Also a great many permanent histological preparations of various amphibian tissues have been studied with the same negative result. The possibility that they might be embryonic in type suggested itself and accordingly a large number of cultures of various tissues from the tadpole have been made and studied. In several of these, cells comparable in size and activity have been found. The experiments are still in progress.

## 220 (2452)

### The blood platelets in rats on adequate and inadequate diets.

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In view of the fact that Bedson and Zilva[1] disagree with Cramer, Drew and Mottram[2] on the behavior of the blood-platelets in rats deficient in vitamin-A, it was found desirable, in the course of the study of the pathology of avitaminosis, to investigate this disputed question. Applying a method for platelet counting which has for its basic principles the minimum of manipulation and the absence of contact of the drawn blood with possible coagulant surfaces, we have found the blood-platelet content in normal albino rats on adequate diets to approximate 400,000 to 600,000 per cu. mm. We have not observed any significant variation from this average in rats subsisting on diets lacking vitamin-A and showing the typical symptoms of such a deficiency. These observations are essentially different from those of all the above mentioned workers in regard to the normal platelet content of white rats, and confirm Bedson and Zilva's contention that the platelet content is not affected by diets deficient in vitamin-A. The method employed, suggested by Dr. A. B. Dayton's practice on man, is as follows: after the freely pro-

[1] Bedson, S. P., and Zilva, S. S., *Brit. J. Exp. Path.*, 1923, iv, 5.

[2] Cramer, W., Drew, A. H., and Mottram, J. C., *Proc. Roy. Soc. B.*, 1922, xciii, 449.

truding tail of the encaged rat is washed, if necessary, with water and dried, a portion of its surface is painted with the diluent and allowed to dry. One of the superficial veins in that area is then punctured with a sharp lancet on which the diluent has also been dried, and as the blood wells up freely it is drawn up into an erythrocyte pipette, the stem of which had previously been filled with the diluent to the 0.5 mark, until the diluent column reaches the 1.0 mark. The diluent is then added to the 101 mark, giving the usual 1:200 dilution. After shaking the pipette for not less than three minutes, a direct count is made of the red blood corpuscles and platelets in the same preparation. The platelets are allowed at least ten minutes to settle. Although the vast majority of the latter are distributed singly, preparations are considered good if not more than six are found in the occasional clump. The primary essentials for consistent count are: a scrupulously clean counting chamber and pipette, the filtering of the diluent[3] immediately before use, the presence of the anticoagulant in the pipette before the entrance of the blood, and a free flow of blood from the wound.

## 221 (2453)

### A technique for the study of fat production in animals.

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The study of the relation of food to the quality of fat laid down in the animal body is not new. The chief criticism, however, which applies to most of the past investigations concerns

[3] The diluent used is that suggested by Rees, H. M., and Ecker, E. E., *J. Am. Med. Assn.*, 1923, lxxx, 621:

| | |
|---|---|
| Sodium Citrate | 3.8 gm. |
| Formaldehyde | 0.2 cc. |
| Brilliant Cresyl Blue | 0.1 gm. |
| Distilled water q. s. ad | 100.0 cc. |

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