

# Reducing antibiotic (AB) use in Dutch Organic Dairy Production

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# AB use in Netherlands:

- Hollands highest use in EU (6 dd. per animal)
- Dairy, calf, pigs and poultry
- For prevention, treatment, stimulating production
- 1st, 2nd and 3rd generation
- more and more cases of resistant bacteria

→ Now politicians want a 50% reduction  
in 3 years.

## What is a daily dosis (dd) ?

- Conversion factor for AB products
- Doses of a product per animal per day

### Example:

- 1 drying off = 1 dd
- 1 mastitis injector = 0.5 dd
- 1 ml excenel = 0.08 dd
- 10g mamyzin = 1.33 dd
- 1 ml baytril 5%/10% = resp. 0.02 /0.04 dd
- 1 ml neopen = 0.03 dd
- 1 ml diatrim = 0.02 dd

## Information from three research projects:

- Project on relation between farm type and strategies and breeding goal (questionnaire)
- Project on backgrounds of the use of AB and animals natural resistance to disease (interviews + data collection)
- Survey, interviews farmers that do not use AB (interviews)

# Dutch Organic Dairy today:

- Questionnaire 182 farmers (of 320 total)
  - 60 cows, 58 ha
  - 6153 kg milk / cow
  - mainly grass/clover (silage)
  - 1131 kg concentrates/cow
  - 70% free stall with cubicles
  - many breeds/cross breeds

# AB use of these 180 farmers:

- 140 farmers: use AB
  - 32% not for drying off
  - 60% uses drying off AB on < 50%
  - 8% uses drying off on > 50%

} 56% also use alternative/homeopathic products
- 40 farmers: no use of AB
  - 58% use also alternative/homeopathic products

# Alternative products:

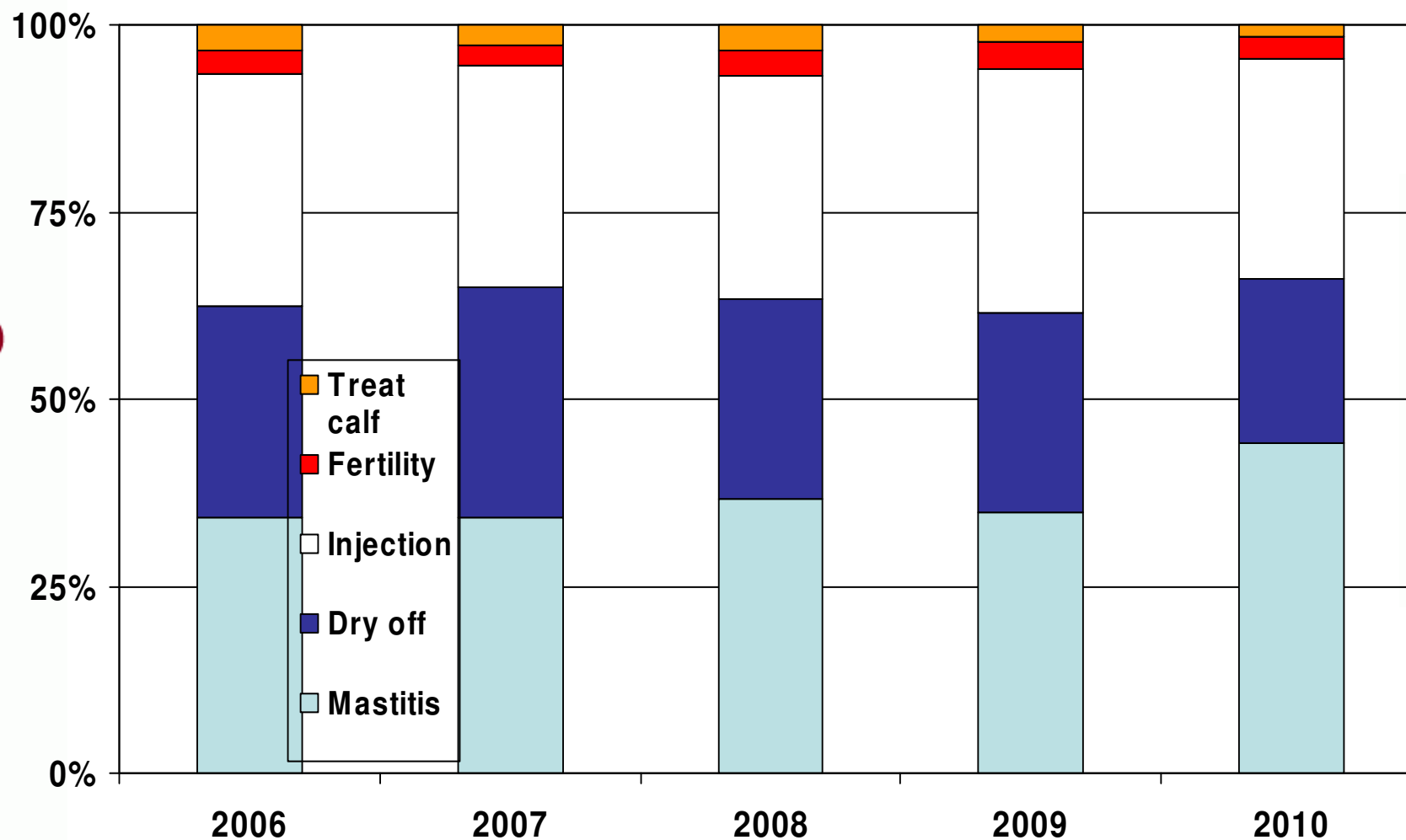
- Many different alternative products:
- 15% use homeopathy
  - 20 farmers use it next to AB
  - 7 farmers only or next to other alternatives

# AB use in Dutch Organic Dairy:

- Average: 1,95 dd per cow
- High variation between farms; 0 to 9 dd per cow
- Average use is 1/3 of conventional
- Some farms use to much AB
- Dutch Org. sector strives to become AB-free in five years
- Discussions between farmers
- Image: distinguish from conventional production



# AB use in Dutch Organic Dairy:

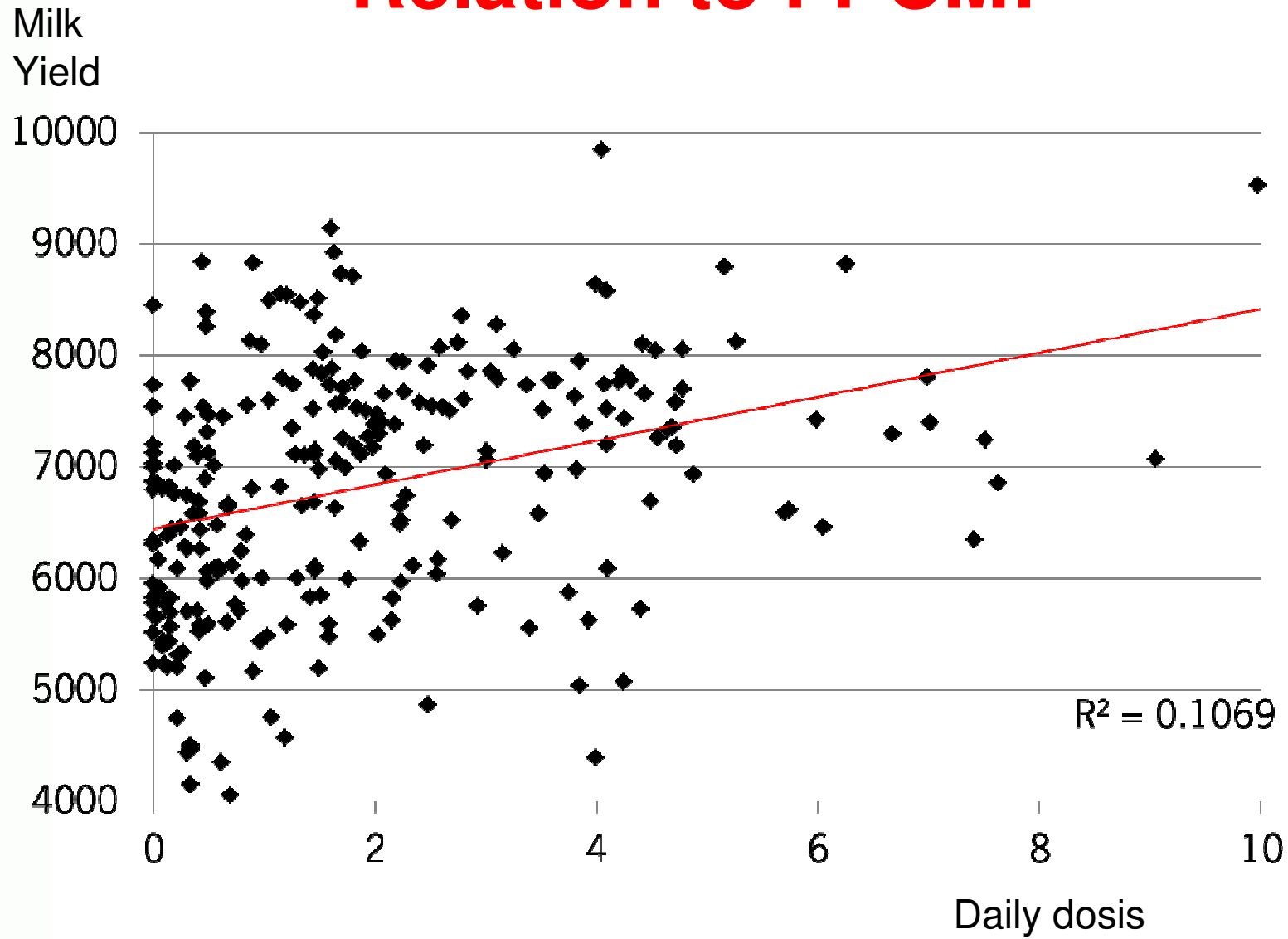


An injection can include treatment for udder health, claws, fertility and other.

# How to become AB free:

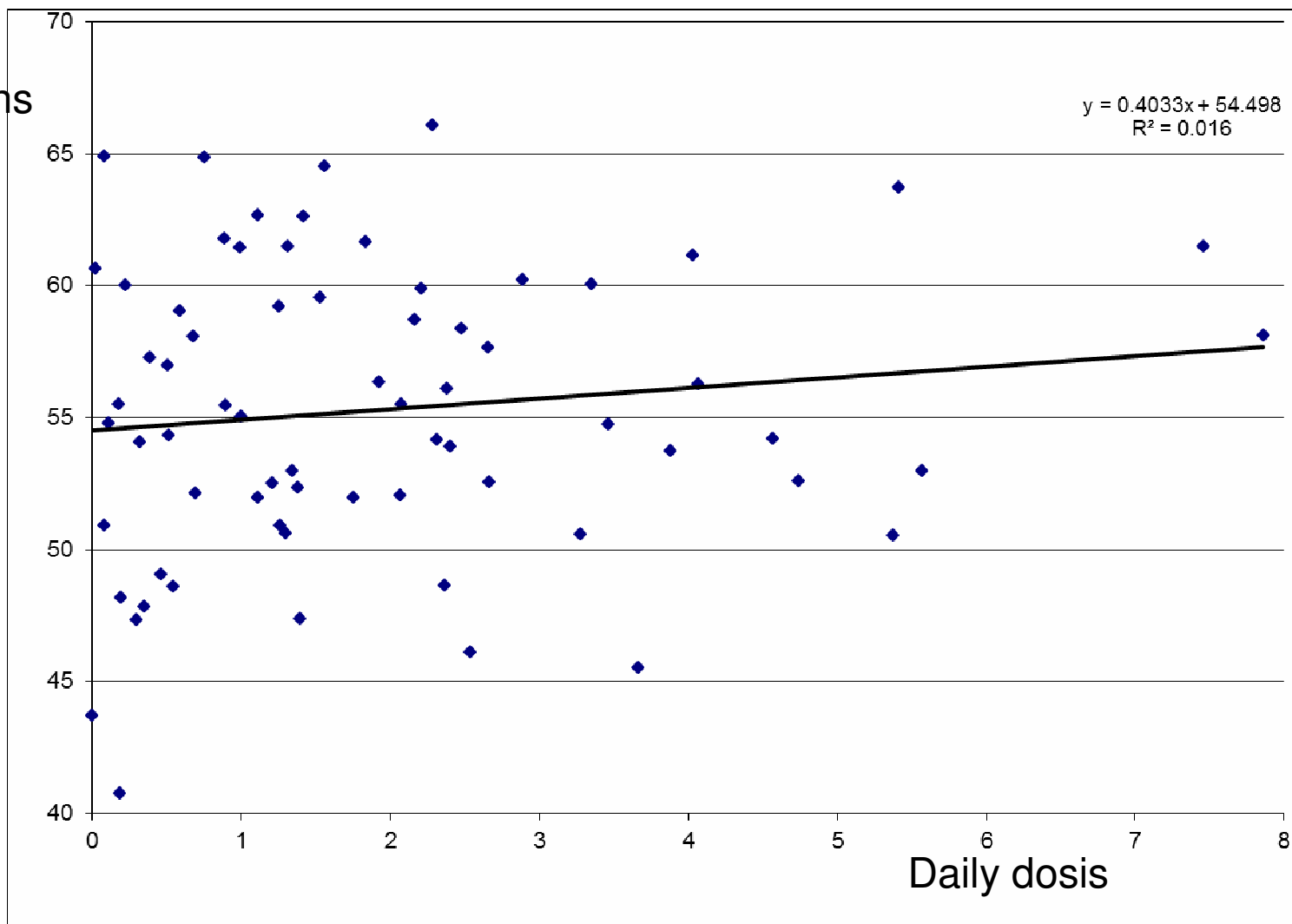
- Farm characteristics/  
management factors
- Farmers experiences

# Relation to FPCM:



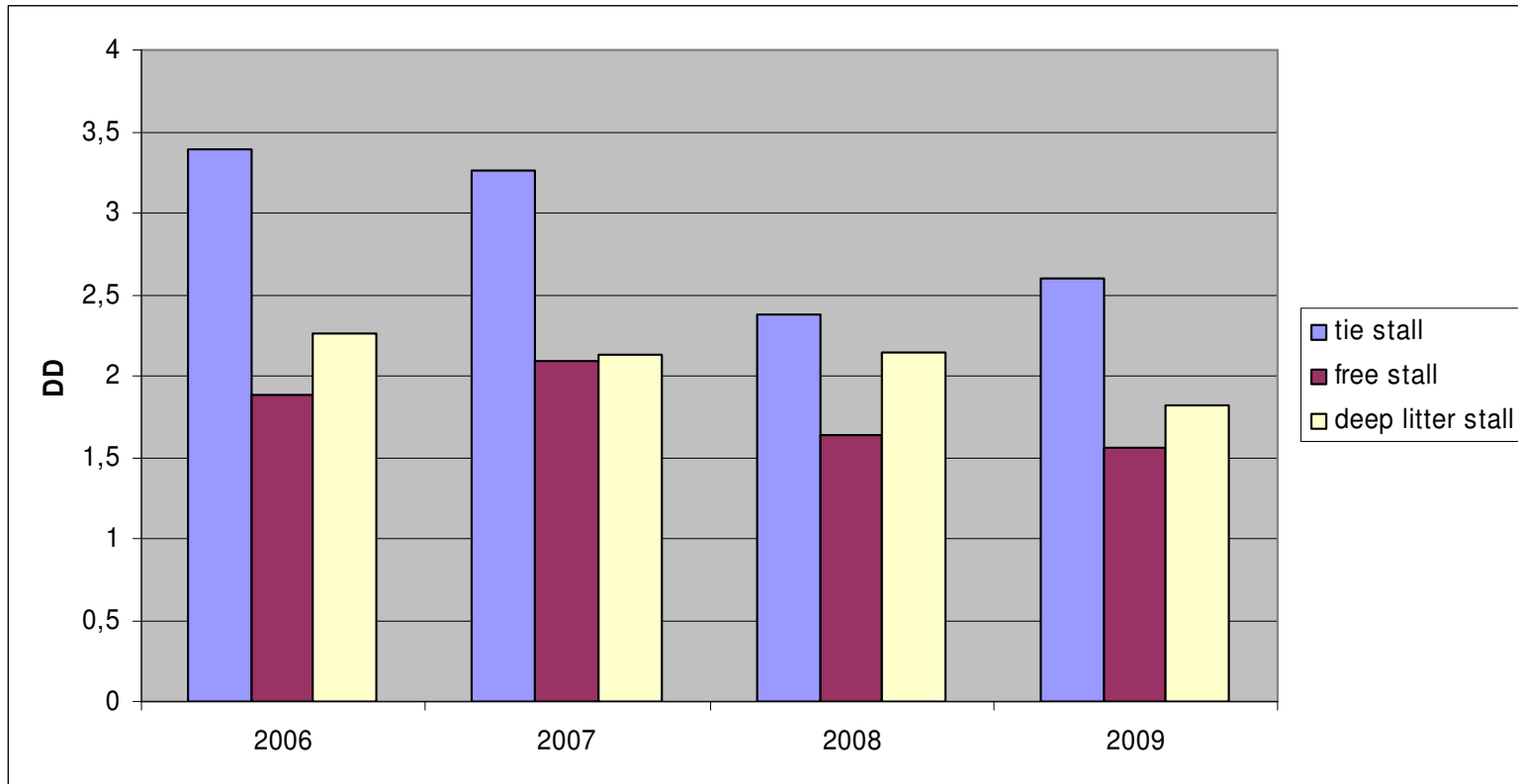
# Relation to age of cows:

Months



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# Relation to housing:



# Farmers experience:

## Aspects from 10 stories of AB free farmers

- Start with lower use, then just quit
- Cows have to get used – about 2 to 5 years
- Problems: cull of cows/cow families
- System approach, all aspects are connected
- System has to be in balance; cow type, feeding, housing, farmers attitude.
- Just do it.

# Summary:

- Low use of AB in organic dairy
- Realization of 0% will be difficult/ possible?
- High variation between farms
- Main use for udder health → needs most attention
- Low relation with farm characteristics
- Farmers management/attitude plays a large role
- Low or No use is possible (for all farmers?)

# Conclusions:

- Good bases for further reduction of AB use, also for conventional farming.
- More knowledge needed and exchanged
- Discussion with farmers important