Nutritional value of diets containing fresh orange pulp for goats crossbreed Boer x Saanen in lactation

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ABSTRACT - The objective of the present study was to determine the dry matter and nutrients intake and digestibility of crossbred Boer x Saanen goats receiving diets containing fresh orange pulp in two periods: 1 to 30 days and 31 to 60 days of lactation. Fifteen-crossbred Boer x Saanen goats in lactation were distributed in a completely randomized design, in three treatments and five replicates. The treatments were no fresh orange pulp (OP) (0% OP); with 50% inclusion of OP (50% OP) and 75% inclusion of OP (75% OP) in substitution of corn silage. The concentrate ration common to all the animals was composed by: ground corn, soybean meal and mineral-vitamin supplement, in the ratio forage to concentrate 60:40. To estimate fecal excretion, indigestible neutral detergent fiber (iNDF) was used as internal indicator. Treatments did not influence the dry matter and nutrients intake (kg/day). However, there was a difference among treatments for dry matter intake based on live weight percentage (DMI% BW) in the period from 31 to 60 days, with 50% of fresh orange pulp, being the highest value. The digestibility coefficients of dry matter and nutrients and total digestible nutrients were higher in the treatment with 75% OP in both periods, except for the digestibility of crude protein and ethereal extract where there was no difference. The use of fresh orange pulp up to 75% of corn silage in the diet of crossbred Boer x Saanen goats is a good alternative because it improves the nutritive value of the diets.

Keywords: digestibility, fresh citrus pulp, intake, FDNi, byproduct