thyroid arteries. The condition ended rather sharply at the brachials and femorals. In the pulmonary artery there were two small aneurisms (1 mm diam.) and several small calcified plaques. In another animal the lesions were less severe and less extensive; the aorta was thickened and dilated, but the intima was smooth throughout the arch and the thoracic portion. In the abdominal portion and below, however, there were present many delicate rings of calcification, embracing the whole circumference of the vessel and extending down into the iliacs. The carotids and subclavians were the arteries most affected, all four showing this annular calcification throughout the entire length of the vessels. The pulmonary artery was thickened and on its anterior wall there was a saccular aneurism (ca. 7 mm in diameter). The condition in the third animal was intermediate to the other two. In this rabbit the calcification appeared not in rings but as conglomerate calcified plaques, large and more abundant at the root of the aorta and diminishing in number and size toward the periphery. The carotid, subclavian, mesenteric and iliac arteries were also affected.

Along with this medial calcification of aorta and large vessels there was found in the first and third animals described a nephritis of varying degree, but the novel feature of this nephritis was the presence of calcification in the interlobular arteries and in the afferent vessels to the glomeruli, particularly in the kidneys of the first animal. In this rabbit the destruction of the cortex was well advanced, especially in its outer third, where many glomeruli were shrunken and their tufts were obliterated by an abundant deposit of calcium salts. The tufts were intact in the third animal, but in both cases there was a striking deposit of calcium in the Bowman's capsules, which, in v. Kossa's preparations, look like an etching of these structures.

In the kidneys of the second animal there was neither calcification of the vessels nor calcification of Bowman's capsules. There was a moderate, subacute nephritis, mainly tubular, with occasional thickening of glomerular capsules, as has been described in experimental uranium poisoning.

A perusal of the work of Dickson[2] shows that the aorta was examined in practically all his animals (guinea pigs, rabbits and dogs), and lesions looked for, with negative findings. It was suggested in explanation of my results that some impurity might exist in the uranium nitrate used, which, either independently of, or in association with uranium, was responsible for this unexpected finding. Accordingly, three other samples of uranium nitrate were obtained from different sources and the experiments repeated. A complete report will be published at the end of the experiment, together with the blood pressure tracings. To date, six animals (including the three of this note) which have died as a result of the intoxication with two of the samples have shown a severe arteriosclerosis. Of these, only two have shown calcification of the arterioles and Bowman's capsules in the kidney. Of the animals intoxicated by the other two samples, the six that have died had normal aortas.

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[2] Dickson, E. C., "A Further Report on the Production of Experimental Chronic Nephritis in Animals by the Administration of Uranium Nitrate," *Arch. of Int. Medicine*, 9, 557 (1912).

THE RELATION OF THE MALE TO THE HATCHABILITY OF HENS' EGGS

PHYSICAL characters of eggs appear to be of much less importance in relation to the hatchability of fertile hens' eggs than either the genetic makeup of the hen laying the egg or of her male mate fertilizing the eggs. No significant correlation has so far been discovered at the Massachusetts Agricultural Experiment Station between any measurable physical character of eggs and the percentage of such fertile eggs hatching into normal chicks.

Below are presented the pullet-year fertility and hatching records of seven Rhode Island Reds, together with their yearling fertility and hatching record. All birds were mated to the same Rhode Island Red cockerel the pullet year and to a second cockerel when yearlings.

Females	Cockerel No. C8081		Cockerel No. E280	
	Per cent. of eggs fertile	Per cent. of fert. eggs hatched	Per cent. of eggs fertile	Per cent. of fert. eggs hatched
C7129	67	0	97	53
C7132	100	0	98	55
C7297	92	0	94	73
C7310	100	0	89	53
C7482	88	0	50	0
C7716	48	10	0	....
C7738	100	0	100	82

The ability of the two males to fertilize the eggs does not differ significantly. Cockerel C8081 was almost unable to sire any chicks, while cockerel E280 sired chicks from five of the six hens laying fertile eggs. The above data are in agreement with extensive data available at this station indicating that the male is an important factor in hatchability and also that hatching power is inherited in Mendelian fashion.

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