

(Indeed, during 1970-71, academy records show that these industries paid \$68,000 of the food protection committee's general administrative expenses.)

Another witness, Charles Edwards, the commissioner of the FDA, said the academy generally had done well by his agency in picking advisory panels. Nevertheless, Edwards said he thought the academy had, in the past, "not shown enough awareness of the problem" of conflicting interests.

The last straw, it seemed, was the appearance of Lloyd Hazelton, an alumnus of the MSG panel and now, or at least last week, a spokesman for the food industry lobby.

"Here is the same person acting as judge and jury," Percy commented. "Regardless of his objectivity and competence, it appears that there is a conflict of interest here. Aren't there enough scientists in the United States so we can select a panel that would be above reproach?"

The senator went on to say that he had the highest regard for members of the NAS, but that he thought the academy had been "insensitive to the fact that we have refused to seat a Supreme Court justice whose integrity no one could question, but who had experienced a conflict of interest." Percy suggested that this insensitivity might be a fit subject for hearings next year by the Government Operations subcommittee on research, of which he is a member.

The academy made no formal response to this criticism, but a spokesman noted that during the past year the academy had taken steps to avoid the appearance of conflicting interests among prospective panel members. Chief among these steps is a requirement that candidates for panels file a statement declaring potential conflicts. These "bias statements" are then used, the spokesman said, as a guide in achieving a balance of viewpoints among members of a given panel. In no case, however, are they used to disqualify a scientist from an advisory committee.

In spite of the academy's new precautions, the FDA has decided to go elsewhere for advice concerning the safety of some 600 food additives on the government's GRAS (or generally regarded as safe) list. Charles Edwards told the Senate committee that to carry out this large and highly sensitive review the FDA had turned instead to the Federation of American Societies for Experimental Biology (FASEB).

Edwards said the FDA had decided

to pass over the academy in favor of FASEB partly because of industry representation on NAS panels. He was quick to add that the academy was being kept in reserve as an appeals body for judgments rendered by FASEB, but if the move was not a slap at the academy it certainly marked an important break with tradition.

Officials of FASEB, for their part, regard the job with eagerness tempered with more than a little trepidation. George Irving and C. Jelleff Carr, the two staff members who share responsibility for the project, agreed in an interview last week that reviewing the safety of food additives was a "new and unusual endeavor" both for the federation and the FDA, and one that could take several years.

Their plans call for a panel of nine scientists, Irving among them, to re-

view the available literature on each additive as compiled in a series of monographs currently being prepared for the FDA under separate contracts. Research sponsored by the FDA will fill some of the gaps in the literature, and the NAS will compile data on dietary intakes of food additives, to help FASEB and the FDA assign priorities to individual chemicals.

How is the federation handling the problem of conflicting interests among its nine panelists? Like the academy, Carr said, they will require detailed statements of each member's connections with the food and chemical industries, if any. But unlike the academy, a panelist will be barred from sitting in judgment of a particular food additive if, for instance, companies using or manufacturing the additive have supported his research.—ROBERT GILLETTE

Hexachlorophene Curbed

Restrictions amounting to a virtual ban were announced last week for the antibacterial agent hexachlorophene, an ingredient of many soaps, shampoos, cosmetics, deodorants and numerous other products. The action of the Food and Drug Administration (FDA) was influenced by the death last month of some 40 French babies in a case involving hexachlorophene. Last December the FDA placed the first serious regulatory curb on the burgeoning use of hexachlorophene by recommending that hospitals refrain from bathing infants in strong (3 percent) solutions of the chemical.

The new regulations state that all products containing hexachlorophene as a principal ingredient will be limited to prescription sale only. (The chemical may be used as a preservative in drugs and cosmetics at levels no higher than 0.1 percent). All existing stocks containing more than 0.75 percent hexachlorophene must be either recalled or (in pharmacies) sold on prescription only.

First patented in 1941 by the Swiss company Givaudan, hexachlorophene has found its way into an increasing multitude of products, such that until recently some 4 million pounds a week were being used by American cosmetics and pharmaceutical companies. The first check on its use arose indirectly as the result of an application to use the chemical as a fungicide. Experiments by Renate D. Kimbrough and Thomas B. Gaines at the FDA toxicology center in Atlanta, Georgia, indicated the potential of hexachlorophene for damaging nervous tissue (*Science* 19 November 1971). The warning by the FDA in December last year that 3 percent hexachlorophene should not be used for routine bathing of infants evoked considerable criticism, particularly in light of several staphylococcus outbreaks in hospitals. But the deaths of the French babies reported last month seem to have been caused by a talcum powder to which hexachlorophene was added in excess but at a level of only 6 percent. The lesions in the infants' brains were identical to those caused by hexachlorophene in experimental animals. "There remains no doubt that hexachlorophene is a potent human neurotoxin, at high levels of use, e.g. 3 percent emulsion and 6 percent in powder," the FDA stated last week. For those exposed to hexachlorophene during the last 30 years, particularly the 3 percent solution, the margin of safety does not seem always to have been overwhelmingly great.—N.W.