

TABLE II.
POIKILOTHERMOUS DECEREBRATE PIGEON.

Date.	Time.	Temperature of Cage.	Body Temperature.
Nov. 6.	12.15 P.M.	30° C.	40.2° C.
" "	2.00 P.M.	30° C.	39.0° C.
" "	4.00 P.M.	30° C.	40.0° C.
" "	4.15 P.M.	.4 c.c. of pituitrin	
" "	5.30 P.M.	30° C.	43.1° C.
" "	6.00 P.M.	30° C.	43.2° C.
" "	7.30 P.M.	30° C.	43.5° C.
" "	9.00 P.M.	24° C.	—
Nov. 7.	10.00 A.M.	24° C.	32.0° C.

The rise in body temperature persists for twelve to twenty-four hours and then falls to a level determined by the environmental temperature.

We have been unable to continuously maintain the body temperature at the normal level by pituitary extract alone without the aid of the warm incubator. Frequently repeated injections of the extract lead to the death of the animal preceded by weakness and general prostration.

A number of quite different factors seem to be involved in this thermic reaction. Further details and discussion will be presented later.

62 (1809)

Relation of splenectomy to growth and appetite in the rat.

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With a view of studying the alleged effect of splenectomy on appetite and growth,¹ experiments were carried out on white rats using the standard feeding technic of Osborne and Mendel. The growth was thus accurately measured and the qualitative as well as quantitative aspect of the food intake carefully controlled. Sixteen rats were splenectomized as nearly as possible at the age of 40 days. Of these, five were observed for 34 weeks, three for 43,

¹ Richet, *J. de Physiol. et de Pathol.*, 1912, xiv, 689; 1913, xv, 579. Prym, *Verhand. des Kongr. f. innere Med.*, 1911, xxviii, 398.

and the remaining rats, which were the progeny of splenectomized parents, were observed for 23 weeks. In no case was there evidence of an increased appetite nor of variation from the normal growth rate.

Erythrocyte count on five of the "second generation" splenectomized rats gave no indication of anemia following the operation.

63 (1810)

Determination of optimum amount of antigen in complement fixation tests.

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A study of the quantitative relation between antigen and antibody in complement fixation, suggested a simple procedure for determining the optimum amount of antigen in these tests. Wassermann, protein and bacterial antigens were employed with their specific antisera. It was observed in the case of the Wassermann antigens (alcoholic, cholesterinized and Noguchi), that each one appears to possess an optimum concentration for binding complement with positive sera. This concentration could be determined only with weak positive sera, preferably those giving + and ++ reactions. The stronger positive sera do not seem to be markedly affected by the quantity of antigen employed.

The procedure consists in first determining the antigenic unit, or smallest quantity which gives complete fixation with some positive serum. A weekly positive serum is then pipetted into a series of 10 tubes, employing the same quantity used in the regular tests. The first tube then gets $\frac{1}{4}$ unit antigen; the second, $\frac{1}{2}$ unit; the third, 1 unit, etc.; the last tube getting about 10 units of this ingredient. After the fixation period, it will be observed, on adding sensitized cells, that certain tubes—not necessarily those containing the largest amount of antigen—will show the maximum amount of fixation. The number of antigenic units contained in these tubes being known, therefore, that number showing the maximum fixation, represents the optimum amount of antigen to