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TAKING ANIMALS OUT OF THE LAB

If we were to ask our readers whether they favor "research modernization," undoubtedly the response would be one of overwhelming approval.

If we likewise polled them as to whether or not they favor the elimination of animals in pharmaceutical research, we expect that the response would be equally overwhelming in opposition.

Interestingly enough, however, these two apparently different concepts currently bear a very close relationship. Specifically, legislation is now being seriously and actively considered within the U.S. Congress that bears the title "Research Modernization Act" (H.R. 4805), and which has the specific purpose of working toward significant reduction or complete elimination of the use of animals in research.

In itself, legislation of this general nature is not novel, because many bills affecting the use of animals in research have been introduced on numerous occasions in the past; in fact, there are at least three other bills in the present Congress which also have as their objective the reduction or elimination of the use of animals in biomedical research (H.R. 282, H.R. 4479, and H.R. 6847).

What makes H.R. 4805 relatively novel is the appealing approach embodied in the preamble of the bill which states that a national center is to be established to develop and coordinate "alternative methods of research and testing" which do not involve the use of live animals.

Those of our readers who have occasion to see *Science*, the weekly publication of the American Association for the Advancement of Science, may have noted an article which appeared in the May 9, 1980 issue. The article was entitled "Legislating an End to Animals in the Lab," and it carried the subtitle "A bill backed by animal-rights activists could all but outlaw federally funded research using cats, rats, dogs, rabbits . . ." This article brought into sharp focus the potential impact of the legislation should it be successfully enacted. Moreover, the article likewise revealed the intense support being given the legislation by antivivisectionists and other animal-rights activists.

On the other hand, from our perception we have seen relatively little discussion of this legislation in the scientific or technical press, nor have we heard much mention of it at scientific or technical meetings. Yet, as brought out in the article in *Science*, "Those in the scientific establishment (who have studied the bill) say the impact of such legislation would be catastrophic. . . ."

Certainly, the basic nature of pharmaceutical research is such that any abrupt action to diminish the availability and use of animals for research and testing purposes would have a dramatic impact on both drug research and production—animals being widely used not only as precursors to human clinical testing in drug research but also, in many instances, as test subjects in quality control monitoring of drug products in production.

There is no question but that appropriate care, humane treatment, good housing, and a healthy environment must be accorded all research animals. Any noncompliance calls for stringent measures of regulatory enforcement against the violators. Happily, extensive progress had been made in these areas fully a generation ago, and present conditions of animal treatment in virtually all research centers are at a high level and generally in compliance with current legislation dealing with humane care and housing.

Furthermore, simple economic considerations have provided the scientific community with a strong incentive to devise and adopt *in vitro* methods to replace *in vivo* procedures wherever possible. *In vitro* methods are generally less expensive to conduct; they are more consistent and uniform; and their results are generally considerably more accurate. Hence, even in the absence of animal-rights considerations, there is strong motivation for science to replace animal test procedures with alternative methodology wherever possible.

The primary purpose of this editorial is not to serve as a defense for the use of animals in pharmaceutical research and testing. Our readers are fully cognizant of the importance of the use of animals for such purposes. Indeed, many of our readers are personally engaged in activities which involve their directly working with animals on a regular basis.

What we do wish to achieve by this editorial is the alerting of the pharmaceutical scientific community to the existence of this major legislative threat and the probable severity of the results if this innocent-sounding legislation were to be enacted.

It has only been within the last few months that regulatory measures were finalized to eliminate the use of prisoners in drug research as of June 1, 1981. This development is already having severe impact on human clinical research in the United States. If legislation of the sort now before the Congress were enacted relative to ending the use of animals in the laboratory, the ultimate impact would even dwarf that resulting from the regulatory action eliminating the use of prisoners.

Edward G. Feldmann