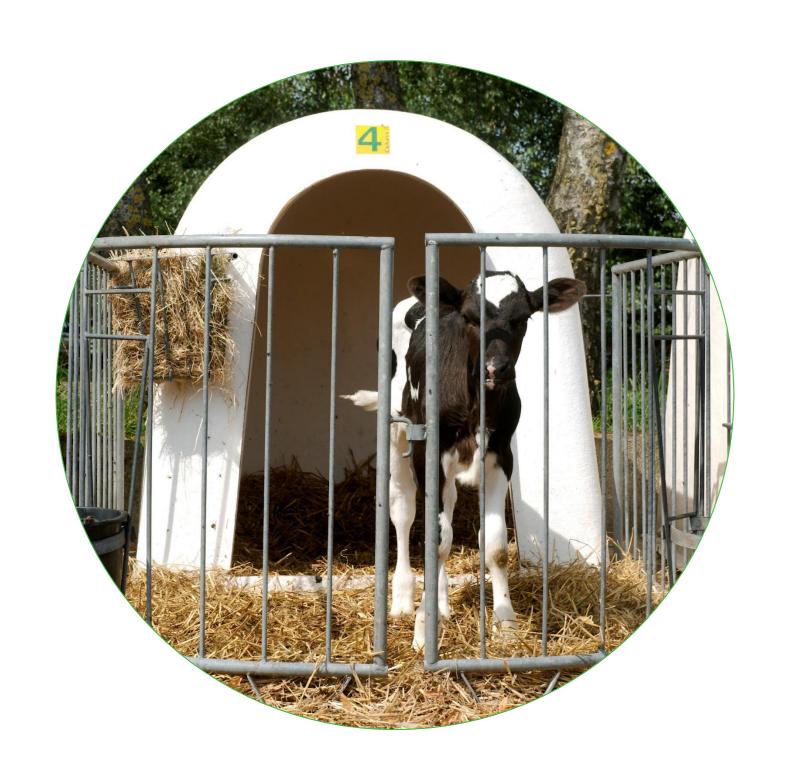
# Implications of cow-calf contact for dairy calf welfare



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### **BACKGROUND**

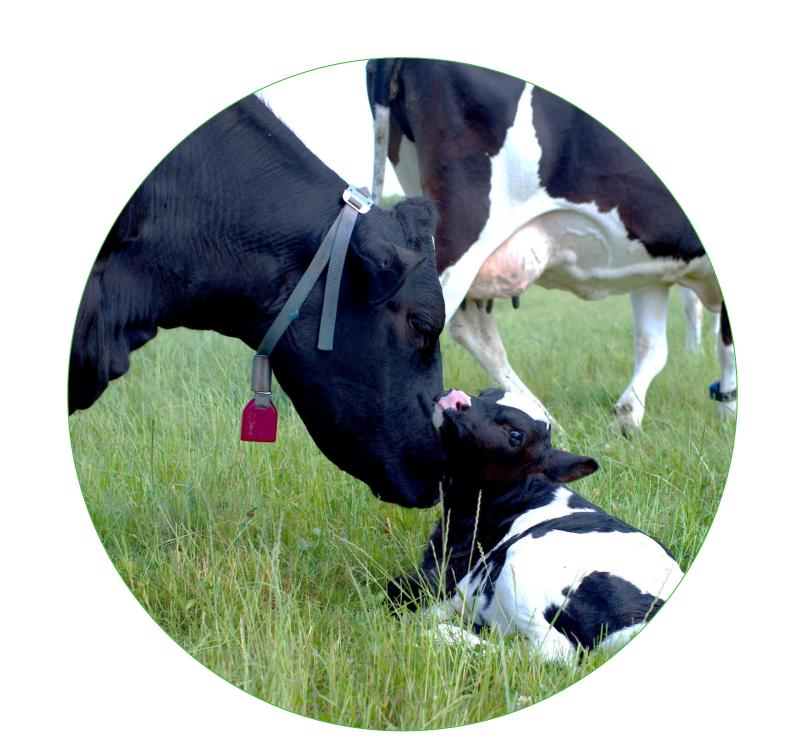
On dairy farms calves are withheld from maternal care, which can result in:

- Reduced welfare: unfulfilled needs (e.g. suckling)
- ♦ Societal concerns



## Might compromise dairy farmers' license to produce

Knowledge on long-term effects of cow-calf contact and suckling on behavioural and biological functioning of dairy calves is lacking.



### **OBJECTIVES**

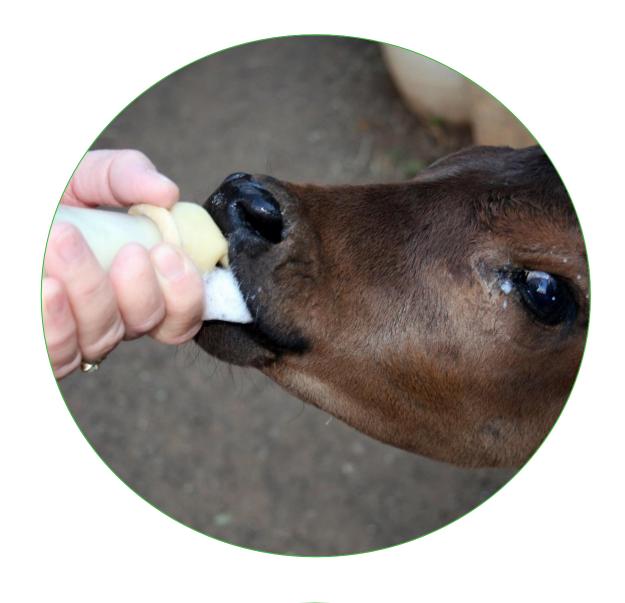
Investigate the effect of rearing methods with different levels and components of maternal care on calf welfare.

- i) Determine the most relevant cow-factors (e.g. maternal licking, suckling) for calf welfare.
- ii) Examine if these cow-factors can be implemented or mimicked in practice.
- iii) Investigate the least stressful method for weaning and separation.

### SOCIETAL IMPACT OF MY RESEARCH

There is a public opposition to the early separation of cow and calf and a social demand for farming systems that allow maternal care. This study will:

- Provide insight in pro's and con's of cow-calf contact during the first 8 weeks of life.
- → Identify potential welfare enhancing farm practices.



# **METHODOLOGY**

- → Follow female calves (N = 120) from birth to early adulthood on one Dutch dairy farm.
- Assess behavioural, physiological, immunological, and microbiological indicators for welfare in cow and calf using a multifactorial experimental design.



# **Treatments**

i/ii) Three groups with different levels of cow-calf contact:

- No contact
- Physical contact but no suckling
- Full contact including suckling



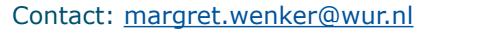
- ► Intake of colostrum (administering vs. suckling)
- ► Tactile stimulation (brushing vs. maternal licking)
- ► Milk source (milk replacer vs. cow milk)
- iii) After 8 weeks calves within the two groups with cow-calf contact will either undergo:
  - First **separation** from cow, then **weaning** off milk.
  - First weaning off milk, then separation from cow.











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