

# *Managing long lasting, healthy cows in a large scale environment*

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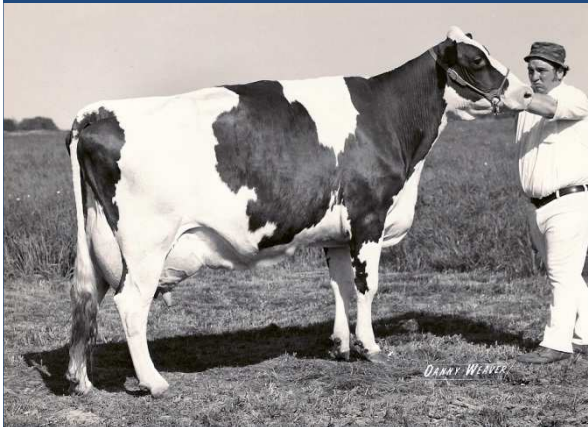
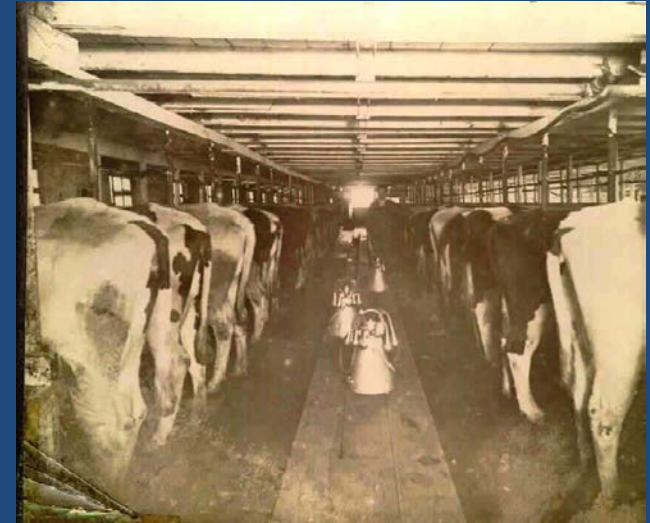
# About us briefly...

- ✓ 1200 ha
- ✓ Vertical integration
- ✓ 11.300 kg 305 (10.400 1st lact.) 3,7-4,0% BF, 3,2-3,3% P
- ✓ One of the highest MHGI replacement herd



# Charles Darwin: origin of Species

✓ Changes - reaction



# *Long usefull lifetime!?*

- *lifetime?*
- *longevity?*
- *High No of lactations?*
- *culling vs selection?*

**VS**

- *Economical lifetime!*
- *Genetic advancement!*
- *Effective raising and breeding!*





# *Place of improvements...*

- ✓ *Calf & heifer raising*
- ✓ *Fresh cow management*
- ✓ *Reproduction*
- ✓ *Nutrition(quality/efficiency*
- ✓ *Environmental factors*
- ✓ *Management skills*



# Calf & Heifer raising...

- ✓ Starts with the dry period „dry cow management“
- ✓ Raising replacements costs 15-20% of total cost
- ✓ Maternity management, calving

**Take home message!!!**

**First Two Hours: life or death**

**First two month: what kind of cow we'll have**



# Calf & Heifer raising...

Goals during the calf raising:

- ✓ Keep calves alive
- ✓ Proper daily growth/ gain
- ✓ First breeding at 12 month of age...
- ✓ First calving age at 22 months!!!
- ✓ Death loss less than 2%

How can it be?

- ✓ Improve immunity system
- ✓ Good quality colostrum
- ✓ Minimize stress
- ✓ hygiene!!!



# IgG absorption (gr) = quantity x concentration

40 kg calf 36 gr IgG

Avg abs% = 35%

Good colostrum = 50g/L

50g/L x 0.35 x 2 L = 35 gr

Poor colostrum = 25g/L

25g/L x 0.35 x 4 L = 35 gr

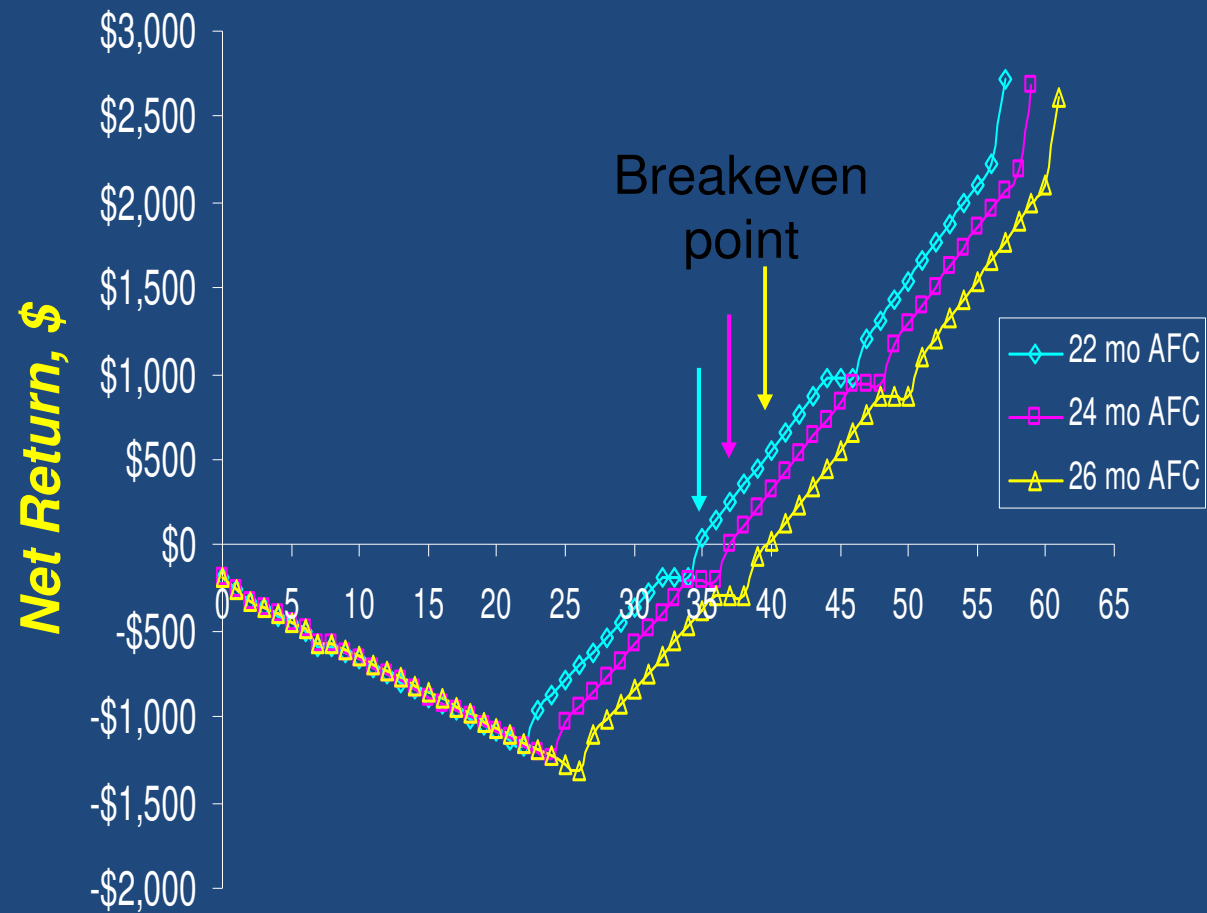




# *Goals during the calf&heifer raising ...*

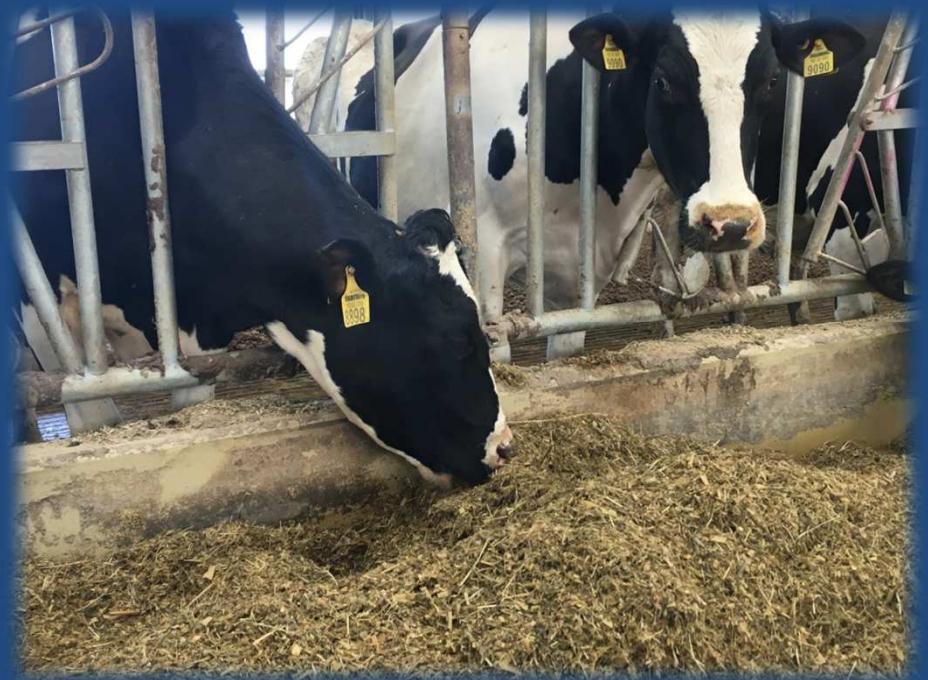
- *Birth weight must be doubled at day 56*
  - *40 kg ....80 kg 56 days of age*
- *At Breeding: 55% of the mature weight.*
- *At first calving: 85% of the mature weight.*
- *2nd calving: 92% of mature weight.*
- *Milk production must be at least 80% of the mature cows production, in the first lact.*

# *Economical effect of 22 months AFC*



# ***Fresh cow monitoring...***

- ✓ ***Daily observation on the first 3 weeks***
- ✓ ***Avoid stress factors***
- ✓ ***The sart is important***
- ✓ ***DMI!!! appetite!!! SIGNS!***





# *Fresh cow monitoring...*





# *Energy Partition During Early Lactation*

**1<sup>st</sup> Maintenance**

**2<sup>nd</sup> Milk Yield**

**3<sup>rd</sup> Growth**

**Weight Gain  
Reproduction**



# *Energy Partition During Late Lactation*

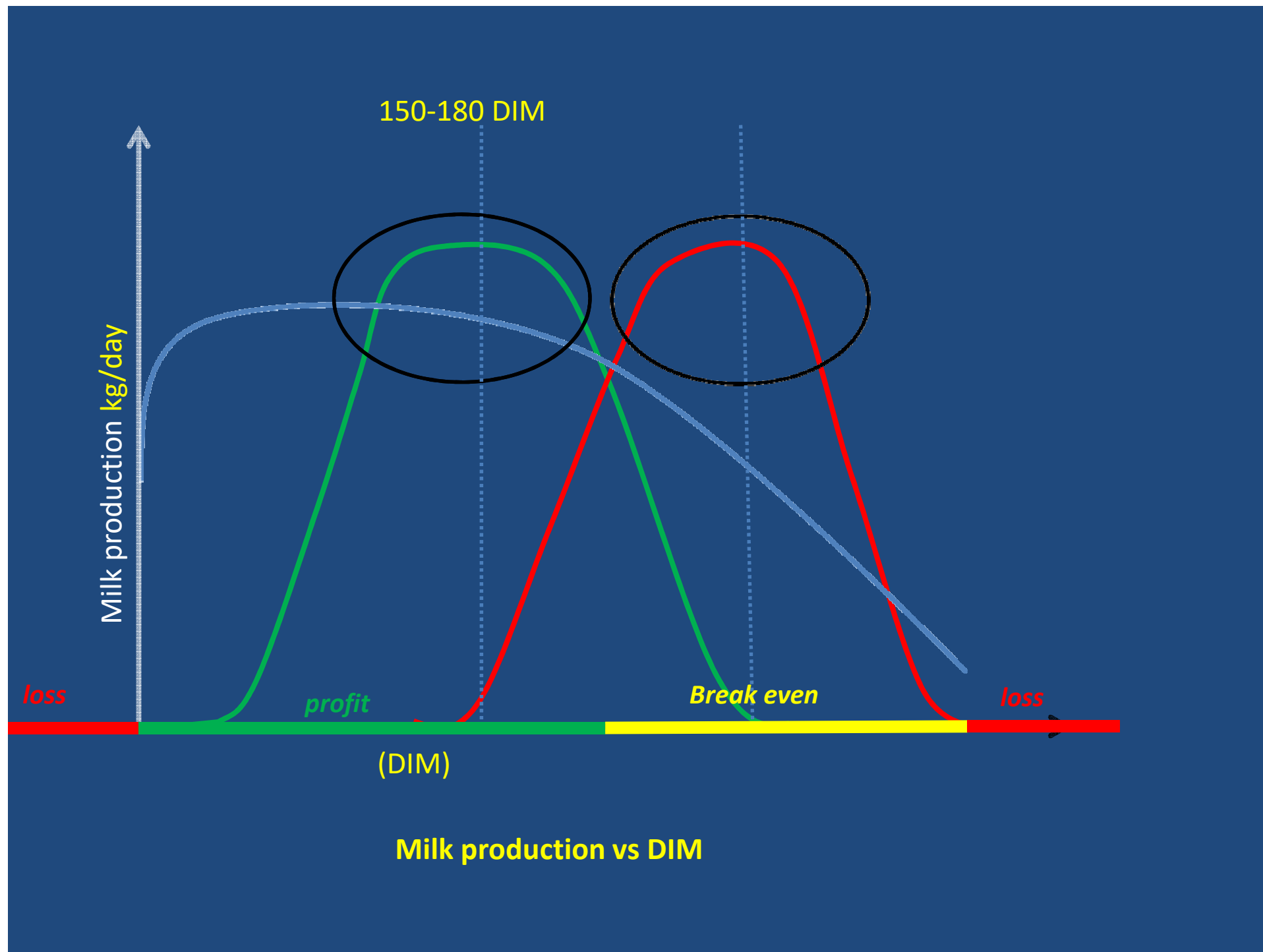
- 1<sup>st</sup> Maintenance
- 2<sup>nd</sup> Reproduction
- 3<sup>rd</sup> Growth  
Milk Yield
- 4<sup>th</sup> Weight Gain



# *Reproduction vs nutrition*

- ✓ „ if you have good reproduction, you'll have good production...”
- ✓ Cows been bred within 120 days (5 USD/ day)
- ✓ 150-180 DIM
- ✓ Nutrition convertation change over 180 DIM!!



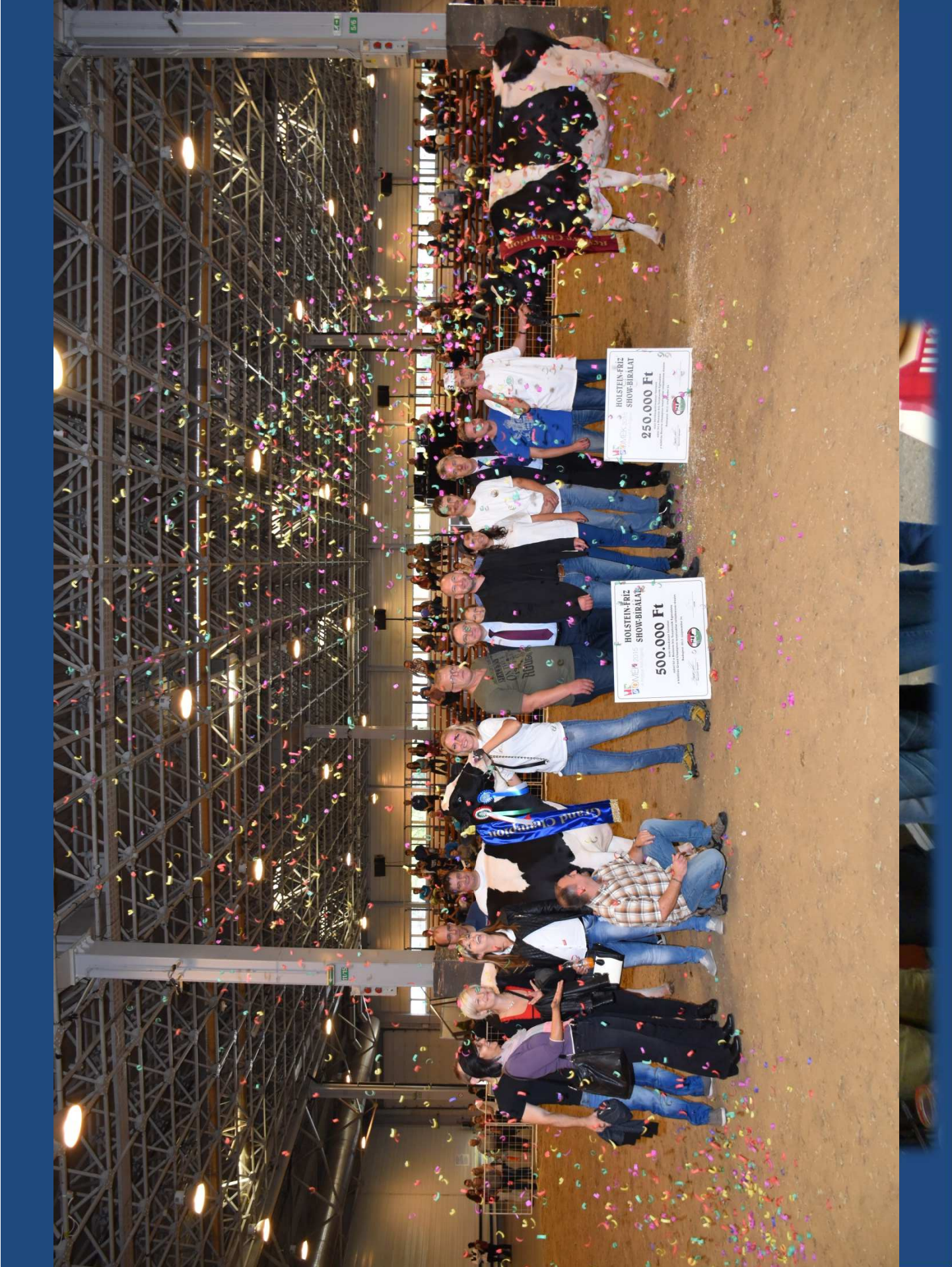




## *Enviromental factors...*











*Thank you for your  
attention!*