IDENTIFICATION OF FACTORS ASSOCIATED WITH LOW FAT CONTENT OF MILK IN KANDY REGION

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One of the major problems facing dairy farmers in Sri Lanka is rejection of milk for variety of reasons. Among these reasons, the commonest cause for rejection by collecting agencies is low fat and solid non fat (SNF) content in milk. Acceptable limits of fat and SNF content in milk prescribed by MILCO are 3.5% and 8.5% respectively. Sometimes farmers are paid very poorly due to low fat and SNF content of milk. This has led to a big frustration among farmers and severely affects the survival of the dairy industry in the country.

This study was conducted in milk collection area covered by Kundasale, Ampitiya and Yatinuwara chilling centers (MILCO) in Kandy region. More than 100 milk samples with suspected low fat content were analyzed to determine the fat and SNF content at animal nutrition laboratory in Veterinary Research Institute (V.R.I.), Gannoruwa, Peradeniya. Sixty farmers were selected for the survey based on fat percentage less than the 3.5. A comprehensive questionnaire was used to collect information related to low fat content from dairy farmers. Data were analyzed by descriptive method.

The results revealed that the different factors were associated with low milk fat content such as breed, age of the cow, stage of lactation, length of lactation, milking frequency, milking method and Nutrition status of the feed. The most prominent factor affected was breed character which represented 44% out of other factors. Second factor was lactation number which represented 28 %. Lactation stage, age of the cow and nutrition

also had considerable effect on fat content. Minimum effect was recorded from heat condition and milking method which taken only 2%.

Several precautions such as selection of breeds with high milk fat content, increase of forage intake and good feed management practices with high quality improved grasses can be considered to increase fat content of milk. In addition, application of forage conservation methods such as silages or hay can also be used as good feed sources under feed scarcity period.

Key words: Milk, Fat, Solid non fat, Factors