

Limit Milk Program for Sustainable Dairy Production

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Summary

This policy article provides pragmatic science to urge modern dairy industries to exercise limit-milk program towards sustainability. The reckless modernization trends have jeopardized reproduction, health, and economy of numerous world dairy enterprises. Temporary rises in milk production and economic outputs have often blinded managers. Sustainable dairy industry will depend on practicing controlled or limit milk production.

Keywords: Dairy industry; Limit milk; Reproduction; Health; Sustainability

Innovations and Discussion

The dramatic rises in average milk production per lactation cycle over the last few decades have coincided with dramatic drops in fertility and reproduction efficiency. As a result, lactation numbers per cow have, on average, considerably decreased (e.g., <2-2.5). The reckless modifications in production systems involving feeding, milking, phase management, and reproduction manipulations contributed to such economic and environmental losses. While few industries have partly noticed such jeopardize and tried to make policies to cease or slow the trend, many industries are not practically cognizant of the problem and continue to exacerbate the complications. Feeding explosive starchy diets, dietary inclusion of artificial nutrients and synthetic supplements, mismanaging calves, heifers and dry cows, and suboptimal housing and milking are among shortcomings. Ruminants must be kept adequately close to their natural life patterns to perform sustainably [1-3].

This policy article, thus, develops a feasible global production system based on 'limit-milk farming' to help dairy herds function in parallel to their evolutionary natural patterns of life. Optimal is by no means maximal as far as sustainability is concerned. Future of the world dairy industry depends on efficient reproduction, improved dairy animals health and welfare, and stable feed and milk markets. None of these can be guaranteed with pushing milk production beyond dairy cattle metabolic and physiological tolerance. Raising fewer dairy cattle with moderated milk production and optimal longevity and health is way superior to struggling with more cattle with too-high milk production for just few weeks at the unrecompensable cost of jeopardised longevity and health. This will largely serve environmental quality and economical sustainability for safe and secure global food production [4-7].

In a nutshell, limit milk production programs are a necessity for global dairy industries towards growing economy and sustainable economy. 'Limit' does not mean overly reduced production, but rather implies not haphazardly and carelessly maximizing milk production. Depending on production scenarios, 'limit' could mean just a little below maximal. The philosophy is to oversee the production process

and to predict and observe where exactly the cycle is going to be able to develop effective strategies to minimize stresses on herds and related critical resources. The limit-milk program is not restricted to milking cows. The initiative must begin long before cows enter milk production cycles. Effective calf and heifer preparation followed by strategic dry and periparturient cow management are required for an effective limit-milk program to be sustainably exercised [7-11]. Education will be a most critical part of this global program for increasing its accomplishments [12,13]. Nature with its leading circadian and circannual rhythms must be viewed as an ideal pattern for the modernized dairy industry to preserve it against the many pathologic conditions [14,15].

Implication

This article developed an innovative new global concept of 'limit-milk program' to keep dairy cattle production adequately close to natural patterns of ruminant life. In light of the already modernized or still modernizing dairy industries around the world, limit-milk programs are a necessity to move towards quality environment and sustainable economy for sufficiently safe and secure human food supply.

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