to an intact cell, provided that its activity is released by coagulation initiated in some other way. This activity is not manifested in the prothrombin consumption test described by Prof. Quick because the clot is separated by centrifugation, which also effectively removes the red cells. That centrifugation has this effect also demonstrates that the activity observed is not due to red cells which have been hæmolysed. Some of our recent observations tend to show that, prior to the red cell developing this activity, it has a contrary inhibitory effect. This is in agreement with findings reported by Prof. Quick.

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P_1 Antigen in the Human Fœtus

IT is well established that in the human fœtus and new-born the P_1 antigen is incompletely expressed[1,2]. In the course of testing blood from 403 fœtuses between the ages of 12 and 28 weeks we have confirmed that the incidence of P_1 is below the adult-level; however, it was found to be considerably higher in young than in old fœtuses. Moreover, in the early fœtuses the strength of the agglutination also tended to be greater.

Table 1

Crown-rump length	P_1^+	P_1^-	Total	Percentage P_1^+
Less than 10 cm.	50	36	86	58·14
More than 10 cm.	67	250	317	21·14
Adults (ref. 3)	1,984	641	2,625	75·58

Taking a dividing line at 10 cm. it can be seen from Table 1 that the distinction between these two groups of fœtuses is highly significant.

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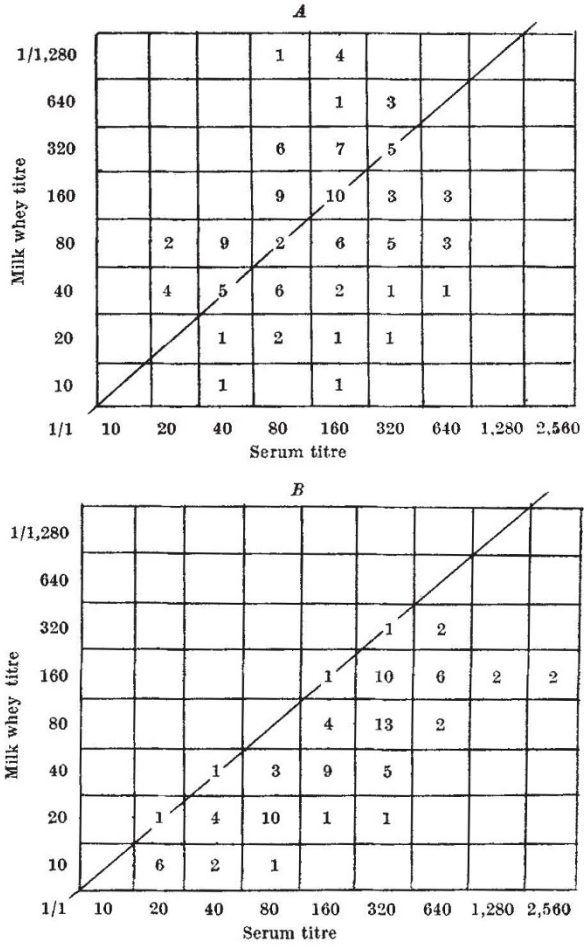
IMMUNOLOGY

Selective Secretion of Circulating Antibodies in the Milk of the Rat

PASSIVE immunity is transmitted from mother to young in the rat, as in the mouse[1], partly before birth, but chiefly after birth by way of the milk and the gut of the suckling. Postnatal transmission continues until the twentieth day of age[2], when the capacity of the gut of the young rat to absorb antibody terminates although antibody continues to be secreted in the milk. The lactating female rat was chosen for investigating the transmission of antibody from the circulation to the milk.

Table 1. CORRELATION TABLES OF MILK WHEY AND SERUM TITRES OF RATS AFTER PRIMARY (*A*) AND SECONDARY (*B*) IMMUNIZATION



Female rats were actively immunized within a day or two of the first littering with *Brucella abortus*. Two injections, one of 0·5 and another of 0·75 ml. of the World Health Organization standardized *Brucella abortus* agglutination concentrate, washed and resuspended in a five-fold dilution in saline, were given two days apart subcutaneously in the neck region. Paired samples of blood and milk were collected daily, or on alternate days, and the serum and milk whey titrated in parallel. The same procedure was repeated at the termination of subsequent pregnancies of these same animals.

Antibody appeared in the serum five days after the primary immunization and by the ninth day had attained titres of 1/160–1/640. Thereafter the titres declined gradually to 1/40–1/80 by the end of the first lactation and were at or near this level at the time of each subsequent immunization. The secondary response was more variable: the majority of animals had attained comparable serum titres of 1/160–1/320, while a few animals showed titres of 1/640–1/2,560, by the seventh day.

The appearance of antibody in the milk was strikingly different after primary, as compared with subsequent, immunizations. After primary immunization antibody appeared in the milk one or two days later than in the serum, and by the tenth day reached maximum titres equalling or exceeding those in the