



Feeding Behavior of Goats and Factors Affecting Nutrient and Feed Intake in Goats

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Abstract

Goat rearing helps poor and marginal farmers to earn money to run their family expenditure. Among the farm animals, goats can be reared with low input cost and give early output. Goats are most selective feeders and require mixed feed or varieties of cereal and leguminous fodders. Goats can distinguish bitter, salty, sweet and sour tastes. Goat is more discerning for taste of feed. They have habit of taking feed by browsing i.e., feeding on small stems, leaves, flowers, fruits of shrubs and trees by standing on their hindlegs. The nutrient requirement in goats is depends on various factors like body weight, sex, age, stage of lactation, growth rate, pregnancy etc. The feed intake in goats is dependent on number of factors. It is concluded that goats have different feeding behavior hence it is necessary to take into consideration this behavior while feeding of goats for profitable goat farming.

Keywords: Behavior, Feeding, Feed intake, Goats, Nutrient requirements.

Introduction

Goats have characteristics including versatility in harvesting forage and require varieties of fodders in their feeding. Goats are able to survive under adverse foraging conditions and have different feeding behavior from other species of livestock. Goats are classified as grazers or browsers are equivocal especially when grazing patterns are examined over a variety of environmental conditions. Goats are referred as mixed-feeding 'opportunists' because they adapt to seasonal and geographic variation much faster than cattle or sheep (Lu, 1988).

Feeding Habits or behavior of goats

1. The goats have upper mobile lips and very prehensile tongue; therefore, they are able to graze on very short grass.
2. They have habit of taking feed by browsing i.e., feeding on small stems, leaves, flowers, fruits of shrubs and trees by standing on their hindlegs. They always like to pluck the tender leafy twigs of herbs, shrubs, small trees (Goetsch *et al.*, 2010).
3. They have habit to eat fresh, clean fodder and refuse to eat any kind of feed which is soiled and with bad smell. Even though the feed is soiled by her or by other animals, she refuses to eat that feed.
4. Goats like mainly tree leaves to eat, contains protein, Calcium etc. Goats are more selective in feeding.
5. Goats prefer and consume wide varieties of feeds and vegetation than either sheep or cattle.
6. Goats can distinguish bitter, salty, sweet and sour tastes. Goat is more discerning for taste of feed (Goetsch *et al.*, 2010).
7. Goats have more tolerance to bitter taste than cattle.

8. In goat kids rumen is fully functional at 3-4 months of age.
9. Goat kids start picking or nibbling the fodder/grass at 2-3 weeks of age.
10. The apparent digestibility of nutrients in goat is higher than cattle and buffaloes and lower than sheep.
11. Goat relish eating aromatic herbs in areas of sparse food.
12. Goats have more tolerance to tannins in feed.
13. Water intake per unit dry matter is less than sheep.
14. Recycling of urea is greater in goats than sheep.
15. Goats walk longer distance for browsing.
16. Salivary secretion is more in case of goats than sheep.
17. Goats utilize coarse fiber feeds for efficient energy production.
18. Dry matter intake of goat is higher as compared to large animals.
19. Goats have higher basal metabolic rate than cattle; therefore, maintenance requirement is higher than cattle.
20. Goats prefer dry green feeds than over succulent feeds. Oat or legume hay can be preferred by the goats.
21. The highest nutrient requirement time for the doe is late pregnancy.
22. Smaller does eat less, therefore require feed with higher in protein and energy on a percentage basis than larger does.

Factors affecting the nutrient requirements of goats (Spencer, 2019)

1. Body weight of animal.
2. Sex of the goat.
3. Body condition.
4. Maintenance and activity levels of goats.
5. Stage of pregnancy, kidding rate.
6. Stage of lactation/ milk production.
7. Growth rate or weight gain.
8. The nutrient requirement is different for meat, dairy and fiber producing goats.
9. Full blood/ breed of goat or crossbred.
10. Climate
11. Physiological stage

Feed intake in goats

On an average the daily feed intake of goat's ranges from 3-4 % of body weight as expressed in pounds (dry matter/head/day). An adult goat requires 4-5 kg green fodder, 0.5-1.0 kg dry fodder and concentrate as per physiological stage.

Factors affecting feed intake in goats (Okoruwa, 2019)

1. Body weight of goat
2. Percent dry matter in the feeds eaten
3. Type of feed and its quality
4. Quantity of feed offered
5. Physiological stage of the goats
6. Condition of fodder (fresh, dry, green, moldy, soiled or succulent)
7. Frequency of feeding
8. Breed of goat
9. Level of milk yield
10. Palatability of feed
11. Goat health

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