

Renal Stereology in the Guinea Pig (*Cavia porcellus*) [Estereología Renal en el Cobayo (*Cavia porcellus*)]

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The guinea pig, (*Cavia porcellus*) is a rodent pertaining to the Rodentia group and the Caviidae family, used as a laboratory animal and for human consumption. Quantitative parameters of the kidney provides important information of its morphofunction, given its labor in the organism's homeostasis. The aim of this study was to describe the kidney of the guinea pig (*Cavia porcellus*), analyzing the stereological characteristics for future experimental studies. Five male guinea pigs (*Cavia porcellus*) obtained from the Biotery of the Universidad de la Frontera, Temuco, Chile, were used. The kidney of the guinea pig weighed approximately 3.2g. The kidney has 140,298 total glomerulus, N_v of 458 mm^3 , V_v of 7.89% and S_v of 3.58 mm^2/mm^3 . The glomerular volume of the kidney was of $1.73 \times 10^{-4} \text{ mm}^3$ and a glomerular diameter of 90 μm . Factors such as species, age, body weight and renal volume, are important to consider, as they differentiate the results in the morphofunctional investigations.

Cavia porcellus

Kidney

Stereology