Fetal Research

On 12 July 1974, President Nixon signed into law Public Law 93–348, the National Research Act of 1974. Title II of this Act authorizes the establishment of a National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research.

One of the first tasks of this commission is to determine the nature, extent, and purposes of research involving living fetuses, and to consider alternative means for reaching those purposes. The commission is given 4 months to complete this study and to make recommendations to the Secretary of the Department of Health, Education, and Welfare (HEW). Until regulations are issued governing fetal research, HEW "may not conduct or support research in the United States or abroad on a living human fetus, before or after the induced abortion of such fetus, unless such research is done for the purpose of assuring the survival of such fetus."

As Assistant Secretary for Health, I have therefore instructed the health agencies of HEW to discontinue any such research, in their own direct activities as well as in grant or contract operations. This moratorium will remain in effect until the Secretary of HEW determines that it should be lifted.

It is also the responsibility of HEW grantees and contractors to discontinue any studies which fall within the limitations outlined above and to advise the awarding unit of HEW as to how they propose to comply with the mortatorium.

Questions about research projects which are subject to the moratorium should be addressed to the HEW awarding agency.

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Fishery Conservation

The article "Law of the Sea: Fisheries plight poses dilemma for United States," by Luther J. Carter (News and Comment, 26 July, p. 336) contains much useful information but, unfortunately, several errors.

For example, Carter states, "This year . . . an 'over catch' [of yellowfin tuna in the eastern Pacific Ocean] already has occurred because the member nations [of the Inter-American Tropical Tuna Commission] failed to agree on the quota in time to notify the fishing fleet before the tuna season began." The 1974 season began on 1 January, but, because of a price dispute, few vessels began fishing until late January. On 17 March 1974 the member nations agreed on a quota of 175,000 short tons of yellowfin, and on the following day it was announced that the regulation would go into effect on that date. This was immediately relayed by radio to the vessels at sea by their managing owners. As of 27 August 1974, 154,496 tons of yellowfin have been taken, and it is anticipated that by the end of the year the catch will be very near the quota.

Carter stresses that "international cooperation is not merely desirable but essential in the management of highly migratory species," but then says, "Efforts to achieve this have been carried on, generally without much success, by a number of international fishery commissions. The imperiled status of the bluefin tuna in the Atlantic and the potential threat to the still apparently abundant yellowfin tuna fishery in the Pacific illustrates how much remains to be accomplished." The Inter-American Tropical Tuna Commission, whose eight member nations take most of the total catch of tunas in the eastern Pacific Ocean, provides an outstanding example of international cooperation to achieve fishery conservation. The regulations of the commission, which have been in effect each year since 1966, are the result of recommendations of its scientific staff that are based on studies as exhaustive as its budget permits. The population of yellowfin of the eastern Pacific, according to all available evidence, is being maintained at approximately the level which will permit the maximum average sustained yield (*1*). Thus the greatest "potential threat" to this population would be refusal of one or more important fishing nations to cooperate with the regulatory program.

The reference to increases in the quota for yellowfin in the eastern Pacific requires explanation. The quotas have been increased from less than 100,000 tons during 1966 and 1967 to 175,000 tons in 1974. These increases have not resulted from pressure by the U.S. fishing industry, as Carter implies. Rather, the staff of the commission has

recommended, on the basis of its scientific studies, gradual increases in the quota as the vessels have fished farther offshore and caught fish that were underutilized a few years ago. The staff zealously monitors the fishery to detect signs of overfishing; if such signs occurred, the staff would recommend stricter regulations.

The Inter-American Tropical Tuna Commission cannot be a perfect answer to the conservation of tunas in the eastern Pacific Ocean, as many aspects of the life histories and population dynamics of these fish are yet not well understood. However, international cooperation, based on scientific studies, is clearly the most rational way to prevent disastrous overfishing of these important food fish.

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Reference

1. *Annual Report, 1973* (Inter-American Tropical Tuna Commission, La Jolla, Calif., 1973).

Keith Brouillard, head of the division of International Fisheries Analysis, National Marine Fisheries Service, was my authority for reporting that there already has been an "over catch" of yellowfin tuna this year. But Brouillard now concedes that it may well be true, as Joseph contends, that the total catch for the year will be within the established quota or will not exceed it significantly.—L.J.C.

Optical Brighteners and Social Responsibility

In response to Deborah Shapley's article (News and Comment, 12 October 1973, p. 145) about me and my activities in Sweden as an environmentalist and scientist, my colleagues Kilbey and Zetterberg (Letters, 1 March, p. 798) comment on optical brighteners, which are added to detergents, body soaps, paper, and so forth. It is suspected that these compounds cause genetic defects and it is well documented that brighteners have been the cause of allergies (*1*, *2*). However, Kilbey and Zetterberg claim that they have not been able to repeat my experiments (*2*) indicating mutagenic effects of certain brighteners in yeast.

Kilbey and Zetterberg also say, "At a meeting in Stockholm at which one of us reviewed the genetic activities of optical brighteners, Gillberg himself admitted that he is now unable to obtain positive results with these compounds." However, I also mentioned at that meeting that, after publishing my paper about brighteners in 1971, I discovered that only the original samples of brighteners that I had obtained from detergent producers induced mutations in yeast, while samples of the same brighteners obtained later did not induce mutations. This appears to indicate that the brightener producers either modified the brightener in question or that some kind of impurity now and then occurs in the brighteners that might induce mutations in yeast.

I also reported at the Stockholm meeting that I had discovered that the samples of brighteners that induced mutations in 1970 in several trials did not do so when tested 2 years later. I said that this might indicate that the factor in the brighteners that induced mutations in my early experiments was maybe not very stable and might have been inactivated because of the long storage period (at least 3 years from the time of production).

Kilbey and Zetterberg state, "If we startle the public too many times with sensational claims that are later retracted, we run a real risk of loosing our most valuable ally if and when a real crisis comes." I agree completely with Kilbey and Zetterberg. However, I have not made any sensational claims about brighteners; the only thing I say in my paper (*2*) is that I consider it of importance to carry on with genetic studies of brighteners against the background of my results. Research has now begun in other laboratories that should have been undertaken before the brighteners were released on the market. The benefits of a product must of course always be weighed against the risks it may create. In such a situation I prefer not to give the product the benefit of the doubt if there are some questions raised. Questions have been raised about these compounds, and I believe that it is my social responsibility to tell my fellow citizens about them.

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References

1. P. E. Osmundsen, *Br. J. Dermatol.* **81**, 799 (1969); A. J. Pinol *et al.*, *Med. Cutanea* **5**, 249 (1971).
2. B. O. Gillberg and J. Aman, *Mutat. Res.* **13**, 149 (1971).