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A Second Note on the Communicability of Colds.*

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It is generally accepted that the common cold is extremely contagious during the primary stage of the affection, and recent observations[1] have tended to show that the common cold is transmissible during its incubation period. Undoubtedly the spread of the contagion from individual to individual during these two stages accounts for the majority of colds, but there are numerous instances of infection in which this mode of spread cannot be substantiated.

The possibility that the infectious agent may be spread by food or fomites has always had many adherents, but as yet there have been no carefully controlled observations upon this point. We, therefore, decided to put to experimental test the belief that the infectious agent of colds can be transmitted upon food contaminated by an individual suffering from an acute common cold.

At the time of the experiment 15 chimpanzees had been under constant observation from July 15 until September 19, 1932. None had shown any signs of a cold. On September 19 the animals were placed in strict isolation in separate cages, distributed in 4 widely separated rooms and during the isolation period the doors to these rooms were locked. The attendants wore masks and gowns and scrubbed their hands thoroughly before coming in contact with the apes or their food. All of the attendants were examined daily during the entire period of isolation for signs of upper respiratory tract infection. All remained healthy. The isolation technique was continued for a period of 3 weeks.

Upon September 26 (the seventh day of isolation) an individual suffering from an acute common cold (second day) prepared breakfast, luncheon and supper for the apes. This individual saw neither the apes nor the attendants while entering the kitchen or preparing the food. After the food was prepared and placed in the containers the individual ill with the cold departed and the attendants then placed the food in the apes' cages.

Within 48 hours after the first meal, 5 of the apes had developed

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[1] Long, P. H., Bliss, E. A., Carpenter, H. M., *Bull. Johns Hopkins Hosp.*, 1932, **51**, 278.

typical common colds characterized by nasal discharge, nasal obstruction, mouth breathing, slight fever, and a leukocytosis. Two of these apes developed moderately severe coughs. The nasal discharge persisted in all animals for at least 10 days. There were no secondary cases among the other 10 apes.

Summary. We feel that the observations just recorded add experimental proof to the common belief that colds may be spread by infected food, and bring into the foreground the necessity of excellent personal hygiene upon the part of those individuals ill with common colds.

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Metabolism in Pregnancy: XI. Blood Sugar Changes During Delivery.

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In the course of an extended investigation on various aspects of the metabolism during pregnancy a series of records were made while the patient was actually in labor and immediately thereafter. It is a well-recognized fact that during pregnancy blood sugars are at a low normal level. In our own series[1] the average level throughout gestation was 83 mg. and the average extreme fluctuation from 81 to 86 mg. In the present instance, a series of 25 patients were exam-

TABLE I
General Data

	Average or Record
Age, high	40 yrs.
low	18 "
average	25 "
Parity, high	10
low	1
average	2.8
Duration of Labor, high	41 hr. 55 min.
low	0 " 55 "
average	12 " 54 "
Last food before a.p. blood, high	21 hr. 30 min.
low	0 " 45 "
average	11 " 2 "
Time of a.p. blood before delivery, high	27 hr. 25 min.
low	0 " 15 "
average	6 " 4 "

[1] Rowe, Gallivan and Matthews, *Am. J. Physiol.*, 1931, **96**, 94.