HEW apparently had second thoughts about permitting cyclamates to be sold even as drugs. The Medical Advisory Group

on Cyclamates was reconvened in August and, after examining essentially the same data that it had examined in November, the Advisory Group concluded that cyclamates should not be used for consumption, even as drugs. HEW heeded this advice, and on 14 August 1970 the sale of all cyclamate products was banned.

Fountain in commenting on his subcommittee's findings called the HEW and FDA actions on cyclamates a subterfuge aimed at circumventing the law. "It is discouraging," he concluded, "to find such conduct among public officials at the very time we are trying to impress upon our young people the importance of law and order."

—ROBERT J. BAZELL

Tenure Controversy: Rejected San Jose Engineer Is Wed to a Red

San Jose State College in California is currently experiencing a tenure controversy that reveals how strongly the mood of political reprisal is afflicting the nation's campuses. The controversy involves Jack H. Kurzweil, a 32-year-old assistant professor of electrical engineering, who has been adjudged a superior teacher by his departmental colleagues, by a campus hearing board, and by the college administration. Yet Kurzweil's appointment to a permanent position has been opposed by a small band of conservative engineers, and, as of this writing, he has been denied tenure by the chancellor of the California state college system.

Kurzweil's sin, so far as can be determined, is that he is literally "in bed with a Communist." His wife, the former Bettina Aptheker, is an avowed Communist whose father, Herbert Aptheker, is often described as the leading scholar of the Communist party in the United States. Kurzweil himself has not been publicly accused of being a Communist, but he declines to reveal just what his beliefs are on the grounds that they are irrelevant to the issues involved in his tenure case.

Whatever the outcome of the controversy, Kurzweil's case will have an impact that extends beyond the narrow

question of his own professional advancement. For, in the process of trying to get rid of Kurzweil, his opponents have undermined and even openly altered the tenure and grievance procedures that affect all faculty members at the 20 or so state colleges in California. Kurzweil's opponents have deliberately trumped up evidence against him (according to a hearing board of faculty members at San Jose State); and they openly flouted the normal campus grievance procedures by refusing to testify in support of their allegations against him. Moreover, the state college trustees, in a move reportedly aimed at Kurzweil, recently curtailed the faculty's role in grievance procedures and gave increased authority to the chancellor of the state college system. "Reds or husbands of Reds get fired all over the place," Kurzweil told *Science*, "but this has turned into an attack on the whole tenure system and grievance procedure."

The opposition to Kurzweil was at first rather openly based on his associations with Communists, but as the controversy reached higher levels of political sophistication, the Red-baiting aspects of the case tended to disappear from sight and be replaced by seemingly scholarly discussions of

whether Kurzweil is or is not professionally qualified for tenure. Still, nobody seems much fooled about what the real issue is. As Hobert W. Burns, who was acting president of San Jose State when the Kurzweil case reached one of its climaxes this past summer, remarked in a detailed 23-page report supporting Kurzweil: ". . . there is reason to believe that many if not all of those faculty members who opposed granting tenure to Dr. Kurzweil in the first place were indeed those who were most concerned with his alleged political beliefs or affiliations. I know some of these faculty members and I know they are honest, sincere men. They conscientiously believe the use of such political criteria is a defensible, even mandatory, practice in the assessment of academic performance . . . they truly believe his alleged political beliefs in and of themselves should automatically disqualify him from professional service in the College. Even so it is wrong, in law and in academic practice, to base a personnel decision on essentially political rather than academic reasons."

Burns suggested that Kurzweil's chief problem was his choice of a marriage partner. "Flamboyant language though it may be," Burns said, "the assertion in the testimony that Dr. Kurzweil would have been recommended for tenure in the first instance if he had married Bettina Smith instead of Bettina Aptheker may have more than whimsy in it."

Kurzweil first came to San Jose State in 1968 after a 2-year stint at San Francisco State, where he was teaching on a temporary appointment. It was no