OPEN ACCESS Freely available online

Advances in Dairy Research

ISSN: 2329-888X

Perspective

The Impact of Bovine Respiratory Disease in Dairy Farming

Luliana Emilia*

Department of Food Science, University of Galati, Galați, Romania

DESCRIPTION

Dairy farming is a crucial component of the global food industry, providing a significant portion of the world's milk, cheese, yogurt, and other dairy products. However, like any agricultural endeavor, dairy farming faces its share of challenges, with diseases being a major concern for both the health of the animals and the profitability of the farm. In this article, we will explore some of the common diseases affecting dairy cattle, along with their causes, symptoms, prevention strategies, and management techniques. Mastitis is perhaps the most prevalent and economically significant disease affecting dairy cattle worldwide. It is an inflammation of the udder tissue, primarily caused by bacterial infections. The bacteria can enter the udder through the teat canal, either during milking or through environmental contamination. Symptoms of mastitis include swelling, heat, redness, and pain in the udder. The milk may appear abnormal, with clots, flakes, or a watery consistency. In severe cases, cows may show signs of systemic illness, such as fever and reduced appetite. Preventing mastitis requires maintaining strict hygiene practices during milking, including proper udder preparation, ensuring clean and well-maintained milking equipment, and providing comfortable and clean living conditions for the cows. Regular monitoring for early signs of mastitis, such as changes in milk quality, can aid in early detection and treatment. Management of mastitis typically involves administering antibiotics to affected cows, along with supportive care such as anti-inflammatory drugs and udder massage. In severe cases, affected cows may need to be culled to prevent the spread of infection within the herd. Bovine Respiratory Disease (BRD) is a complex and multifactorial disease that affects the respiratory system of cattle, including dairy cows. This includes providing adequate ventilation and housing, avoiding overcrowding, ensuring proper nutrition, and practicing good biosecurity measures to prevent the introduction and spread of infectious agents. Management of BRD often requires a multifaceted approach, including the administration of antibiotics to control bacterial infections, anti-inflammatory drugs to reduce inflammation in the respiratory tract, and supportive care such as fluid therapy and nutritional support. Lameness is a significant welfare issue and economic concern in dairy cattle, affecting their mobility and overall productivity. It can be caused by various factors, including hoof injuries, infections, nutritional deficiencies, and metabolic disorders. Symptoms of lameness include limping, reluctance to stand or walk, swelling or heat in the affected limb, and changes in posture or gait. Lameness can have a profound impact on milk production, reproductive performance, and overall cow comfort. In conclusion, dairy diseases pose significant challenges to the health and productivity of dairy cattle, as well as the profitability of dairy farms. However, with proper management practices, including strict hygiene protocols, sound nutrition, and proactive health monitoring, many of these diseases can be prevented or effectively managed. By prioritizing animal welfare and implementing preventive measures, dairy farmers can ensure the long-term health and well-being of their herds while maintaining sustainable and profitable operations.

An increasing number of women and children are experiencing health problems as a result of inadequate dietary zinc intake, and a lack of this mineral is a widespread global concern. More than one billion people, or over 17% of the world's population, suffer from a zinc shortage that is getting worse with time. Zinc is the second-richest mineral in the human body's trace mineral composition, right after iron. An adult human body generally contains two to three grams of zinc. One of the main causes is the zinc shortage brought on by their diet's low vitamin content. According to reports, one of the main causes of a number of serious illnesses in underdeveloped nations is zinc deficiency. A severe deterioration of the immune system, arteriosclerosis, neurosystems, and adverse effects on taste and smell are the outcomes of a zinc shortage. In order to address various illnesses, including anemia in women of reproductive age, numerous models and treatments are used to enhance the production of zinc in the food supply chain. This is particularly the case for nations like Africa, the nation of Nepal, Pakistan as a whole, Tanzania, Togo, Morocco, Brazil, India, and Ethiopia. In addition to iron, anemic individuals also need zinc, lithium, and selenium, among many other elements. Additionally, zinc is employed as a bio stimulant element. A zinc deficit can cause

Correspondence to: Luliana Emilia, Department of Food Science, University of Galati, Galați, Romania, E-mail: emilia124@gmail.com

Received: 01-Mar-2024, Manuscript No. ADR-24-30541; **Editor assigned:** 04-Mar-2024, PreQC No. ADR-24-30541 (PQ); **Reviewed:** 19-Mar-2023, QC No. ADR-24-30541; **Revised:** 26-Mar-2024, Manuscript No. ADR-24-30541 (R); **Published:** 03-Apr-2024, DOI: 10.35248/2329-888X.24.12.647

Citation: Emilia L (2024) The Impact of Bovine Respiratory Disease in Dairy Farming. J Adv Dairy Res. 12:647.

significant disruptions to the body's protein synthesis process by altering the characteristics of Ribonucleic Acid (RNA) Ribonucleic Acid polymerase, an essential transcription enzyme. As a result, there is a significant impact on plasma proteins, the immunological system, and the reproductive system, mitotic division at the site of wounds, hair, and body growth. A yogurt is extensively consumed as a staple diet by many people and is reasonably priced.

The study also looked at adding zinc oxide nanoparticles made from green syntheses to yogurt and investigating how zinc affected the texture, color, and rheological properties of the product. deficiency of zinc in the body when pregnant might have a negative impact on the developing baby's mental capacity. Infertility in men can also result from zinc deficiency affecting the reproductive system. Phytate-rich foods, inadequate zinc intake from the diet, and hereditary conditions including acrodermatitis and anemia are the main causes of zinc insufficiency. This study sought to improve yogurt by supplementing it with zinc in order to satisfy daily body requirements because yogurt is extensively consumed as a staple diet by many people and is reasonably priced. The study also looked at adding zinc oxide nanoparticles made from green syntheses to yogurt and investigating how zinc affected the texture, color, and rheological properties of the product.