through drying the same fundamentally as laking by hypertonic solutions? Brahmachari[1] suggests that hypertonic solutions of sodium chloride lake by uniting with some cellular constituent and thus alter its normal properties. If this is true, it would seem that such union is at least of a doubtful chemical character; for a number of inorganic salts as well as cane sugar and glycerine in hypertonic solution may cause laking.

It is conceivable that the abstraction of sufficient water from the discs in any manner as by evaporation or by hypertonic solutions or by freezing, may so alter the molecular arrangement of the essential structures that it is not possible for them subsequently to imbibe or otherwise take up water and regain their normal properties,—hence laking.

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The schizogony in the life-cycle of Sarcocystis muris.

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The first period of the life cycle of *Sarcocystis muris* extends from the date of infection to the entrance of the unicellular parasite into the muscular tissue of the host (20 to 30 days).[2] In my former publications I could only describe from this period some large ameboid forms found in the walls of the intestine and in the lymph vessels of experimentally infected mice.[3]

My present investigation shows the appearance of small ameboid and schizogony forms six days after infection. These stages were discovered after feeding sarcosporidia to young mice nourished with milk from birth to the end of the experiments. These small schizogony forms (0.3 to 0.4 μ) consist of a tiny protoplasmic body with a caryosome-nucleus, and arise from smaller ameboid organisms which show typical schizogony.

[1] *Bio-Chem. Jr.*, 1909, IV, 59.

[2] Erdmann, "Die Entwicklung der *Sarcocystis muris* in der Muskulatur," *Sitzungsberichte der Gesellschaft Naturforschender Freunde*, 1910, p. 399.

[3] Ibidem, p. 382. Also cf. Erdmann, "Beiträge zur Morphologie und Entwickelungsgeschichte des Hammelsarkosporids in der Maus," *Centrb. für Bakt. und Parasitk.*, 1910, Bd. 53, Abt. I Orig., p. 515.

Although these mice did not contain any other protozoan parasites in the intestine, I hesitate to connect positively the small ameboid and schizogony forms with the newly introduced Sarcosporidian "spore" until further study actually demonstrates the transition.

A complete account of the work will appear in the *Arch. d. Zool. expér. et gén.*, T. 52, 1914.

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The purine enzymes of the anthropoids and marsupials.

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Previous studies have shown that the human organism contains no enzymes which will destroy uric acid *in vitro*, in which respect man differs from all other mammals hitherto investigated. This corresponds with the repeated observations, especially of Wiechowski, that man alone of all domestic mammals excretes uric acid rather than allantoin as the chief end product of purine metabolism. These facts have been especially emphasized of late by Andrew Hunter. One of us found that even the monkey has no demonstrable uricolytic enzymes in its tissues. Wiechowski made the interesting observation that the chimpanzee, like man, excretes only uric acid and little or no allantoin, while Hunter and Givens reported that monkeys resembled the other mammals in excreting chiefly allantoin, corresponding with our observations on the purine enzymes of the monkey. We have recently, through the kindness of Dr. W. T. Hornaday of the New York Zoölogical Society, come into possession of two fresh bodies of anthropoids—a male chimpanzee and a female orang-utan. Examination of their tissues shows that, like man, they do not possess the uricolytic enzyme, uricase, demonstrable *in vitro*. They also resemble adult man in having guanase but no demonstrable adenase. Hence it seems that the anthropoids stand with men in constituting, in respect to uricolytic power, an exception to all other known mammals; the monkeys resemble the other lower mammals in