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## ROLE OF ESCHERICHIA COLI IN THE AETHIOLOGY OF DIARRHOEA IN THE RABBIT

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when adding 0.45 p. 100 lysine, which would indicate a lysine requirement of 0.78 p. 100 of the diet. In a second experiment where 0.0.34 and 0.68 p. 100 lysine were added to a diet containing 17 p. 100 sesame proteins, it was noted that the addition of this amino acid improved the nitrogen balance and nitrogen retention coefficient whereas the digestibility of the diet was not changed.

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**EFFECT OF DL-METHIONINE ADDITION  
TO A SOYBEAN OIL-MEAL DIET  
ON GROWTH AND NITROGEN RETENTION IN THE RABBIT**

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It has been demonstrated in the rabbit that DL-Methionine supplementation of soybean oil-meal diets has a favourable effect on growth performances, feed efficiency, nitrogen balance and nitrogen retention coefficient. On the other hand, the digestibility of the diet does not seem to be affected. Using two protein levels (10 and 13 p. 100), the best results were obtained with a DL-methionine supplementation of 0.1 p. 100 of the diet. But an addition of 0.3 p. 100 DL-methionine has slight depressive effects on the weight gain. However, on account of the low protein level in the diets studied, it seems to be difficult, on the basis of the present experiment, to make an approach of the requirement for sulphur amino acids in the rabbit.

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**II. — Pathology**

**ROLE OF *ESCHERICHIA COLI*  
IN THE AETHIOLOGY OF DIARRHOEA IN THE RABBIT**

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An experiment carried out on 408 strains of *E. coli* isolated from the intestinal contents of 75 live rabbits, suffering from serious digestive troubles unrelated with coccidiosis showed, through systematic analyses of the hemolytic and pathogenic power on the mouse and enteropa-

thogenic power on the rabbit, that colibacillosis enteritis exists in this species. Enteropathogenic strains belong to 02, 08, 020, 039 and 0106 groups in the newborn rabbit and to 02, 049, 085, 0103 and 0132 groups in the fattening rabbit.

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### IMPORTANCE OF NEPHROPATHIES IN THE RABBIT

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avec la collaboration technique d'E. LE BOURHIS, M. AUVRAY et C. PIANEL

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Among 669 rabbits received at the laboratory during 1972 about 56 p. 100 exhibited nephritis lesions and 60 suffered from « uremic syndrome ». Primary kidney lesions were caused either by microbic or parasitic diseases, or poor management conditions bringing about serious digestive troubles, or, at last, uncontrolled use of medications. Epithelial nephritis bringing about an important mortality by « uremic syndrome », high levels of urea, reaching in certain cases 4.5 g per liter of serum, was associated with hyperkalemia reaching 23 mEq per liter and causing rapid death by heart stopping. To cope with severe nephropathy that may kill up to 50 p. 100 of flocks, farmers should take into consideration the importance of good management practises and good sanitary conditions of their animals.

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### III. — Physiology

#### COMPARISON OF THE REPRODUCTIVE BEHAVIOUR OF DOES MATED AT DIFFERENT TIME INTERVALS AFTER PARTURITION

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The effect on ovulation, implantation and embryo survival of the time interval between parturition and mating was studied in 182 primiparous rabbits. The rabbits were mated either on day 1 (lot 1) or on day 10 (lot 10) and killed on day 10, 16, 20, 24 or 28 post-coitus. The frequencies of ovulation and implantation were determined, the numbers of corpora lutea (C. L.)