

## **Effect of a total dry ration on the feeding behavior and animal welfare of dairy cows**

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Welfare is a multidimensional concept. And its assessment is based on a set of indicators. In this context, an investigation was carried out in 10 dairy farms that have undergone a diet based on the total mixed ration to evaluate its effect on the welfare quality of dairy cows through some indicators such as body condition, lameness, milk production, flight distance, the appearance of the dung of cows and eating behavior such as the ingestion time, rumination and number of chewing. The results showed that the total mixed diet has an effect on some indicators. Indeed, a significant effect ( $P < 0.05$ ) was observed in the increase of milk production, clean feet (score =  $1.07 \pm 0.06$ ), the appearance of dung (score =  $1.37 \pm 0.05$ ) and flight distance ( $p = 0.0004$ ). moreover, we recorded during observation of eating behavior of the cow an increase in the period of rumination ( $p < 0.0001$ ), increased number of mastications by bolus ( $58.28 \pm 0.51$ ) and increase in the amount of feed ingested and decreased ingestion time ( $26.58 \pm 0.55$  min) during a meal. On the other hand, no difference was recorded in the scoring of lameness and body condition.

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