Dairy cow health and the effects of genetic merit for milk production, management and interactions between these: udder health parameters

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Milk production per cow has increased significantly as a result of breeding, feeding and other management factors. High producing cows are often compared with athletes that require special care. Therefore concerns about consequences of high production for animal health are increasing. This study aims to address such concerns and deals with health risks for low and high producing dairy cows. In a 2x2x2 factorial design, HF Heifers (n=100) of high or low genetic merit for milk yield that were milked 2 or 3 times a day and fed a Mixed Ration with high or low energy content were compared during the first 14 weeks of lactation. Milk composition and cell counts were determined weekly, quarter milk bacteriology at 3 and teat condition at 4 time points during the experiment. The experimental factors, especially ration composition, resulted in substantial differences in milk production between treatment groups. Preliminary results indicate that ration composition did not affect cell counts or teat condition. Teat condition was impaired but cell counts were lower with increased milking frequency. Cell counts were higher for cows with high genetic merit, teat condition was not related to genetic merit for milk production. Effects of genetic merit on cell counts were highest for 2 times a day milking.