changes in the testes. In the present experiments, however, motile sperm were found in the epididymis of males dying from scurvy. In order to acquire physiological proof of fertility, functional tests were initiated in which 6 adult males were gradually deprived of vitamin C and mated at intervals with normal females in oestrus. Only one attempted mating of 43 produced a litter and that one occurred while the male was receiving 3 cc. of orange juice a day. Artificial insemination was therefore resorted to. When sperm from a male, dying of prolonged scurvy, was injected into the uterine horns of a female in oestrus, a litter of normal young, which are now 6 months of age, was born.

Deprivation of vitamin C does not disturb the oestrus rhythm of the guinea pig until the animal begins losing in weight, nor does it interfere with the fertilizing power of sperm.

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Immunologically Symmetrical Proteolysis.

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If 0.1 cc. horse serum is added to 1.9 cc. canine leucocytic extract and the mixture is incubated over night, titration of the resulting lytic products by means of ice-chest ripened rabbit precipitin gives precipitin graphs[1] suggesting a 400% to 800% test-tube multiplication of horse proteins, without appreciable horse protein denaturization.

The simplest explanation of this apparent increase is to assume that under the influence of leucocytic proteolysin each horse protein molecule is hydrolysed into from 4 to 8 daughter protein molecules, each daughter molecule being of approximate horse protein specificity.

[1] For technic and typical graphs see PROC. SOC. EXP. BIOL. AND MED., 1929, xxvii, 14.