

whether, as is the case with large primary tumors at this time, the growth will go on independently of the host's condition of nourishment.

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Preliminary report upon the transmission of haemolysins from mother to offspring.

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In view of the fact that little work has been done upon the transmission of hæmolysins from mother to offspring, and that there is a lack of agreement between the reported results of the workers in this field, the subject was taken up for further investigation. The question is of practical importance, since a parallel relationship exists between hæmolysins and bacteriolytic bodies: the latter group of substances play a more or less important rôle in immunity against certain infections.

Goats were selected as the most suitable experimental animals for these studies. In each case the animal was actively immunized by repeated injections of washed sheep-corpuscles given subcutaneously. Serum and milk samples were collected, throughout each experiment, and stored in an ice-box. All were tested at the same time, under uniform conditions, after the given experiment was closed.

One series of animals were immunized immediately following the birth of their young. In all, excepting one case, the milk contained no demonstrable hæmolysins. As evident, the sucklings from the mothers which supplied the negative milk, gave negative sera. The suckling which received the mother's milk containing hæmolysins, showed no specific hæmolysins at any time in its serum. The hæmolysins did not appear (by test) in the milk in this case until about one week after birth of the young.

A second series of animals were immunized at different periods during the course of gestation. Before birth of the young the animal's nipples were sealed to prevent the young getting any

milk before blood samples were taken. When twins came, one was placed, at once, upon cow's milk for control. At the time of birth none of the young showed specific hæmolysins in the blood serum. But those getting the colostrum and first milk rapidly acquired, and retained, the specific antibodies. The colostrum in those cases was very rich in hæmolysins, but the antibodies disappeared from the milk output after a few days, in so far as we were able to ascertain.

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The effects of intraperitoneal injections of adrenalin on the partition of nitrogen in the urine of dogs.

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Underhill and Closson have shown that the *subcutaneous* injection of adrenalin chlorid solutions into dogs is not attended by any significant change in the proportion of the urea, ammonia and creatinin nitrogen of the urine.

In our work we used two specimens of the colorless adrenalin chloride, 1:1000, of Parke, Davis and Co. They were purchased in the open market. Each was tested for its pressor action at the conclusion of the corresponding injection experiments and was then found to be practically as active as ever.

The metabolism experiments were carried out by the methods in use in this laboratory.

Intraperitoneal injection of adrenalin chloride solutions was without effect on the proportions of nitrogen in the forms of urea, ammonia, creatin and creatinin, purins and allantoin.

In one adrenalin injection period of eighteen days, a total of 62 c.c. of a 1:10,000 adrenalin solution was given intraperitoneally and in another injection period of six days a total of 29 c.c. of a 1:1000 adrenalin chloride solution was administered.

The following table shows the different percentages of nitrogen for the several experimental periods: