Briefing

NAS Begins Study of Antibiotics in Feeds

Although the Food and Drug Administration (FDA) concluded 7 years ago that the use of antibiotics in animal feeds posed a risk to public health and should be restricted, American farmers and chemical producers have never accepted the FDA's findings. They have lobbied assiduously and with continuing success to prevent the FDA from limiting the use of these drugs in animal feeds, for they argue that the FDA can do little to reduce the health risk but could greatly reduce farmers' ability to put weight on their livestock. By one recent estimate, meat prices would rise between 3 and 28 percent if a modest FDA proposal for limiting antibiotic use were put into effect. The farmers' repeated cry is that more research is needed.

The most recent plea for delay has set in motion a major study by the National Academy of Sciences (NAS), launched with a ceremonial public meeting on 23 August in Washington, D.C. This review of animal husbandry and antibiotics is scheduled to be written in short order, by March of 1980, when it will be forwarded to the FDA. The study is being carried out under contract with the FDA, not because the FDA wanted it but because Congress demanded it.

The latest round in this controversy began in 1977, when the then commissioner of FDA, Donald Kennedy, announced that the evidence in hand was sufficient to persuade him that penicillin should be banned from use in animal feeds and that tetracycline use be sharply limited. The danger, according to an early FDA task force report, is that using low levels of antibiotics in the barnyard creates "an ideal environment" for breeding antibiotic-resistant strains of bacteria that could eventually infect humans. A strain resistant to both penicillin and tetracycline, for example, could overcome two of the best and most commonly used medicines in the physician's armamentarium. Despite this apparent danger, nearly 40 percent of the antibacterials produced in the United States are used in animal feeds or for other nonhuman purposes.

Before the FDA could carry out its plan to restrict antibiotic use, Congress intervened. The House appropriations subcommittee on agriculture stipulated that a $250,000 contract be given to the NAS to make a study of the question, and the House Agriculture Committee forbade the FDA from acting until the new study had been completed. These orders cleared Congress last September, and a new research project was born.

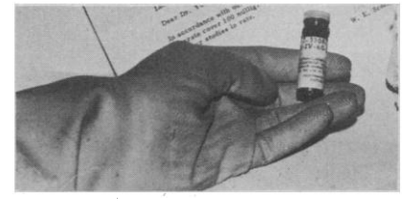
According to the staff director of the NAS project, Enriqueta Bond, the panel of experts assigned to this task may reach one of three general recommendations: "They can say no further studies need to be done, or that there is no way you can design a study to answer the question, or they may propose some studies." Clearly the committee does not yet know where it is headed. The hard work will begin in September when the panel meets privately at Woods Hole, Massachusetts, to hammer out its views.

Bond said that in order to avoid charges of bias, "We tried not to use anybody on our panel who'd been involved with any of the previous studies." Thus, some outspoken experts were eliminated, including scientists who sat on review panels for the FDA, the World Health Organization, and the Office of Technology Assessment—all of which concluded that the use of antibiotics in feeds should be restricted. The NAS also ruled out candidates who had been associated with the Council on Agricultural Science and Technology, a group that generally supports existing patterns of chemical use in farming. The chairman of the NAS study group is Rueul Stallones, dean of the school of public health at the University of Texas in Houston.

If the NAS panel announces next March that more data are needed to settle the issue, will the FDA have to postpone action again? "No," said Terrence Harvey of the FDA's Bureau of Veterinary Medicine. "The current project just requires that the NAS conduct their deliberations. It will not impinge upon our proceedings." He said the FDA's position is that antibiotics in feeds present a health risk, and, "as far as we are concerned, that hazard still exists, and we're just maintaining that position until we find out otherwise."

Scientologists Obtain Potent Hallucinogen, QNB

The Church of Scientology, which is battling the federal government on several personal privacy issues, opened a new front this summer by charging that a potent hallucinogen, quinuclidinyl benzilate (known as QNB or, formerly, BZ) has been abused by the Army in test programs and now presents a public health threat due to indifferent federal regulation. On 22 August, an arm of the church calling itself American Citizens for Honesty in Government revealed that it had obtained a vial containing 100 milligrams of QNB from the pharmaceutical company Hoffmann-La Roche simply by asking for it. This



amount, it was claimed, was enough to incapacitate 400 to 500 people for several days. The company did not bill for the shipment. The Scientologists accused the Justice Department of "criminal negligence" in permitting QNB to be shipped casually in this way, and they demanded that it be classified a controlled substance, as heroin and lysergic acid diethylamide (LSD) have been.

QNB was produced in large quantities by the Army in the 1960's for use in antipersonnel bombs, and the current stockpile amounts to about 50 tons, stored at bases in Arkansas, Utah, and Maryland—enough to kill the population of the United States several times over. QNB was used as well in experiments conducted by the Army at the Edgewood Arsenal in Maryland between 1960 and 1969, as part of the military's chemical warfare program. The Pentagon believes that during that period 362 volunteers may have been exposed to the drug, considered to be 10 to 100 times as potent as LSD. A small dose puts a person out of commission for 4 to 5 days, and by all accounts, the experience is horrible.

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Army spokesman Major Anthony Caggiano said there have been no medical follow-ups on the volunteers who took QNB because "it was determined at the time of the tests that there were no serious aftereffects." Under pressure from the Scientologists, however, the Army may now undertake a follow-up program.

Meanwhile, the Scientologists have done some inquiring on their own. After placing full-page ads in several papers this summer, they claim to have located 30 former volunteers who were exposed to QNB at Edgewood Arsenal. They have collected anecdotal evidence suggesting that some of these volunteers are still suffering from the aftereffects, including occasional "flashback" hallucinations, gaps in memory, and an inability to concentrate.

Caggiano said the Army does no testing with QNB today and frankly would like to get rid of the stuff. "The drug," he said, "is a victim of technology. Other things have proved more effective." Besides, he explained, the Pentagon is trying to "get away from" chemical weapons altogether. The Battelle Corporation has been given a $2.3-million contract to study alternatives for disposing of the Army's QNB stockpile and come up with a safe remedy by the end of next year.

Although QNB is more potent than LSD, it has never been placed on the controlled substances list, a Justice Department spokesman said, because it has never been marketed as a drug, and no one has ever come forward with evidence that it is abused. LSD, like many other abused drugs, was put on the list by the congressional act of 1970 that created the current drug enforcement bureaucracy. QNB was not on the list, and regulations stipulate that it shall remain off the list unless someone makes a formal case arguing that it has been or will be abused.

Alfred Zobel, a spokesman for Hoffmann-La Roche, said, "We have made QNB available in the past to bona fide scientists at medical schools or pharmaceutical companies."

It is a potent anticholinergic, used in an irradiated form to label receptors in the nervous system in laboratory experiments with animals, and never used on humans. Researchers traditionally share such chemicals with colleagues free of charge, Zobel said. The company sent QNB to a member of the Church of Scientology, Zobel claimed, after the caller falsely represented himself as a researcher in a private laboratory. "We can assure you that we are going to refine our methods in a way that will prevent a repetition of such deceit," he said.

President's Commission Reprimands NRC Staff

The Nuclear Regulatory Commission (NRC), already suffering from a battered public image, endured a new humiliation in August when it crossed swords with President Carter's commission investigating the accident at Three Mile Island. The trouble began on 20 August, when the NRC's director of reactor regulation, Harold Denton, wrote a letter to his superiors proposing that a 3-month-old moratorium on licensing of new plants be brought to an end. He argued that the NRC's recent changes in design standards and licensing procedures had eliminated all threats to public safety, making it possible to resume business as usual. Denton apparently made a double blunder: he failed to realize that this was a question of central importance to the President's commission, and he failed to notify the investigators of his proposal to resume licensing.

Denton was summoned before the investigative group on 23 August and questioned closely for 3 hours. Arizona Governor Bruce Babbitt said he was "personally outraged by your damn-the-torpedoes attitude." Carolyn Lewis said, "It kind of shows the NRC thumbing its nose at the commission." The members then voted to subpoena all five NRC commissioners to find out what they planned to do. Only one—Richard Kennedy—was in town. When he appeared on the stand, he said simply that the NRC had not decided yet what it would do about new licenses. As of last week, therefore, the moratorium remained in effect, pending a final decision by the NRC commissioners when they return from vacation.

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ence," writes Popovsky. "The system that prevails in his Institute is one of unmitigated terror." (William Terry of the National Cancer Institute, the only American mentioned in Popovsky's book, agreed with Popovsky's characterization of Baroyan and confirmed the author's account of Baroyan's crude attempts to obstruct contacts between Soviet and American immunologists at Baroyan's institute.)

A well-known figure whose career is chronicled by Popovsky is Yuri Anatolyevich Ovchinnikov, vice president of the Soviet Academy of Sciences and head of a large laboratory at the "science city" of Pushchino. According to Popovsky, "the main purpose of Ovchinnikov's research is to impress his superiors and foreign colleagues." He sets masses of serflike assistants to work on a problem of his choosing, none of whom know the common aim of their particular piece of work, and he alone takes credit for the final outcome. "He says openly that he doesn't need anyone's brains—his own is good enough." He is regarded as a "paragon of energy and organization" and is expected to be named president of the academy in 1980—with a career built on "scientific slave-labor."

Considerations of quality aside, Popovsky claims secrecy is the dominant feature of science, as well as of every other aspect of life in the Soviet Union. "Secrecy," he writes, "is the main product of hundreds of Soviet research and development institutes, and may be called the lifeblood of Soviet science." Yet when a young scientist gets a job at a secret lab (all are more or less secret, the military ones totally so) he finds "the main task of secret laboratories is to copy models manufactured in the United States."

As Popovsky describes it, the universal scientific ideal of free exchange of information does not even get lip service in the Soviet Union. Those who contend the Soviets are getting more than we are from mutual scientific exchanges will find support in Popovsky's reporting of a quote from an editor of Znanie, the scientific publisher: "The Central Committee held a conference for propagandists and told us straight out: the whole purpose of scientific contacts with the West is to get as much from them and give them as little as we can."

For some scientists, their inability to get permission to leave the country remains a mystery. One is Izyaslav Petrovich Lapin, an internationally renowned psychopharmacologist at the Bekhterov