

HOW CAN WE IMPROVE?



USING MEAT INSPECTION DATA TO IDENTIFY BEEF CATTLE FARMS WITH POTENTIAL ANIMAL HEALTH AND WELFARE ISSUES

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RATIONALE

Meat inspection data are collected routinely, but their potential as a source of epidemiological information is still underestimated and underutilized.

OBJECTIVE

Assess the intercorrelation between lesions found at meat inspection and so identify latent factors potentially related to health and welfare on the farm

RESULTS 4 factors – 24% explained variance – RMSR = 0.04

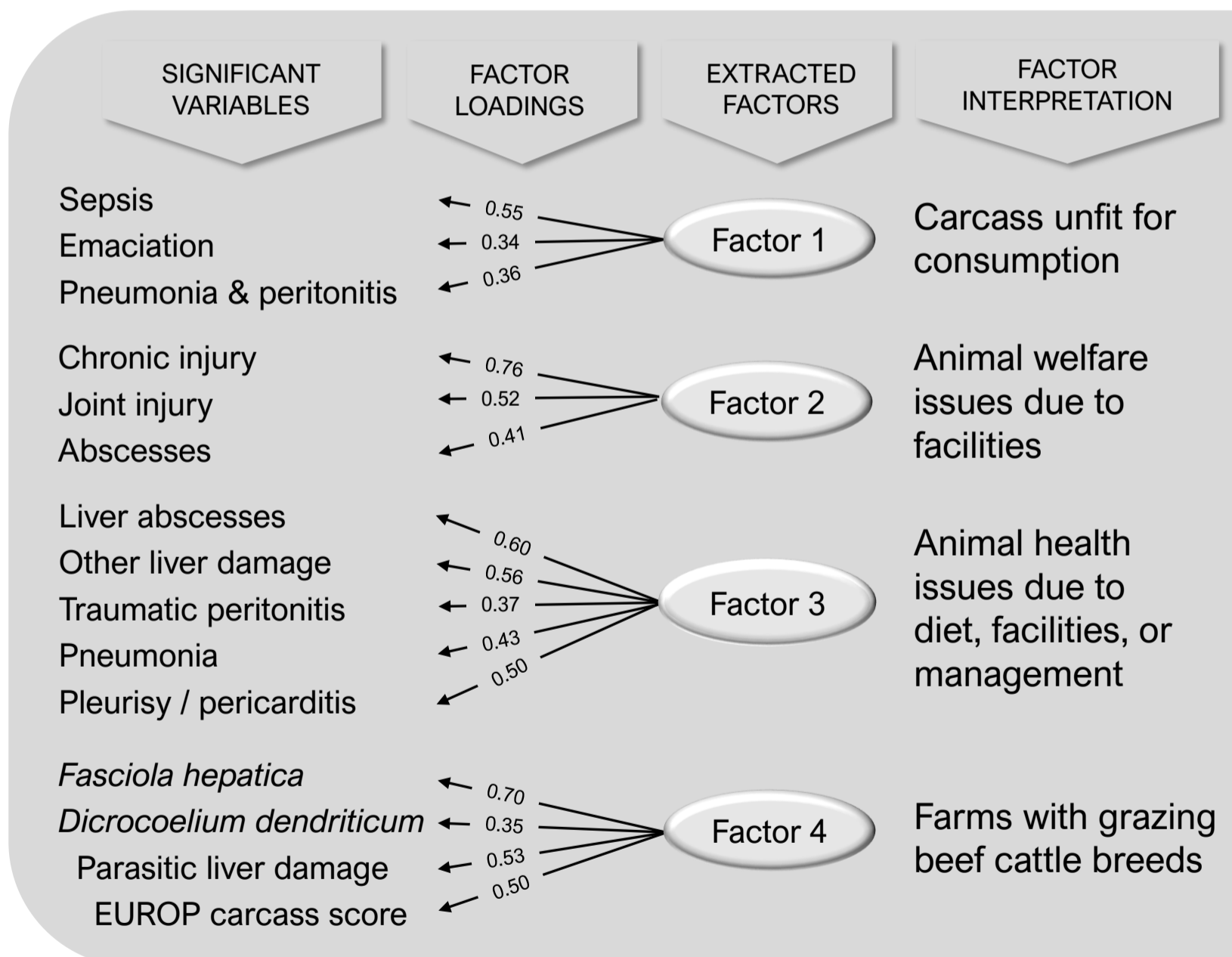
METHODS

Data

- Meat inspection data 2014-2018
- Sweden's 8 biggest abattoirs
- Within-farm prevalence of recorded lesions adjusted by abattoir effect
- From 1100 beef farms slaughtering at least 20 animals/year

Exploratory Factor Analysis

- Generate hypotheses
- Variables with KMO > 0.5
- Principal axis factoring
- Oblique rotation (*oblimin*)
- Factor loadings > |0.30|
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CONCLUSIONS

- Despite very low within-farm prevalence of lesions, it was possible to identify **latent factors** potentially related to farm animal health and welfare issues
- Such factors could have a potential use as a **warning system** to identify farms and so where to target veterinary advice and support