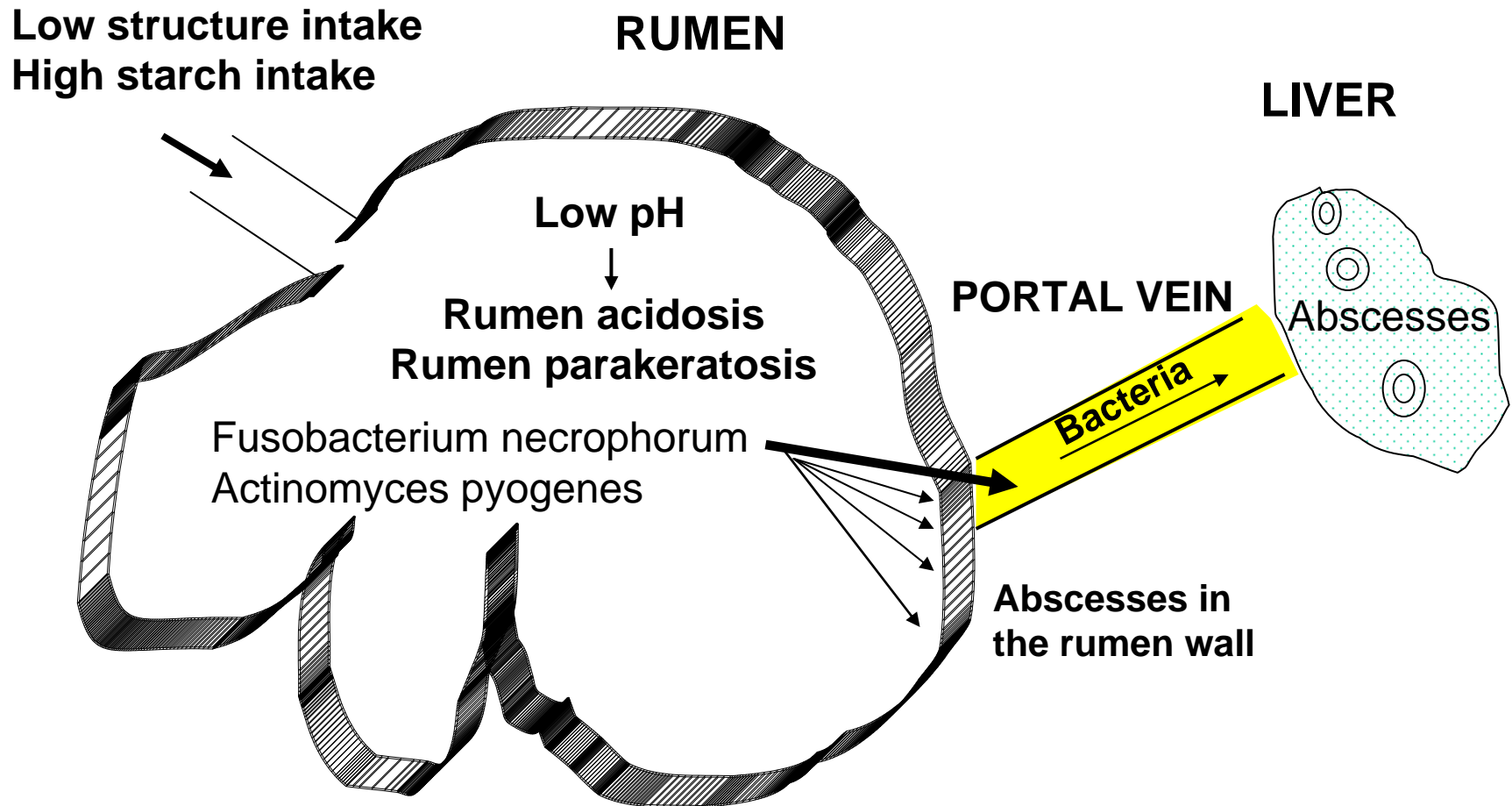


# Factors causing a higher level of liver abscesses in organic compared with conventional dairy herds

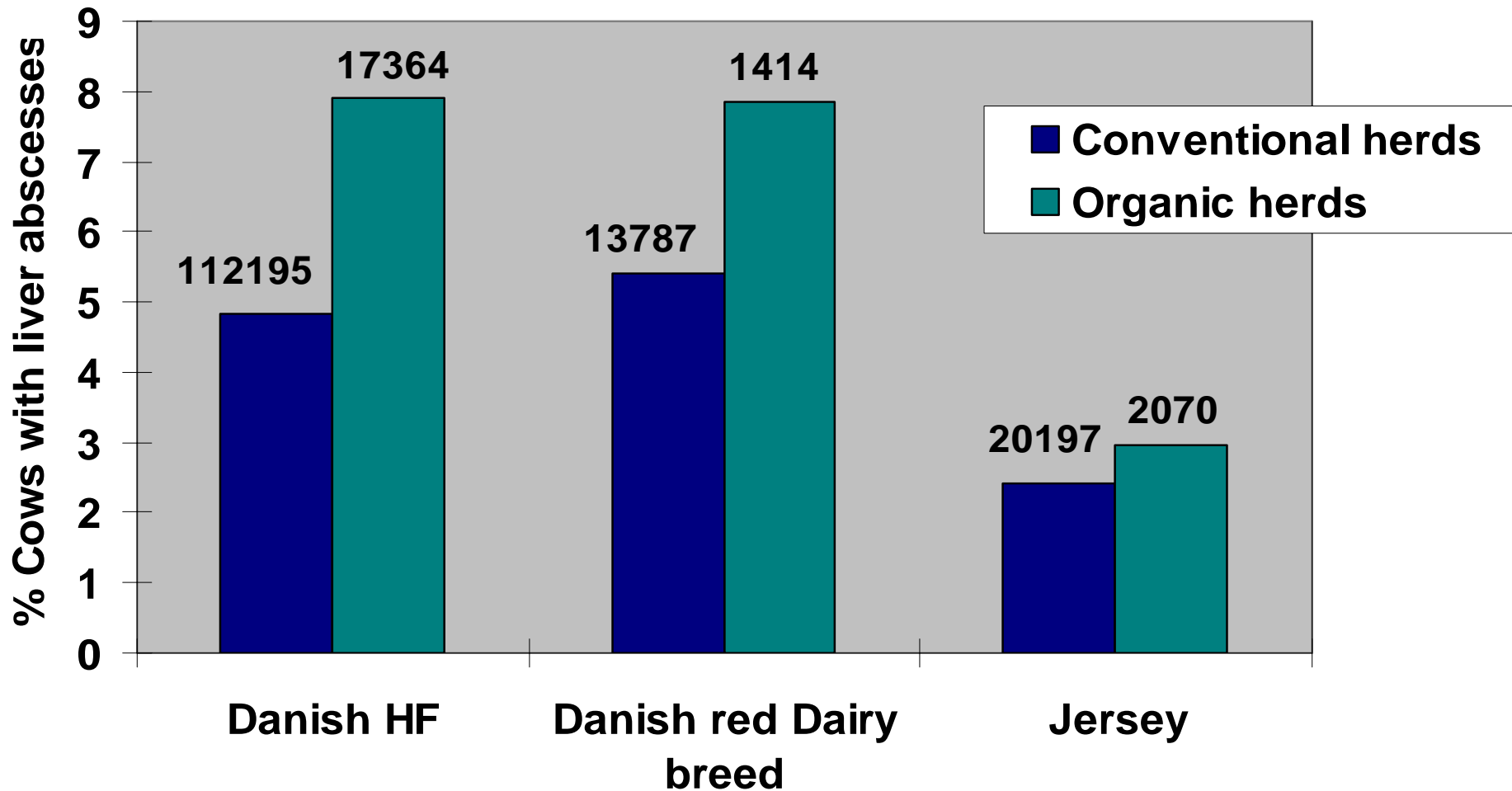


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# Feed related causes of liver abscesses:



# Higher frequency of liver abscesses in organic dairy herds and large breeds



# Aim of project

To identify feeding and management factors related to the high level of liver abscesses in organic herds

by

- 1) A questionnaire
- 2) Analysis based on data from the Danish Cattle Data Base

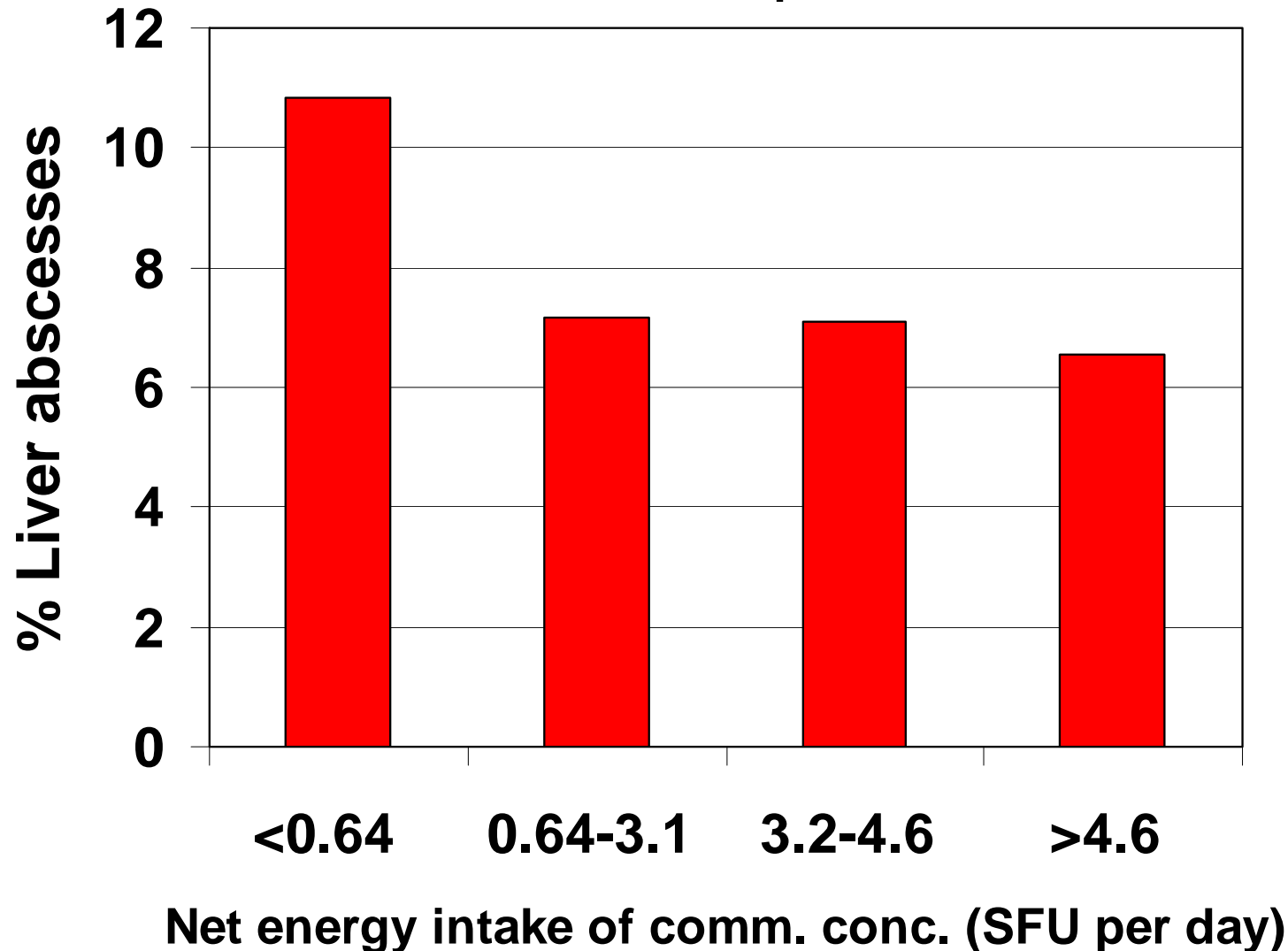
# Questionnaire

- 91 organic herds
- Large breed
- Slaughter more than 20 cows per year
- Standardised slaughterhouse recordings
- Data included:
  - winter and summer feed ration, feeding and grazing routines during 3 seasons (2001- 2003)

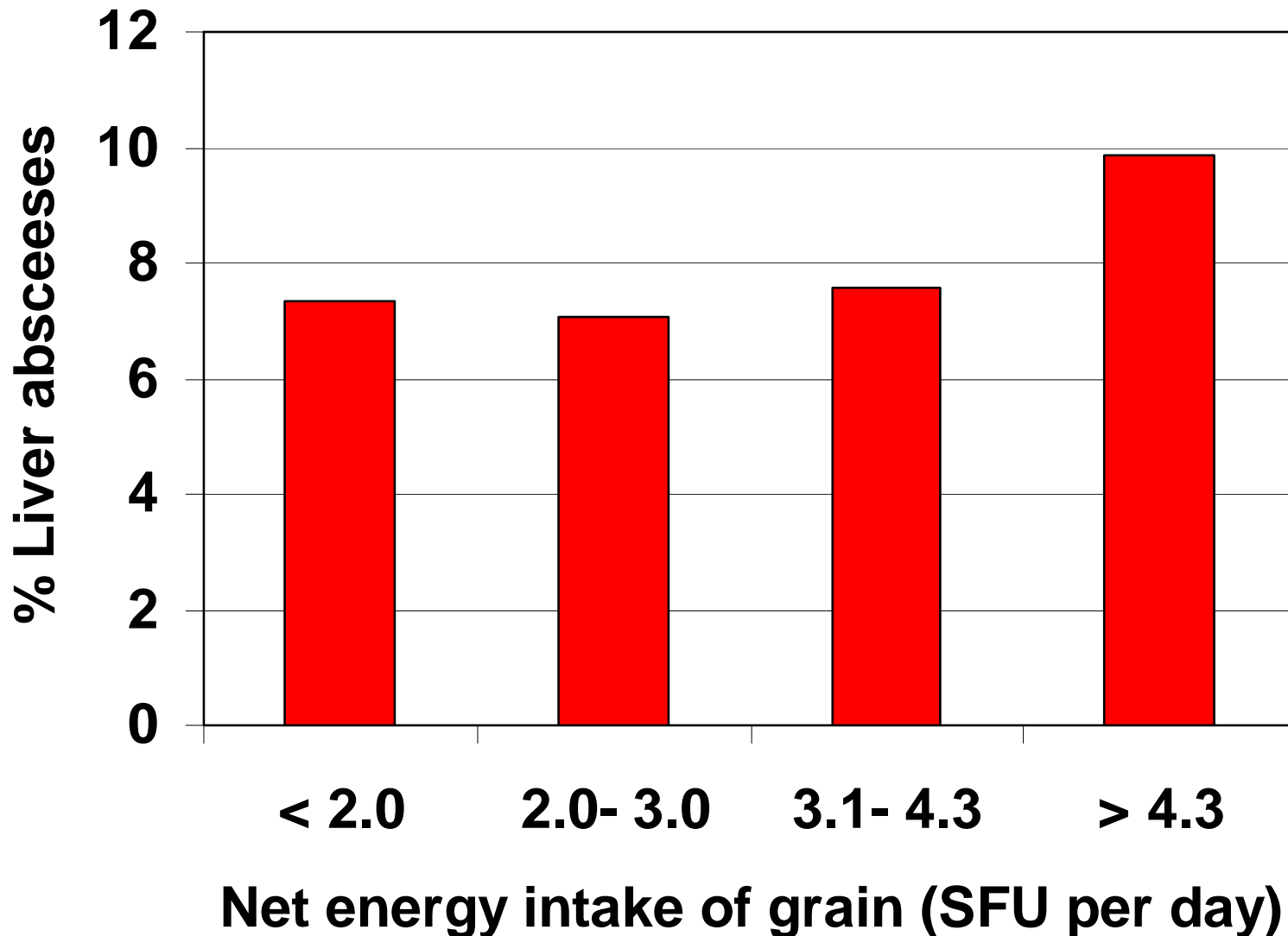
# Average feed level and nutrient content in organic and conventional rations

	Winter	Summer
Net Energy Intake, Scandinavian Feed Units	18.4 19.6	18.5 19.5
Fatty acids, gram per SFU	28.6 36.0	28.8 34.0
Starch, gram per SFU	200 167	174 147
Digestible cell walls, gram per SFU	376 361	343 365

# Effect of energy intake from commercial concentrates on the herd level of liver abscesses ( $p = 0.019$ )

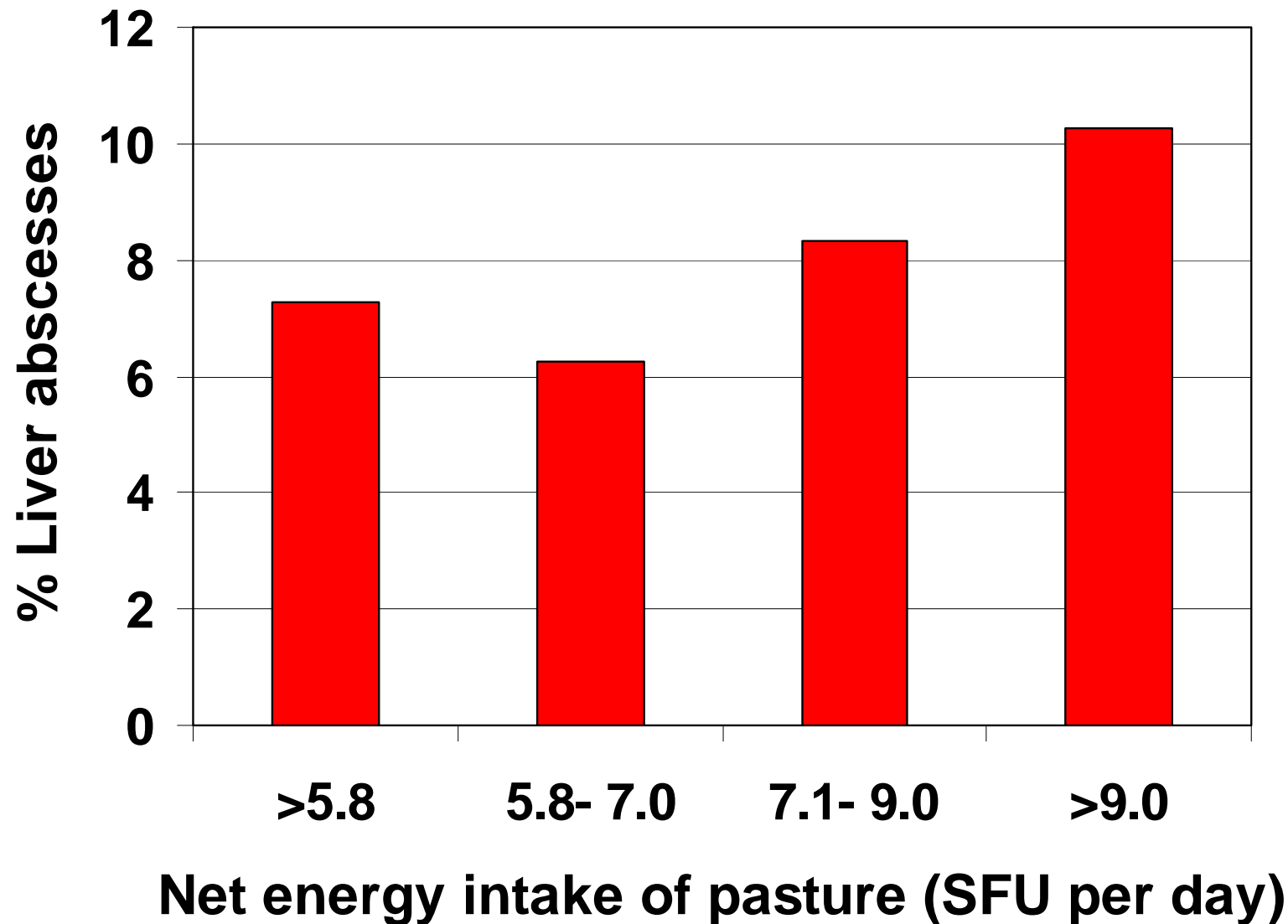


# Effect of energy level from grain on the herd level of liver abscesses (ns)





# Effect of the level of pasture intake on the herd level of liver abscesses ( $p=0.012$ )



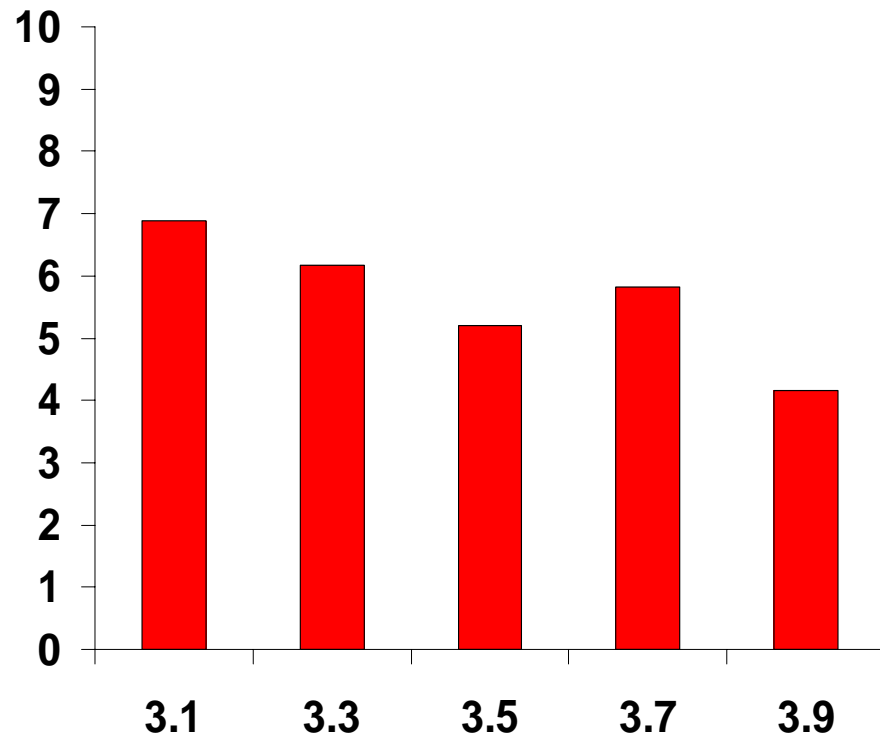
# Analysis

## Danish Cattle Data Base

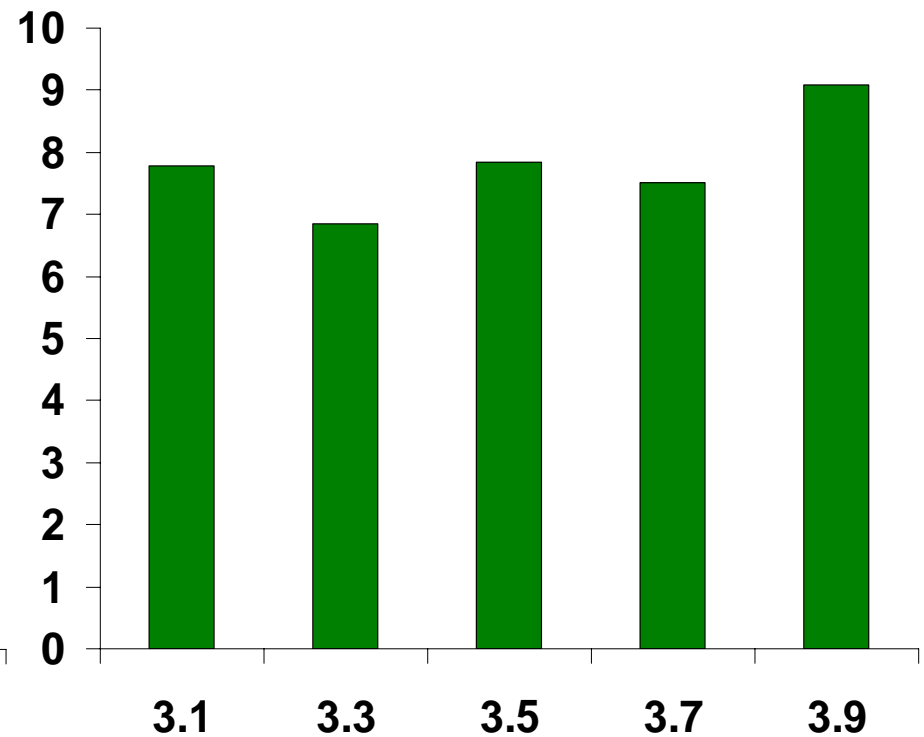
- 244 organic herds
- 666 conventional herds  
(loose housing ✓ grazing ✓)
- Danish Holsteins
- Milk tank recordings of the herds  
(January 2001 to June 2003)
- Standardised slaughterhouse recordings  
(July 2001 to June 2003)

# Effect of minimum milk fat % during Summer season

**% Liver abscesses**



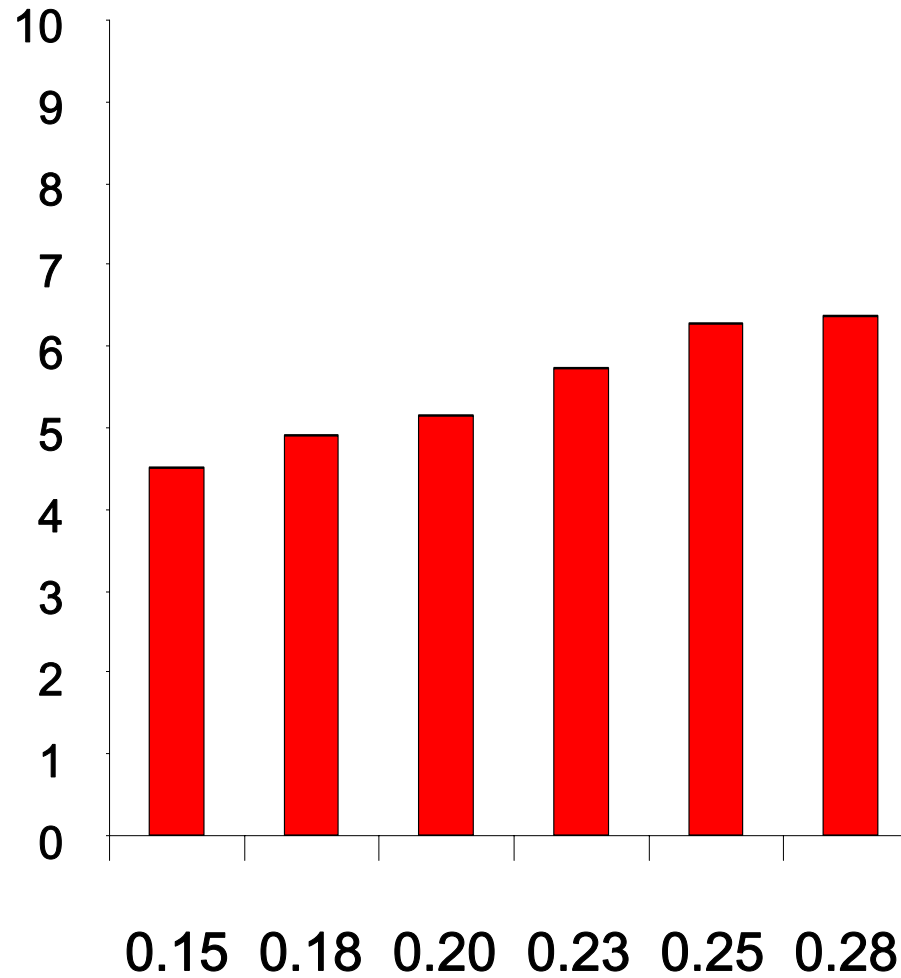
**Conventional herds**



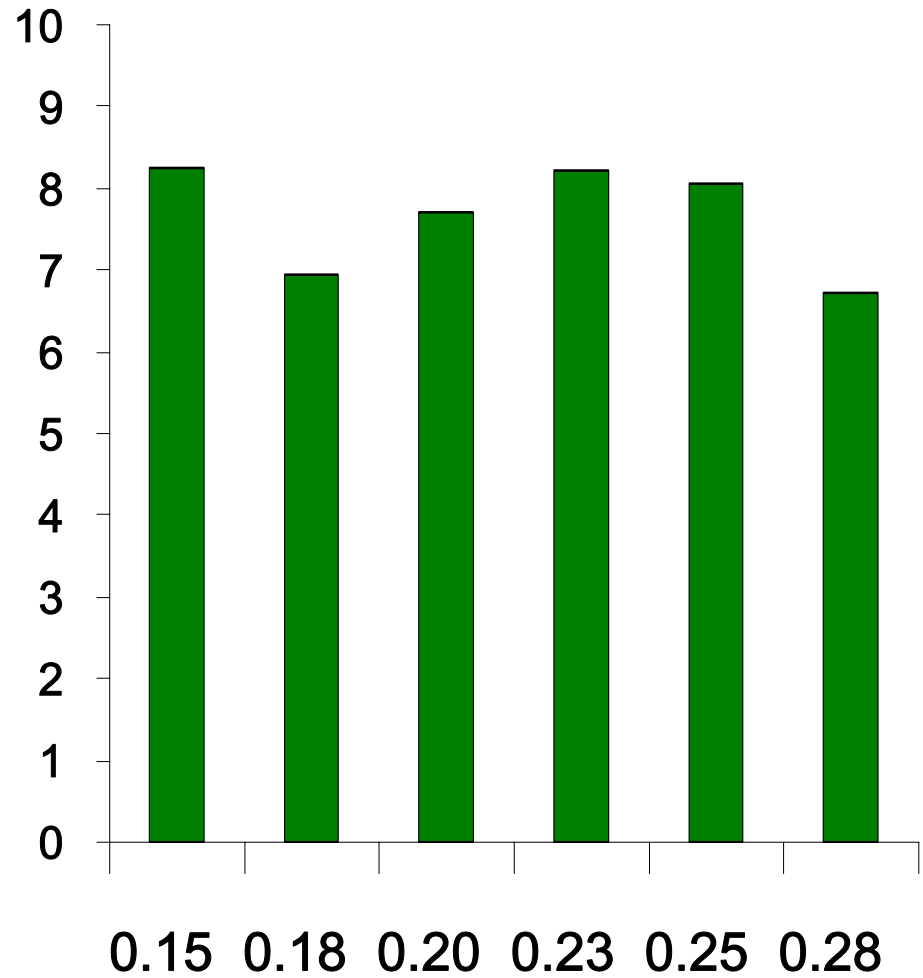
**Organic herds**

# Effect of variation in milk fat %

**% Liver abscesses**



**Conventional herds**



**Organic herds**

# Conclusions

- Organic dairy feed rations had a
  - higher starch level
  - lower level of digestible cell walls in summer rations
- Higher frequency of liver abscesses were found in herds with high grazing levels and high grain/low commercial concentrate intake
- The effect of high grazing levels are probably related to unbalanced feeding
- Low minimum milk fat % during Summer and high variation in milk fat % in general, corresponded to higher levels of liver abscesses

Thank you for your attention!

