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## **Foot disorders in dairy cattle: impact on cow and dairy farmer**

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### **Abstract**

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*This paper considers the economic consequences and the welfare impact of foot disorders in dairy cattle and the association between them, taking into account clinical and subclinical foot disorders. In dairy farming with cubicle housing and concrete floors, foot disorders are a major welfare problem with serious economic consequences. On average, foot disorders cost €53 per cow per year, of which indirect cost factors are the main cause. Subclinical foot disorders, which are the foot disorders not recognised by dairy farmers, account for 50% of the total welfare impact and 32% of the total costs. The consequences of foot disorders can be difficult to observe and more insight into these consequences is helpful in stimulating actions to improve dairy cow foot health. Digital dermatitis (DD), an infectious foot disorder, is the most serious foot disorder from both an economic and welfare perspective. The correlation between economics and animal welfare impact suggests that reducing the problem of foot disorders from an economic perspective will positively influence the welfare of dairy cows. Insight into economic and welfare consequences of the different foot disorders, including the association between them, can help make dairy farmers more aware and help with decision-making regarding measures to improve dairy cow foot health.*

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**Keywords:** animal welfare, dairy cattle, economics, foot disorders, modelling, welfare impact