

*Benzyl Alcohol Penicillin Solution (Solution D)*—A sterile aqueous solution of benzyl alcohol (0.5%) was used as the vehicle to prepare the buffered penicillin solution.

**Results and Discussion**—The data from Table I show that the amounts of potassium penicillin G remaining in the control solution (Solution A) at specific times after the start of the experiment coincide rather well with predicted values which were calculated from published tables (20). Furthermore, it is noteworthy that the observed residual penicillin concentrations in the ethanol (Solutions B and C) as well as the benzyl alcohol (Solution D) solutions compared favorably with those of the penicillin control (Solution A).

Thus, these experiments have shown that potassium penicillin G can be mixed with ethanol solutions of concentrations as high as 70% for up to 10 days, with no greater loss than penicillin in aqueous solution. In a similar manner, it has been shown that benzyl alcohol, at a concentration of 0.5%, will not cause a decrease in stability of potassium penicillin G when in contact with the antibiotic for periods up to 10 days.

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ALVIN B. SEGELMAN  
NORMAN R. FARNSWORTH  
Department of Pharmacognosy  
School of Pharmacy  
University of Pittsburgh  
Pittsburgh, PA 15213

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## Books

### REVIEWS

**Experimental Methods in Pharmacology.** By CHARLES O. WARD. St. John's University Press, Jamaica, NY 11432, 1969. 119 pp. 15 x 23 cm.

This small book briefly describes 62 experiments under 18 different chapter headings. Some of the subjects covered are local anesthetics, psychotropic drugs, anticonvulsants, muscle relaxants, topical drugs, antihistamines, and diuretics. Most of the experiments described are time-tested. Unfortunately the book is not of general value even though it is well suited to the author's laboratory. The descriptions of the experiments are very short and in many cases not too informative. Many numbers are missing for dosages and stimulus parameters; no statement of the intent of the blank spaces is given. This reviewer presumes that the student is to furnish the numbers by reference to the literature.

In some cases the experiments are so inadequately described as to be seriously misleading. An example is the experiment on measuring blood flow with a rotameter. The obvious requirement that flow

measurements must have simultaneous pressure measurements to have physiological meaning is ignored. In addition the use of the carotid artery is questionable because of the parallel flow (unmeasured) through three other large arteries.

The book is marred by many typographical errors; some of these are quite humorous, such as untravenously and cammula. Dosages are given in variable units; cc. of solution per kgm. or by weight per kgm. Anesthesia seems to have been omitted in some experiments in which it seems indicated. In an experiment in which painful stimuli are applied to a guinea pig, no description of the animal's response is given.

This edition of "Experimental Methods in Pharmacology" cannot be recommended for general use. The ideas behind it are excellent, and a revision based on discussions with other pharmacology teachers would be a welcome addition.

Reviewed by R. P. Ahlquist  
Medical College of Georgia  
Augusta, GA 30902 ■