

## EFFECT OF FEEDING SUPPLEMENTS ON SNF CONTENT IN MILK

**P. Mathialagan\*, D. Chandrasekaran, G. Kumaresan and A. Manivannan**

DBT Scheme Research Team, Veterinary College and Research Institute, Namakkal.

**Key Words:** Feeding Practices-SNF Content-Adoption-Dairywomen-Impact

The dairy farmers are frequently encountering the problem of low solids not fat (SNF) content in the milk, leading to refusal of milk at the milk collection centres (Das et.al.2003). The price of milk is fixed mainly based on the fat and SNF content. Dairy farmers incur huge loss due to low SNF content in the milk sold.

A study was conducted with the objective of training the farmers on feeding technologies for improving the SNF content of milk in milch animals and to assess its impact at the field level. About 159 women dairy farmers cum self help group members belonging to ten different villages of Namakkal district were selected for the study. A benchmark survey was conducted to collect data about the feeding practices followed by them. Training programmes were conducted to all the women dairy farmers on cost effective feeding practices for dairy cattle, feeding of chopped fodder to the animals and supplementing diet with minerals.

Trace minerals and calcite were supplied to the beneficiaries for feeding to the dairy animals (Trace Minerals-5g/day/animal; Calcite-50g/day/animal; Sodium chloride -50g/day/animal; Sodium bicarbonate-10g/day/animal). Milk samples were collected before and after intervention tested for fat and SNF content. The impact was studied by personal interview and appropriate methods were employed for analysis. The results indicate that 46.37 % of cow milk samples had less than 8.0% of SNF content. When the SNF content falls below 8.0%, the payment for the milk will be calculated

based on the fat content of the milk as per the price policy of milk co-operative societies. In such cases, the farmer would get a lower price of Rs. 6.50/- per litre instead of Rs.8.75/litre of milk.

The SNF content could be increased to an average of 0.49% and 0.35% in cows and buffaloes respectively due to mineral supplementation, so that the farmers could get the price Rs.8.75/- per litre of milk in cows. This finding agrees with the findings of El-nor, (2000).The rise in SNF content has led to an average increase of Rs.0.40/- per litre of milk, further the milk production in cows also increased by about 1.12 litres and in buffaloes by 0.8 litre per day per animal. Siregar,(2001) reported that an increase in milk production ability of lactating cows through improved feeding practices. Similarly 7.5 % of buffalo milk samples had less than 8.0 % SNF content and the farmers would get Rs.6.50/- per litre for such milk. By increasing the SNF content to above 8.0%, the farmers could get a price, ranging from Rs.9.67/- to 10.04/- per litre of buffalo milk. Thus the farmer would get an additional income of Rs.3.17/ - per litre of buffalo milk.

The dairy farmers perceived that after calving, cows used to get conceived in 6 months to one-year period. But after intervention, they reported that, the cows conceived between 45 days to 3 months period after calving. In buffaloes also the conception period after calving was improved from 1-1.5 years to 2-4 months after adoption of technologies. There was reduction in the incidence

---

\*Present address: Professor & Head, Dept. of Veterinary & Animal Husbandry Extension & Entrepreneurship, Madras Veterinary College, Chennai.

of milk fever from 1 % to 0.2 % in case of cows and 5 % to nil in buffaloes. The average cost of production of milk (per litre) was also reduced from Rs 7.68/- to Rs.5.07/- in cows and Rs.9.24/- to Rs.6.24/- in buffaloes. On the whole, 28.77 % and 27.21 % of cost reduction was achieved in cows and buffaloes respectively through the scheme. The average cost of milk production per litre was decreased by Rs.2.60/- for cows and Rs.3/- for buffaloes.

.Hence it is stressed that the simple feeding practices advocated in the study for dairy cattle rearing could be diffused among the dairy farmers by way of various extension methods so that the end user could reap the advantages of adopting proven practices.

#### **.ACKNOWLEDGEMENT**

The funds granted by The Department of Biotechnology, Ministry of Science and Technology, Government of India, New Delhi and the facilities provided by the Tamil Nadu Veterinary and Animal Sciences University, Chennai are gratefully acknowledged.

#### **REFERENCE**

- Dasm, S. Ray, P.R., Bandyopadhyay, A.K , and Ghalak, P.K. 2003. Physico-chemical quality of market milk in Kolkata and its suburbs. *Ind. J. Anim. Health.* **42**: 156-160.
- El-Nor, 2000. Milk production response to supplementation of fat soluble vitamins with or without mineral mixture for lactating buffaloes. *Egyptian J. Dairy Sci.* **28**:259-269
- Siregar, S.B. 2001. Increasing milk production ability of lactating cows through improvement of feeding management. *Jurnal Ilmu Ternak dan Veteriner.* **6**: 76-82.