

Studies on the ingestion of radiocesium from contaminated pastures in reindeer

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Abstract: Grazing experiment with two oesophageally fistulated reindeer were conducted during June to August 1987 in the Jotunheimen mountain range (1000-1400 m). Grazing in 4 different plant communities was compared: Mesotrophic birch forest dominated by heather, Oligotrophic community with poor snow-cover dominated by heather and Dwarf birch, Oligotrophic community with moderate snowcover dominated by lichens and sedges and a snowbed community dominated by Least willow and lichens.

The radioactivity in food samples obtained from the fistula changed through the summer and differed between communities. from 8000 Bq/kg dry matter to 49000 Bq/kg dry matter. The major factor responsible for these changes was variations in the amounts of lichens ingested. Lichens beside mosses had the highest levels of radiocesium and consequently the amount of lichens consumed was the major single food item responsible for high intake of radioactivity.

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