CLXXVI. A FURTHER NOTE ON THE VALUE OF EGG-WHITE AS THE SOLE SOURCE OF NITROGEN FOR YOUNG GROWING RATS.

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IN a former communication [Boas, 1924] it was stated that a diet containing all the substances essential for normal growth, but supplying protein solely in the form of egg-white, was inadequate to support growth and health in young rats. This was contrary to the results obtained by Osborne and Mendel [1913, 1, 2; 1915], and Prof. Mendel has been kind enough to suggest that some divergence in the conditions of the experiments might account for the discrepancy. The egg-white used in my experiments was, as stated, a dried commercial sample of Chinese origin. I was not therefore justified in concluding that my observation applied to egg-white in general, but, under the circumstances, I hope Prof. Mendel will pardon my rashness.

I have since compared the value of the whites of fresh hen's eggs and this dried commercial preparation as the source of protein. In both cases the egg-white was, as in my former experiments, coagulated by heat before incorporation in the diet. The rats fed on the white from fresh English eggs grew normally and had good coats, whereas those fed upon the commercial preparation ceased to grow after they had received the diet for from four to six weeks, and the typical symptoms of loss of hair, etc., described in my former paper, appeared. These results obtained with fresh egg-white confirm the experiments of Osborne and Mendel, to whom I express my regret that I should by inference have cast any doubt upon the conclusions arrived at by them.

I am at present engaged in investigating the cause of the failure following the use of the dried egg-white, but I have not as yet been able to arrive at any definite conclusions.

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