

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

INFLUENCE OF FEED RESTRICTION AND SEX CLASSES ON NUTRIENT DIGESTIBILITY IN SANTA INES SHEEP

Monalisa Eva Santos EVANGELISTA*¹, Elzania Sales PEREIRA¹, Ana Claudia Nascimento CAMPOS¹

*corresponding author: monalisaeva@hotmail.com

¹Universidade Federal do Ceará, Fortaleza, Ceará, Brasil

Animals fed at some restriction level lower than the intake *ad libitum* may have improvements in feed efficiency. Thus, the digestibility of nutrients can be used as a parameter in the evaluation of the best use of nutrients by animals. This study was carried out to evaluate the effects of feed restriction and sex classes on the digestibility in Santa Ines sheep. Thirty male animals (13.00 ± 1.49 kg initial body weight (BW) and approximately two months old), were allocated in a factorial design with diet restriction levels (*ad libitum*, 30% and 60% feed restriction) and sex classes (castrated and non-castrated males). The total experiment period was 100 days. The digestibility trial was carried out indirectly using indigestible neutral detergent fibre (iNDF) as to estimate fecal dry matter excretion. Fecal samples were collected from each animal during three consecutive days, every 15 days, at the following times: at 08:00 am on the first day, 12:00 noon on the second day and at 04:00 pm on the third day. The amount of iNDF in the fecal samples, refusals, concentrate and hay samples was obtained by *in situ* incubations over a 240 h period in the rumen of a cow, the bags with the incubation residues were washed in running water. Subsequently, the bags were boiled for one hour in a neutral detergent solution. The residues were weighed and considered as iNDF. There was no effect on the sex classes or interaction among sex classes and feed restriction on digestibility nutrients: dry matter (DM), organic matter (OM), crude protein (CP), ether extract (EE), neutral detergent fiber (NDF), total carbohydrates (TC) e non-fiber carbohydrates (NFC) (P>0.05). Differences were found among feed restriction levels (p<0.001) for digestibility of all nutrients. The animals submitted to 60% feed restriction has higher values for the digestibility of DM, CP, EE, NDF, ADF and TC (P<0.001), whereas, the animals submitted to 30% feed restriction had higher values for the NFC digestibility (P<0.001). The food restriction provides a better utilization of the nutrients of the ration.

Keywords: lambs, neutral detergent fibre, nutrition, semi-arid

Promoção e Realização:



Apoio Institucional:



Organização:

