
Determination of the ruminal microbial protein synthesis from ^{15}N urea in sheep fed on diets with high levels of fibre

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SUMMARY

An original experimental model between three wethers fitted with ruminal, re-entrant duodenal and ileocecal fistulas was designed. An amount of 8 g ^{15}N urea (0.15 g/kg body weight) was infused intraruminally in one animal and urea without tracer in the other two. The duodenal flows were crossed between the three animals, ^{15}N recirculation from one animal to the other being thus completely avoided. This experimental model allowed a more correct determination of the amount of urea absorbed from the rumen and intestines and of the synthesis of ruminal microbial protein from ^{15}N urea.

Keywords: wethers, protein synthesis, rumen, experimental model