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The share of protein, lipids and water in cows organism of in different condition, assessed by urea method

S u m m a r y

The changes in cows' condition are directly linked with the changes of body mass and its composition, and they also influence the health and productivity. In order to assess the body composition (protein, lipids, water) urea dilution method was used. The method depends on the calculation of urea capacity resulting from the difference between the urea concentration in blood before and after the application of urea solution. The method is quick, not harmful for animal and the analyses are relatively simple. Urea solution is a substance that, via diffusion process, penetrate 10 water in the whole animal's organism. The aim of the study was to assess the usefulness of the method in the aspect of changing body condition. The experiment was conducted on 12 cows divided into 3 groups in relation to their condition (BCS): poor, optimal and very good. A relationship was found between urea capacity and body mass of cows and their condition. Obtained results confirm the purposefulness of body condition scoring as a source of information about the degree of body fatness and musculature, completing or replacing expensive and complex laboratory analysis.