UREA AND ELECTROLYTE EXCRETION BY SHEEP

by

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DECLARATION

I declare that this thesis is my own composition, and is a report of my own research, not having been presented in any previous application for a degree. All sources of information have been indicated in the text and help given by others has been acknowledged.

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SPECIAL NOTES

Measured parameters in this thesis are expressed in SI units with the exception of nitrogen, which is expressed in grams or as a percentage in convention with the current literature.

Figures and tables associated with the experimental section of this thesis are located either within the text or at the ends of each chapter.

Statistical differences between means were not considered significant unless \( P < 0.05 \).

All animal experiments were approved by and conducted within the guidelines of the University of New England's Animal Welfare Committee.

The following papers arose wholly or in part from the studies reported in this thesis. Copies of available reprints are included in the appendices.


ABBREVIATIONS

ADH    antidiuretic hormone
ATP    adenosine triphosphate
BW     body weight
d      day
DPG    2,3-diphosphoglycerate
ECV    extracellular fluid volume
EDTA   ethylene diamine tetra acetate
ERPF   effective renal plasma flow
FE     fractional excretion
FF     filtration fraction
GFR    glomerular filtration rate
HCO₃   bicarbonate
Na-K-ATPase  sodium-potassium-dependent adenosine triphosphatase
NH₃    ammonia
P      plasma concentration
PAH    para-aminohippuric acid
pCO₂   partial pressure of carbon dioxide
PCV    packed cell volume
Pi     inorganic phosphate
PTH    parathyroid hormone
RBC    red blood cell concentration
SNGFR  single nephron glomerular filtration rate
TCA    trichloroacetic acid
U      urine excretion
UFR    urine flow rate
URAL   uric acid plus allantoin
VFA    volatile fatty acids

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