

sinase is produced long before the substrate upon which it normally reacts is formed.

The question of the activation of the enzyme tyrosinase is of some further interest in view of the fact that in many cases its presence in tissues has been often questioned. It would seem from the present results that the enzyme may be present, but lacking an activator or substrate, no indications of its activity are evident.

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Deposition of Amyloid in Kidneys with Restricted Circulation.

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In an earlier report,¹ one of us described a method for production of renal insufficiency in rabbits, by reducing the blood flow through the renal artery of one of the kidneys by means of a loop of thread of a definite diameter. The loop is put on when the animals are small, the artery grows up to the size of the loop, and thereafter growth of the kidney stops. The other kidney continues to grow, and it is removed at some time later with the resultant production of renal insufficiency.

It has been our experience that the rabbits will survive if the restricted kidney represents 30% or more of the total previous kidney mass; in other words, if the restricted kidney is about half or more of the mass of the one removed. A group of 6 such animals survived for periods varying from 1½ to 10 months. The remaining kidney in each of these animals was swollen and pale, and microscopic examination revealed the presence of amyloid in the glomerular tufts and about the intertubular capillaries. This infiltrating substance was identified as amyloid by the methyl violet, congo red, and iodine staining methods. No amyloid was found in other organs.

No amyloid was found in the kidneys of a group of 10 rabbits surviving, one month or less, the removal of the normal kidney. Furthermore, no amyloid was found in the kidneys with restricted blood supply where the normal kidney was not removed.

¹ Drury, D. R., *Proc. Soc. Exp. Biol. and Med.*, 1932, **29**, 856.