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Research Management

Section animal welfare

# Influence of housing and management on claw health in Swiss dairy goats

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### Key words

Claw lesion, Dairy goat, Housing, Locomotor activity, Management, Overgrown wall horn

## Aim of the study

The aim of this study was to gain profound knowledge on the occurrence of overgrown wall horn, its impact on claw health and locomotor behavior, and possible adverse effects on animal welfare. Additionally, housing and management factors that may contribute to non-physiological claw conditions were evaluated.

#### Material and methods

The study was conducted on 28 Swiss dairy goat farms. On each farm, data on claw measurements, overgrown wall horn and claw lesions was collected from 12 randomly selected goats twice (in autumn, after the grazing period and in spring, after the indoor housing period). Data on locomotion (activity, total lying time, number and duration of lying bouts in 24 h) was recorded by MSR loggers over 3 days, before and 2 weeks after routine claw trimming. Data on housing conditions and management factors was gathered by means of a questionaire.

# Results and significance

Almost all claws showed overgrown wall horn. Horn separation and sole hemorrhages were the most frequent lesions detected. No infectious claw diseases were found. The risk of developing sole hemorrhages doubled in severely overgrown claws. Specific training of the farmer for trimming small ruminants showed a positive effect on the occurrence of a part of claw lesions. Trimming had no effect on locomotion and lying behavior. A certain extent of wall horn overgrowth in dairy goat claws cannot be avoided under the housing conditions typical for Swiss farms. Severe wall horn overgrowth is associated with an increase in the proportion of claws with sole hemorrhages. Therefore, regular and careful functional claw trimming, taking the housing situation (indoor on deep bedding, access to pasture, grazing on alpine pasture) into account, should be propagated.

#### Publications, posters and presentations

- Lisa-Marie Sailer; Mirjam Holinger; Joan-Bryce Burla; Beat Wechsler; Patrik Zanolari; Katharina Friedli: Influence of housing and management on claw health in Swiss dairy goats. BMC Veterinary Research (submitted).
- Lisa-Marie Sailer: Einfluss von Management und Haltung auf die Klauengesundheit von Schweizer Milchziegen (Präsentation). Kleinwiederkäuertagung, Tierspital Zürich, 13.2.2020
- Lisa-Marie Sailer: Influence of housing and management on claw health in Swiss dairy goats (presentation). International Congress on the Breeding of Sheep and Goats, Bonn, Germany 15 -16 October 2020.
- Katharina Friedli: Einfluss von Management und Haltung auf die Klauengesundheit von Schweizer Milchziegen. Artikel im Forum Kleinwiederkäuer (in Vorbereitung).

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