the blood of vitamin B deficiency in the albino rat was found to be too small to be considered of any significance, neither was there any appreciable rise in the concentration of urea nor uric acid.

It was rather surprising to find that losses to the extent of 30% in body weight did not produce any greater increase in concentration of non-protein nitrogen of the blood than 8 to 10%.

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Avitaminosis. IX. Influence of Vitamin A Deficiency on Albumin-globulin Ratio of the Blood of Albino Rat.*

M. C. KIK AND BARNETT SURE.

From the Department of Agricultural Chemistry, University of Arkansas, Fayetteville.

Since it is now generally recognized that infection accompanies vitamin A deficiency,[1] and since it is claimed that during infection there is a change in the albumin-globulin ratio of the blood,[2] due to the rise of the globulins, it was thought of interest to investigate if in this avitaminosis there is produced a shift in the albumin-globulin ratio of the blood of the albino rat.

A total of 18 animals were used in this study, 12 pathological and 6 controls. The micro methods used for the determinations of albumin and globulin were those perfected by Greenberg.[3] Weekly determinations were made for periods ranging from 63 to 102 days. The animals were 49 to 61 days old when started on the experiment and weighed 82 to 127 gm.

Summarizing all of our results for the entire experimental periods, the pathological animals showed an albumin-globulin ratio of 2.0 and the controls a ratio of 1.7. Only 4 animals out of the 12 pathological showed any considerable fall in the albumin-globulin ratio during the terminal stages of the avitaminosis, as indicated by a ratio of 1.3 in 2 animals and a ratio of 1.5 in 2 others.

From the character of our results we conclude that the albumin-globulin ratio cannot be used as an index of infection in vitamin A deficiency.

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[2] Howe, P. E., *Physiol. Rev.*, 1925, **4**, 439.

[3] Greenberg, D. M., *J. Biol. Chem.*, 1929, **82**, 545.