COMMUNICATION TO THE EDITOR

To the Editor:

I wish to comment about the recent paper by Warner et al (1982) entitled "Prevention of Rancidity in Experimental Rat Diets for Long-Term Feeding." At least one vital reference is missing, as well as details about the composition of the rat diets.

It has long been known, contrary to the authors' statements, that experimental diets become rancid after various storage periods, depending on the type of mineral mixture present (Fox and Mickelson 1959). Certain copper, iron, and/or manganese salts are particularly promotive of oxidation in experimental diets. Thiamine destruction is also a problem with some mineral mixtures.

Unfortunately, Warner and co-workers failed to provide information about the type or composition of the mineral mixture they used. With the proper mineral mixture, rancidity can be delayed for long periods. Warner et al also gave no information about the composition of the vitamin mixture they used. The levels of vitamin E and possibly ascorbic acid, which are known antioxidants, are apt to be very important to the results they obtained. The importance of providing these types of details about experimental diets in scientific papers of this kind has been pointed out by the Committee on Laboratory Animal Diets of the National

0009-0352/83/010092001/\$03.00/0 ©1982 American Association of Cereal Chemists, Inc. Academy of Sciences (Newberne et al 1978) as well as other committees and researchers.

The authors should be commended for noticing the differences in rancidity levels in their experimental diets containing casein versus soybean protein sources and for drawing this to the attention of your readers. Unfortunately, many other experiments in which this factor was unnoticed have no doubt reached the scientific literature.

G. M. BRIGGS
Professor of Nutrition
University of California, Berkeley
Berkeley, CA 94720

LITERATURE CITED

FOX, M. R. S., and MICKELSEN, O. 1959. Salt mixtures for purified type diets. I. Effect of salts in accelerating oxidative rancidity. J. Nutr. 67:123. NEWBERNE, P. M., BIERI, J. G. BRIGGS, G. M., and NESHEIM, M. 1978. Control of diets in laboratory animal experimentation. Inst. Lab. Anim. Resour., Nat. Acad. Sci., Washington, DC, ILAR News, 21(2): A3.

WARNER, K., BOOKWALTER, G. N., RACKIS, J. J., HONIG, D. H., HOCKRIDGE, E., and KWOLEK, W. F. 1982. Prevention of rancidity in experimental rat diets for long-term feeding. Cereal Chem. 59:175.

[Received September 7, 1982. Accepted September 20, 1982]