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THE EFFECT OF VITAMIN DEFICIENCY ON BLOOD PRESSURE IN RATS

H. B. COOK AND F. M. BALDWIN

ABSTRACT

After devising a very delicate, modified recording mercury manometer, it was found possible to obtain direct blood pressure curves from the abdominal aorta of anaesthetised rats, previously fed upon specific normal and vitamin deficient diets and thus make comparisons. About 75 animals were used, one-half of this number being normals to check about equally against A and B deficient animals. The records from 22 normals, on growing rations, showed an average of 84 mm. Hg, with the exception of one extremely high and one extremely low figure. The majority were close to the general average. This figure is strikingly close to the figure cited by Uhlmann, where he found the normal pressure in rabbits to be about 90 mm. Hg.

Averaging the records obtained from 19 animals on A-deficient diets gave 75 mm. Hg. With three exceptional extremes here, the majority of records fall close to the average and thus in general a slight though conspicuous, sub-normal pressure is maintained by such animals. To account for this, a number of factors probably enter, since histological examinations of heart muscles showed marked atrophy and slight segmentation of muscle fibers, as well as a slight congestion of the myocardia.

The average of records from 16 animals on B-deficient was 34 mm. Hg. This marked sub-normal pressure is without doubt correlated with the condition of the heart muscles, with marked hypertrophy of ventricular walls and areas of edema. These facts conform to finding of McCarrison in monkeys, and Durch in humans.

Histological sections of the aorta and other vessels in vitamin deficient animals shows no conspicuous changes in intima, media or adventitia which might indicate a tendency toward fibrosis.

Snake Notes

J. E. GUTHRIE

There is probably no *inborn* snake-dread. Snake species and personalities differ widely among themselves. A captive rattle-

snake shed four skins and got four rattles in a year. Poisonous snakes shed and swallow their poison fangs. About 1600 rattlesnakes were presented for bounties last year in seven Iowa counties. *Virginia elegans* Kenn. is reported as new for Iowa. Figures of a double-headed garter snake and of a two-headed bullsnake embryo are given.

NOTES ON THE OYSTER-SHELL SCALE, *LEPIDO-*
SAPHES ULMI, LINN

R. L. WEBSTER

Several years' records of dates on which the eggs of this insect hatched at Ames, Iowa.