

AS8.**RESPONSE OF GROWING AND LACTATING SAHIWAL CATTLE TO UREA-MOLASSES-MINERAL SUPPLEMENTATION.**

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A study was conducted to examine the response of feed intake, blood metabolites, body weight gain, milk yield and milk composition of Sahiwal cattle to urea-molasses-mineral supplementation.

Twelve lactating cows and twelve weaned calves of Sahiwal breed were used. The cows were divided into two groups (n=6/group) balanced by body weight (357.0±2.0 kg), length of lactation (51.8±0.3 d) and milk yield (7.15±0.06 l/d). The calves were divided into two groups (n=6/group) balanced by age (86.1±0.5 d) and body weight (51.5±0.3 kg). One group of cows and one group of calves were supplemented with urea-molasses-mineral block (UMMB) and urea-molasses-mineral mixture (UMMM), respectively. Both UMMB and UMMM contained 10% urea, 40% molasses and 8% mineral by weight. Measurements were obtained on daily intake of UMMB/UMMM, individual body weight, blood urea nitrogen (BUN) and beta hydroxy butyrate (BHB) of cows and calves. Daily milk yield, composition and proximate composition of feed were also determined.

The nutrient content of UMMB and UMMM were superior to that of concentrate and roughage normally offered to cows and calves. Intake of UMMB/UMMM increased over time. Supplementary feeding of UMMB/UMMM increased BUN in cows and calves, lowered BHB in cows, and increased daily milk yield resulting increased net profits. Milk composition was not altered. Body weight gain improvement was not significant.

The results suggest that supplementary feeding of the tested UMMB improves nutritional status and milk yield of Sahiwal cattle.