WATER INTAKE AND DRY MATTER INTAKE OF NATIVE DAIRY GOATS SUPPLEMENTED WITH DIFFERENT LIPID SOURCES

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Water is indispensable for lactating goats. Water intake depends on factors such as the species and the age of the animal, the physiological state, the feeding, the ambient temperature, among others. The objective was to evaluate the impact of lipid supplementation in water and dry matter intake of native dairy goats. Four lactating female goats (47.10 ± 5.86 kg initial body weight (BW)) were assigned to each of four treatments distributed in a Latin Square design 4 x 4. Each experimental period had 15 days, which 10 days of adaptation to experimental diets followed by five days of measurements and sampling. The total experimental period was 60 days. The experimental treatments consisted of a control diet (CON) without supplemental lipids and three other diets with different lipid supplements: oil (OI) consisting of 60% castor and 40% sunflower oil, cashew nut meal (CNM) and coconut meal (COCO). The water supply was ad libitum. To estimate the dry matter intake were collected samples of forage and concentrate during five consecutive days of each experimental period. Water intake was determinate by the calculation from the weight difference of the buckets before and after supply, at 07:30 am and 03:30 pm. At the same time, four buckets with water were distributed through the installation to measure the loss of water by evaporation. The average temperature and relative humidity was 27.95°C ± 1.24 and 65.64% ± 8.86, respectively. The lipid sources had no effect (P>0.05) on dry matter and water intake. The mean values for dry matter intake were 1.28 (± 0.06) kg day⁻¹, 2.76 (± 0.15) %BW and 71.87 (± 3.63) g kg⁻¹ of metabolic weight (W0.75⁻¹). The mean values for water intake were 3.69 (± 0.37) kg day⁻¹, 0.08 (± 0.01) L day⁻¹ BW⁻¹, 0.21 (± 0.03) L day⁻¹ W0.75⁻¹. In our study, the lipid sources did not influence the dry matter and water intake of native dairy goats.

Keywords: lactating goats, lipid supplementation, water