New Zealand Society of Animal Production online archive

This paper is from the New Zealand Society for Animal Production online archive. NZSAP holds a regular annual conference in June or July each year for the presentation of technical and applied topics in animal production. NZSAP plays an important role as a forum fostering research in all areas of animal production including production systems, nutrition, meat science, animal welfare, wool science, animal breeding and genetics.

An invitation is extended to all those involved in the field of animal production to apply for membership of the New Zealand Society of Animal Production at our website www.nzsap.org.nz

The New Zealand Society of Animal Production in publishing the conference proceedings is engaged in disseminating information, not rendering professional advice or services. The views expressed herein do not necessarily represent the views of the New Zealand Society of Animal Production and the New Zealand Society of Animal Production expressly disclaims any form of liability with respect to anything done or omitted to be done in reliance upon the contents of these proceedings.

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

You are free to:

- **Share** — copy and redistribute the material in any medium or format

Under the following terms:

- **Attribution** — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
- **NonCommercial** — You may not use the material for commercial purposes.
- **NoDerivatives** — If you remix, transform, or build upon the material, you may not distribute the modified material.

http://creativecommons.org/licenses/by-nc-nd/4.0/
Summary only

THE EFFECT OF CORTISOL ACETATE ADMINISTRATION ON GROWTH AND CARCASS QUALITY OF LAMBS

R. W. PURCHAS
M. C. Franklin Laboratory, University of Sydney Farms, Camden, N.S.W., Australia

Relationships between adrenal cortex activity and growth and carcass quality of sheep have been investigated by attempting to manipulate circulating cortisol levels. Preliminary experiments indicated that reasonably consistent elevations in circulating cortisol levels could be obtained by administering cortisol acetate every two or three days. When cortisol acetate was administered to growing lambs at the rate of 50 mg/animal every second day over an 8-week period, it produced an initial elevation in circulating cortisol levels. After approximately 5 weeks these levels fell, so that at slaughter they did not differ from control levels. There were no detectable effects of this treatment on growth rates, carcass composition or meat tenderness.

Acute administration of cortisol acetate at 150 mg/animal for 3 days immediately before slaughter did not affect carcass characteristics or meat tenderness.

It is concluded that the relationship between adrenal cortical activity and productivity reported for cattle either does not hold in lambs or, if it does, it is not a simple cause and effect relationship.