

Monitoring of subclinical ketosis in Poland, based on monthly milk recording

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The aim of the lecture is to present the new system of monitoring of subclinical ketosis (SCK) in Poland, based on monthly milk recording. The preliminary results of such a monitoring will also be presented as well as the main risk factors for SCK in Poland. SCK is an excess of circulating ketone bodies in the blood without clinical signs of ketosis, such as decreased appetite, weight loss and milk production. The lack of clinical signs makes SCK difficult to detect. However, using blood β -hydroxybutyrate (BHBA) testing to measure the incidence or prevalence of SCK in a herd is a powerful and useful clinical tool. In Poland, we use milk content of BHBA (M-BHBA) and acetone (M-A) to detect cows and herds in risk of SCK. M-BHBA and M-A are determined by MilkoScans with FTIR, in four labs of Polish Federation of Dairy Cattle Breeders and Milk Producers (the association which serves the monthly milk recording in Poland). The system (Kowalski and Słoniewski, 2013) has been introduced into the practice in April 1., 2013 and about 720 000 cows are being monitored annually. The cows between 6 and 60 days in milk (DIM) are not diagnosed but identified as „in risk”. A special statistical method has been implemented to calculate the probable frequency of subclinical ketosis (PFSK). If it is higher than 10 or 20%, the herd is identified as „in risk” or „in high risk” of SCK, respectively. The results are presented to the farmers in monthly reports delivered by the internet. A preliminary survey of the results shows that about 11% of cows at 6-60 DIM are in risk of SCK. Surprisingly, more ketotic cows have been found in lower productive herds than in higher productive ones. High milk yield is not a risk factor for SCK in Poland. Other factors will be shown and discussed. Our next activities will also be presented.

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