Senator Nelson. In the March 16, 1967, issue of the New England Journal of Medicine a letter from you was printed. You make a very interesting point, and I would like to have the letter printed in the record at this point. I would like to have you look at it, refresh your memory, and extemporaneously give us your comments about it.

(The letter referred to follows:)

NEW ENGLAND JOURNAL OF MEDICINE, March 16, 1967.

PRICE FACTOR IN RELATION TO DRUGS

To the Editor: The price of the drug is virtually never stated in advertisements from pharmaceutical houses. Informed laymen are particularly annoyed by this, and in some recent books and popular magazine articles, physicians have been, perhaps, unjustly, accused of lack of concern for the costs that the patient must bear. This is of course, only a half-truth since most physicians, particularly those in private practice, are deeply concerned with such matters. A series of recent experiences in treatment of bacterial meningitis with ampicillin brought patient costs to mind once again. It seems of particular importance now that Time magazine, in a recent issue, has seen fit to report the value of this drug

to the general public.

The advocates of the use of ampicillin have presented convincing evidence that this drug is effective, when used alone in the treatment of meningitis due to the pneumococcus, meningococcus and *Hucmophilus influenzae*, and that it is as good as or better than other forms of therapy. I have no argument with the use of the drug, particularly in cases in which the offending organism cannot be definitely characterized in stained specimens of spinal fluid, and when 1 of the 3 organisms listed above is probably the responsible etiologic agent. I am concerned with the relative cost of ampicillin versus penicillin G, however, and would advocate a switch of therapy to the latter, less expensive drug, once the bacteriology laboratory has reported the pneumococcus or meningococcus to be present. I believe that most clinicians would agree, including those who have performed the valuable studies with ampicillin.

The cost to the patient in our hospital for penicillin G is \$0.25 per 1,000,000 units (600 mg.—supplied in vials containing 20,000,000 units), as compared to \$3.00 per 500 mg. of ampicillin for parenteral administration. Projecting this to a ten-day course of parenteral therapy, the cost for an adult receiving 1,000,000 units of penicillin every two hours would be \$30, and that for ampicillin given as 1 gm. every four hours would be \$360. Many clinicians would use even larger dose of the latter drug, particularly in the early stage of treatment. Costs will vary among hospitals and dose schedules in children, but the order of magnitude of the difference between penicillin G and ampicillin will probably be about the

same. I believe that the facts clearly speak for themselves.

CALVIN M. KUNIN, M.D.,

Associate Professor, Department of Preventive Medicine, University of Virginia School of Medicine.

CHARLOTTESVILLE, VA.

Dr. Kunin. Well, this concerns the treatment of meningitis with a new penicillin, Ampcillin, and I think that here we have had a wonderful addition to our medical armamentarium, the addition of this new particular penicillin, because of its great breadth of activity and its effectiveness in this particular form of disease. It does help the physician very often when he has to treat meningitis, which is a serious disease and which may be due to any one of three common organisms. This drug alone will often be quite effective.

Now, the problem arises in that this drug is very, very much more expensive than, say penicillin G alone, and all I point out here is that once the physician does actually have the diagnosis perhaps in a day or two, he can then stop the more expensive drug and go on to a very

much less expensive agent for the same therapeutic purpose.

Senator Nelson. Why? Is one of them a specific drug for one of the causative agents?