

## QUALITY AND REQUIREMENT OF WATER FOR DAIRY COWS

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### Abstract

This study describes the importance of safety regard the water quality, as well as meeting the needs for drinking water for cows. Some of most important parameters of organoleptic, physic-chemical and microbiological properties of water are pointed in this paper. In this study the hazards and adverse consequences of presence of nitrogen compounds in water (ammonia, nitrate and nitrite) plant and animal products and food industries are described. The adverse effects are seen as symptoms of poisoning by nitrates and nitrites, so the suggestions for limited water consumption are presented, in situation of increased amount of mentioned compounds. The particularly significant focus of study was aimed to highlight the risks of water usage, that is contaminated by wastes from processing factory (slaughterhouses and tanneries) in which can be found causes of disease.

In the second part of study, the formulas for calculation of drinking water amount for cows are presented, based on data about the intake dry matter, sodium and protein as well as based on the actual production of milk and temperature of air. It has been concluded that accomplishing of the needs for amount of drinking water for cows and the requirements for hygiene of water, are the main preconditions for good health of cows and higher production of milk as well for the achieving of the good quality of milk. The quality of water should be controlled by accredited institutions and laboratories.

**Key words:** Cows, Water safety, Quality, Contamination, Requirements, Consumption.