

## MAINTENANCE OF MOISTURE IN BACTERIOLOGIC CULTURE MEDIA

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**M**ANY laboratories prepare culture media and store them for future use but they do not seem to have appreciated the effect of partial dehydration caused by evaporation of moisture from the surface. For example, we have often received cultures on slants of Loeffler's blood serum medium or on blood agar that had become excessively dry. Many microorganisms thrive best in the presence of abundant moisture. Also the concentration of ingredients is affected by dehydration. Hence it is essential to minimize losses of moisture.

In this laboratory, Petri dishes with porcelain covers glazed on the outside are poured approximately 25 ml. each and are stored in an electric refrigerator. The average loss from evaporation, judged by loss of weight, is 0.10 ml. per day. Consequently, the date each medium is poured is noted on a slip of paper which is attached to the set of dishes. When a plate is needed sterile water is added, 0.10 ml. for each day since it was poured, and is spread lightly by a sterile glass spreader. The plate is allowed to stand about a half-hour and is then inverted to drain off any unabsorbed moisture. It is then ready for use.

We have kept different types of blood agar and media containing critical concentrations of bacteriostatic agents for considerable periods of time and have found them entirely satisfactory while other plates from the same lot but not so treated gave poor results.

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