This filtrate is then dialyzed in cellophane tubing for several hours against distilled water to remove the excess of sodium chloride. It is advisable at this point to test the thrombic action of the extract upon some oxalated plasma to ascertain whether a sufficiently active preparation has been obtained. The solution is next dialyzed for 72 hours against a Sørensen buffer mixture pH 7.38 (95 gm. Na_2HPO_4 and 19 gm. KH_2PO_4 in 20 liters of water). During this period the dialyzing liquid is renewed either by a continuous slow stream or by changing the outside liquid half a dozen or more times. The material is finally dialyzed for 5 hours against running, distilled water to remove the phosphates. The solution is filtered without pressure through a No. 5 Whatman filter paper and the now clear filtrate is dried at room temperature before an electric fan. The material thus obtained is soluble in water and the solutions show strong thrombic action. Two drops of a 0.7% solution will cause clotting of 3 drops of oxalated plasma in approximately 30 seconds with most specimens. In dry form the potency of the preparation is retained apparently indefinitely. Saline solutions give neither precipitate nor opalescence on boiling, indicating the absence of heat coagulable protein. Positive reactions for protein are given by the biuret, xanthoproteic, Adamkiewicz, ninhydrin, and Folin-Denis reagents. Positive reactions are given also for the presence of sulfur (cystine) and phosphorus. Tests with the Molisch reagent and for purine bases were negative. Prolonged dialysis of the solutions against distilled water inactivates this thrombin indicating, possibly, that it is a protein of the globulin group.

7783 C

Number of Thrombocytes and Leucocytes in Blood of Adrenalectomized Rats.

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Peripheral blood was obtained from each of a group of 15 normal rats for determining the total number of thrombocytes. Each blood sample was collected in a Trenner automatic red cell pipette and diluted one part to 200 with Ringer's solution (Casey and Helmer) and a small amount of cresyl blue added. After being shaken for 5 minutes in an automatic shaker, the platelets in 240 small squares

TABLE I.
Effect of Adrenalectomy on Platelet Count.

Animal No.	Before Adrenalectomy			Days after Adrenalectomy				Days to death
	1st Count	2nd Count	Nor. Ave.	2	4	6	8	
M 1	696,000	597,000	641,500	480,000	506,000	976,250	1,305,000	11
M 2	558,500	586,000	565,500	518,000	555,000	1,021,500	Death in 8 days	
M 3	602,500	604,500	603,500	499,000	501,000	1,040,000	1,055,000	11
M 4	493,500	472,500	483,000	353,000	410,000	Death in 7 days		
M 5	482,000	510,000	496,000	467,000	760,500	Death in 5 days		
M 6	606,500	554,000	580,250	570,000	705,000	Death in 5 days		
F 7	258,500	365,000	311,750	506,000	525,000	504,750	682,500	11
F 8	295,000	399,750	347,370	612,500	765,000	Death in 6 days		
F 9	234,000	230,000	232,000	364,000	447,000	838,500	Death in 9 days	
M 10	523,500	541,000	532,250	440,500	597,000	918,000	802,000	12
M 11	659,000	472,000	565,000	589,000	831,250	1,126,500	842,500	10
M 12	469,000	452,500	466,750	472,500	644,000	713,000	690,500	14
M 13	363,000	397,750	380,750	373,500	550,000	853,000		7

M—Male F—Female

on both sides of a double chambered Neubauer hemocytometer were counted by 2 workers for each animal.

After the average normal platelet count was obtained, the rat was bilaterally adrenalectomized. Two days were allowed for recovery from the operation and on alternate days, thereafter, the numbers of platelets were enumerated until death occurred from adrenal insufficiency. The results obtained on the 13 rats of the group which died of adrenal insufficiency are recorded in Table I. They averaged 477,350 in the normal state and 840,270 just before death, an average increase of 76%.

The total number of white cells in the blood of 34 normal rats averaged 11,319 while just before death from adrenal insufficiency the leucocytes averaged 17,576 per cubic millimeter of blood. This leucocytosis is in agreement with the observations made by Zwemer and Lyons[1] and also by Corey and Britton[2] on adrenalectomized cats.

Differential white cell counts were made on a group of 19 rats before and after adrenalectomy. In the normal state the lymphocytes averaged 81.2%, two days after operation 84.7% and just before death from adrenal insufficiency 88.4%. With the increase in lymphocytes there was a concomitant decrease in the neutrophils. The numbers of the other types of white blood cells seemed unchanged.

7784 P

Bacteriostatic Action of Irradiated Dye Media

HAROLD LEON FRUITMAN. (Introduced by H. F. Blum.)

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The writer has observed that the growth of bacterial organisms is inhibited on culture plates which contain photosensitizing dyes, and which have been exposed to light of relatively low intensities. The culture media used were eosin-methylene blue, and Salle plates, the latter containing erythrosine, brom-cresol-purple, and methylene blue. When *B. coli* and *B. aerogenes* were streaked upon such irradiated plates, growth generally did not occur when the plates were subsequently incubated at 37°C. Plain agar plates containing no

[1] Zwemer, R. L., and Lyons, G., *Am. J. Physiol.*, 1928, **96**, 545.

[2] Corey, E. L., and Britton, S. W., *Am. J. Physiol.*, 1932, **102**, 699.