

## Controlled Starch Feeding to Rescue the Dairy Industry

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**Received:** October 14, 2016; **Published:** October 22, 2016

### Abstract

This article addresses a global obligation on controlling starch nutrition to optimize rumen fermentation and animal health and economics. The misguided development in increasing starch feeding from cereals in modern ruminant diets must be ceased. The sustainability of the postmodern ruminant industry will depend on controlled starch nutrition in postmodern dairy production.

**Keywords:** Starch; Feeding; Dairy industry; Rumen health

Volume 1 Issue 1 October 2016

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### Innovations and Critiques

The modern ruminant industry plays important roles in supplying safe and secure food for human [1-2]. However, the increasing demands for animal proteins have in many regions unwisely led to increases milk and beef production mainly via blind increases in starch nutrition. Such an inane policy has kept the global ruminant industry from realizing its optimal health and economic perspectives. The rising losses due to reduced longevity, elevated costs of treatment and animal removal, and unstable feed, milk and meat markets have seriously challenged the world ruminant industry. Complex health issues including devastating metabolic diseases of especially subacute rumen acidosis and related immune deficiencies, as a result, frequently occur. Moreover, inter-diet and inter-phase adaptations have become more challenging in the face of such ill-advised feeding of starch to high-producing ruminants. A significant globally enforced action has recently been widely disseminated to seriously alter the situation via a variety of pragmatic starch feeding programs [3-10].

### Pragmatic Interventions

The critical periparturient period in dairy production and the challenging feedlot adaptations to heavy diets in beef production are among remarkable examples. Getting too far from natural ruminant grazing and feeding behaviours during overmodernization has made managing such periods extremely difficult [5-10]. It is by no way wise to first overly modernize an inherently natural industry and then inanelly search for strategies to manage the already distressed rumen and ruminant physiology. The trend is entirely nonsense. To be capable to effectively manage rumen and ruminant transition through such demanding phases of production, raising systems (e.g., housing, feeding, milking, treating) must be close enough to ruminants' natural behaviour and evolutionary metabolism. This is the key for successful production that necessitates moderated starch nutrition to avoid back-breaking production peaks and uncontrolled tissue mobilization but to move towards improved health, longevity and efficiency.

**Citation:** Akbar Nikkhah. "Controlled Starch Feeding to Rescue the Dairy Industry". *Multidisciplinary Advances in Veterinary Science* 1.1 (2016): 11-12.

Wisdom must be exercised in improving long-term production and health simultaneously through relatively moderating starch provision. Formulating dairy diets with > 35-40% cereals of especially barley and extensively-processed corn just facilitates facing an irrecoverable tragedy. This suggests that even feedlot diets conventionally containing up to 90-95% grain should also be revisited from a long-term postmodern perspective. Many aspects remain unexplored needing research, but the obvious is a global must for moderated feeding of starch to end the striking man-made increasing trend of animal health problems adversely affecting food safety and security.

### Conclusion

The adverse leaning of health issues in modern ruminant enterprises continue to result from unwise quantitative and qualitative choices of starch feeding in commercial diets. A global obligation must be met to cease the blunder and to control starch nutrition in postmodern ruminants.

### Acknowledgments

Thanks to Iran's Ministry of Science Research, Technology and National Elite Foundation and University of Zanjan.

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