



Topic/Title

Individuell fenotyping av fôreffektivitet hos NRF ved bruk av stabile isotoper

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Individual phenotyping of feed efficiency in NRF using stable isotopes

Summary

Selective breeding relies on the use of individual recordings of feed efficiency (linked to genetic information) on large numbers of individuals. As feed utilization efficiency (FUE) is defined as milk yield (kg) /feed intake (kg) both milk yield and feed intake have to be individually recorded. Individual milk yield is easy to manage but measuring the individual feed intake of cows is laborious and costly for dairy farms, particularly when cows are fed in groups. Hence, potential novel traits using stable isotope profiling should be investigated. The thesis will analyze milk and blood samples from an experiment which is carried out at the metabolism barn at the Norwegian University of Life Sciences (NMBU) this autumn. The experiment is designed to test a method for phenotyping individual feed efficiency in Norwegian red cows (NRF). The method is based on using stable isotopes to trace nutrients from feed to milk. The student can be part of the experiment (October-December 2021), will be part of the sample preparation and the statistical analysis. It is also possible to be part of a scientific publication.

Subject area

Phenotyping, feed efficiency, breeding, nutrition, and stable isotopes

Language thesis

Preferably in English, but Norwegian is also accepted.

Bachelor or Master thesis

Master thesis

Credits

30/60

Project/company

Collaboration project between GENO, TINE, and NMBU.

Please contact

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