ever, that some factor, such as inability to absorb this particular extract, is responsible for the negative findings, but it seems more probable that sexual differences in plumage and eye-color of this species have been differentiated with reference to factors other than the primary sex hormones.

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Antifibrinolytic Titer of Commercial Antistreptococcus Serums.*

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Twenty-eight commercial antistreptococcus serums† have been titrated for their neutralizing power (a) against the specific anti-human streptococcus fibrinolysin of Tillett and Garner,[1] and (b) against the two antiveterinary streptofibrinolysins of Madison.[2] The highest serial dilution of each antiserum completely neutralizing an arbitrary fibrinolytic dose of the selected streptococcus filtrates was taken as its approximate titer. Data thus obtained are recorded in Table I.

The table shows that each of 3 animal species tested is relatively immune to the homologous streptofibrinolysin, but has only minimum humoral defenses against the 2 heterologous streptolysins.

The titers of the specific antiserums suggest that only 6 (21%) of the 28 serums tested are of sufficiently high antifibrinolytic content to serve as effective passive antifibrinolytic immunizing agents in man.‡ But 2 (7%) of them would be similarly effective with horses. None of the antiserums would have a predictable antifibrinolytic immunizing value for domestic swine.

It is of interest that the 7 "refined" and "concentrated" anti-

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† These antiserums were kindly furnished by: Eli Lilly and Co.; The Cutter Laboratory; Parke, Davis and Co.; Lederle Laboratories; and E. R. Squibb and Sons.

1 Tillett, W. S., and Garner, R. L., *J. Exp. Med.*, 1933, **58**, 485.

2 Madison, R. R., PROC. SOC. EXP. BIOL. AND MED., 1934, **32**, 444; 1933, **32**, 641.

‡ So far as known there is no parallelism between the antifibrinolytic titer and therapeutic value of antistreptococcus serums. (W. H. M.)

TABLE I.

Titer of Streptococcus Antiserums.

An arbitrary dose of approximately 10 minimum fibrinolytic units of each streptococcus filtrate was added to 1:10, 1:100, 1:1000, and 1:10,000 dilutions of each antiserum, controls being run with normal human, horse, and swine serum. The resulting mixtures were incubated for 3 hours, then tested for their fibrinolytic power. Purified human, horse, and hog fibrins were used in all fibrinolytic tests, the technic throughout being identical with that used by Tillett and Garner.[1] The maximum serial dilution of a serum giving complete neutralization of the arbitrary fibrinolytic dose was taken as its approximate titer. 0, no demonstrable neutralization of the fibrinolytic dose in the highest serum concentration tested, *i. e.*, 1:10.

The table records composite data from 2 tests with different streptococcus filtrates. In several cases the 2 tests gave slightly different titers with the same serum. In such cases the mathematical average is recorded.

	Antifibrinolytic units per cc. when titrated against the arbitrary dose of:		
serums	Anti-human streptofibrinolysin	Anti-horse streptofibrinolysin	Anti-swine streptofibrinolysin
Normal Serum Controls:			
Pooled adult human serum A, B, C	50	5	10
Normal horse serum A, B	0	100	5
Normal hog serum A, B	5	10	50
Commercial Antiserums:			
Nos. 23, 30, 31	0	100	5
22	0	1000	5
25§	5	500	10
11	5	1000	5
29	10	100	0
14, 19	10	1000	0
7, 9, 10	10	1000	10
21	50	100	10
16	100	50	5
18	100	500	0
13	100	1000	0
24§, 32§, 33§	100	1000	5
1, 15§	100	1000	10
5	100	5000	5
20§	1000	100	5
17	1000	1000	5
2	1000	1000	10
6§, 12	1000	1000	100
8	1000	5000	50

§ "Refined" and "concentrated" antiserums.

serums in the above list are not appreciably superior to the 21 presumably untreated antiserums.