

various combinations, points to a similarity between the chick-growth response on antibiotics and surface-active agents. Preliminary investigations of a possible synergistic effect between surfactants and B₁₂-antibiotic supplements have been negative. Further studies on this discovery are being continued by the Nutritional Group of National Distillers Research Division.

Manuscript received Sept. 11, 1951.

Hereditary Differences in Ability to Conceive Following Coitus in Mice¹

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Recent studies of the effects on embryonic development of cortisone injected into pregnant mice included observations on the strain differences in response to treatment (1). The mice were of 5 genetically different stocks: strains A, C57 black, and Black and tan, all originally received from the Jackson Laboratory at Bar Harbor, a stock (N) carrying the mutant "Naked" which was inbred in this laboratory for 11 generations, and a genetically heterogeneous stock (H). Very early in the cortisone studies it was found that these 5 stocks of mice fell into two distinct groups with respect to incidence of cleft palate in the offspring of pregnant mice injected with cortisone. Stocks A and N showed a very high incidence, whereas stocks C57, Black and tan, and H produced a relatively low incidence of offspring with cleft palate.

Strain differences have also been found in the incidence of pregnancy following coitus. When a female was found with a vaginal plug it was assumed that she had been inseminated within the preceding 24-hr period.

Table 1 shows that pregnancy does not necessarily follow insemination of the adult female mouse and suggests that female mice of some stocks (A, N) are less likely to become pregnant following coitus than female mice of other stocks (C57, Black and tan, H).

TABLE 1
INCIDENCE OF PREGNANCY FOLLOWING OBSERVATION OF
VAGINAL PLUG IN 5 STOCKS OF MICE

Stock	No. females with vaginal plug	No. pregnant	Percentage pregnant
A	35	5	14.3
N	14	4	28.6
C57	18	14	77.8
Black and tan	15	9	60.0
H	2	2	100.0

¹This work is part of a project made possible by a grant from the National Research Council of Canada. Thanks are due F. Clarie Fraser for closely supervising the entire project.

TABLE 2
INCIDENCE OF PREGNANCY FOLLOWING OBSERVATION
OF VAGINAL PLUG IN 2 GROUPS OF MICE*

Stock	No. females with vaginal plug	No. preg- nant	Per- centage preg- nant
A, N	49	9	18.4
C57, Black and tan, H	35	25	71.4

* The difference between the two groups is highly significant at the 1% level ($\chi^2 = 9.8263$, $P \ll 0.01$).

In Table 2 the data presented in Table 1 are grouped according to susceptibility to cortisone treatment as measured by the incidence of cleft palate in the offspring of cortisone-treated pregnant females.

The animals of stocks A and N (both stocks highly susceptible to cortisone treatment) were significantly less likely to become pregnant following coitus than animals of C57, Black and tan, and H (the three stocks constituting the cortisone-resistant groups).

Reference

1. FRASER, F. C., and FAINSTAT, T. D. *Pediatrics* (in press). Manuscript received July 2, 1951.

A Simple Technique for Repeated Collection of Blood Samples from Guinea Pigs

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In studies on the action of antibiotics, chemotherapeutics, or antigenic substances, it is frequently necessary to bleed a guinea pig at certain intervals for micro- or semimicrochemical work related to their absorption, blood concentration, therapeutic activity, etc. Frequent bleedings may also be necessary in studies on blood circulation of bacteria, viruses, or antibodies. Heart puncture is not advised when re-

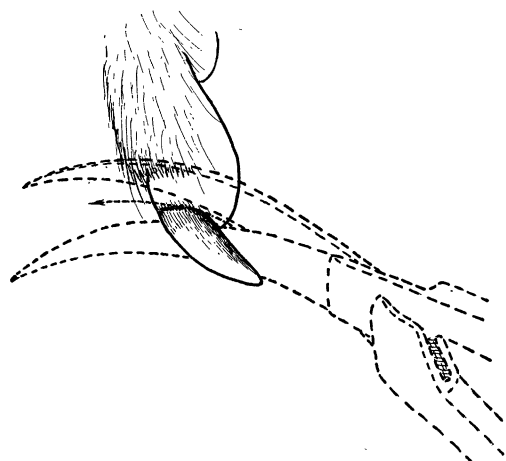


FIG. 1.