



**CowSIGNALS**<sup>®</sup>  
TRAINING COMPANY

# CowSignals<sup>®</sup> Training: why & how

Bergharen | 2020 | Joep Driessen





### Alert, active attitude

- distracted attitude indicates poor health, low energy status and rumen acidification

### Clear, bright eyes

- sleep-wet eyes: the cow is sick

### Clean nostrils

- mucus with pus, blood and skin injuries: nasal passages/skin of the nose inflamed due to virus or cold
- clear mucus doesn't tell you much

### Closed mouth

- some drooling: usually hunger
- lot of drooling: swallowing problems or mouth pain
- coughing: due to cold air, lungworms or dust

### Strong rumination activity

- reduced chewing: diet lacks fibre or stimulus
- spitting out the cud: tooth pain, tooth problems, picky bits in the feed
- normal: 55 to 75 chews per cud

### Undamaged knees with full hair covering

- bare knees: scraping on ground when getting up
- swollen knees: bruising when getting up, lack of space in cubicle

### Sound, fully weight-bearing hooves

- tip-toeing, standing on tips of hooves
- injured or swollen coronary band
- scabs or sores in interdigital space

### Steady breathing

- rapid and superficial: heat stress or pain. Sometimes at start of lambing period as well
- normal: 10 to 30 times a minute from ribs and belly

### Full belly

- belly too empty: hasn't eaten enough last week
- Take account of the size of the calf, if any.

### Straight back

- arched back: painful hooves or physical wear and tear
- injuries: usually bruising against cubicle partition

### Good rumen fill

- too empty: hasn't eaten enough today
- no discernible layered structure (apple shape): not enough fibre in diet

### Optimum condition

- too thin: inadequate energy intake
  - too fat: excessive energy intake
- COW SIGNALS**
- Good condition leads to increased disease resistance, fertility and health around calving (pay attention to breed).

### Correct temperature

- too high (> 39.0°C): fever
  - too low (< 38.0°C): milk fever or serious illness
  - normal: between 38.0 and 38.5°C
- Take temperature rectally.

### Clean hindquarters

- dung on both sides of rump: dung too thin
- asymmetrical soiling: environment too dirty

### Glossy, intact coat

- dull coat: poor health or nutrition
- skin injuries: cause and result of agitation and reduced disease resistance

### Undamaged hocks with full hair covering

- bare hocks: scraping on cubicle floor
- thick hocks: lack of space, cubicle floor too hard
- scabs: inflammation due to dirt or moisture

### Flat but formed, smooth dung

- long stems: insufficient rumination activity
- not too loose or too firm, always relate with ration components (ie grazing) and lactation stage (ie dry vs peak lactation)

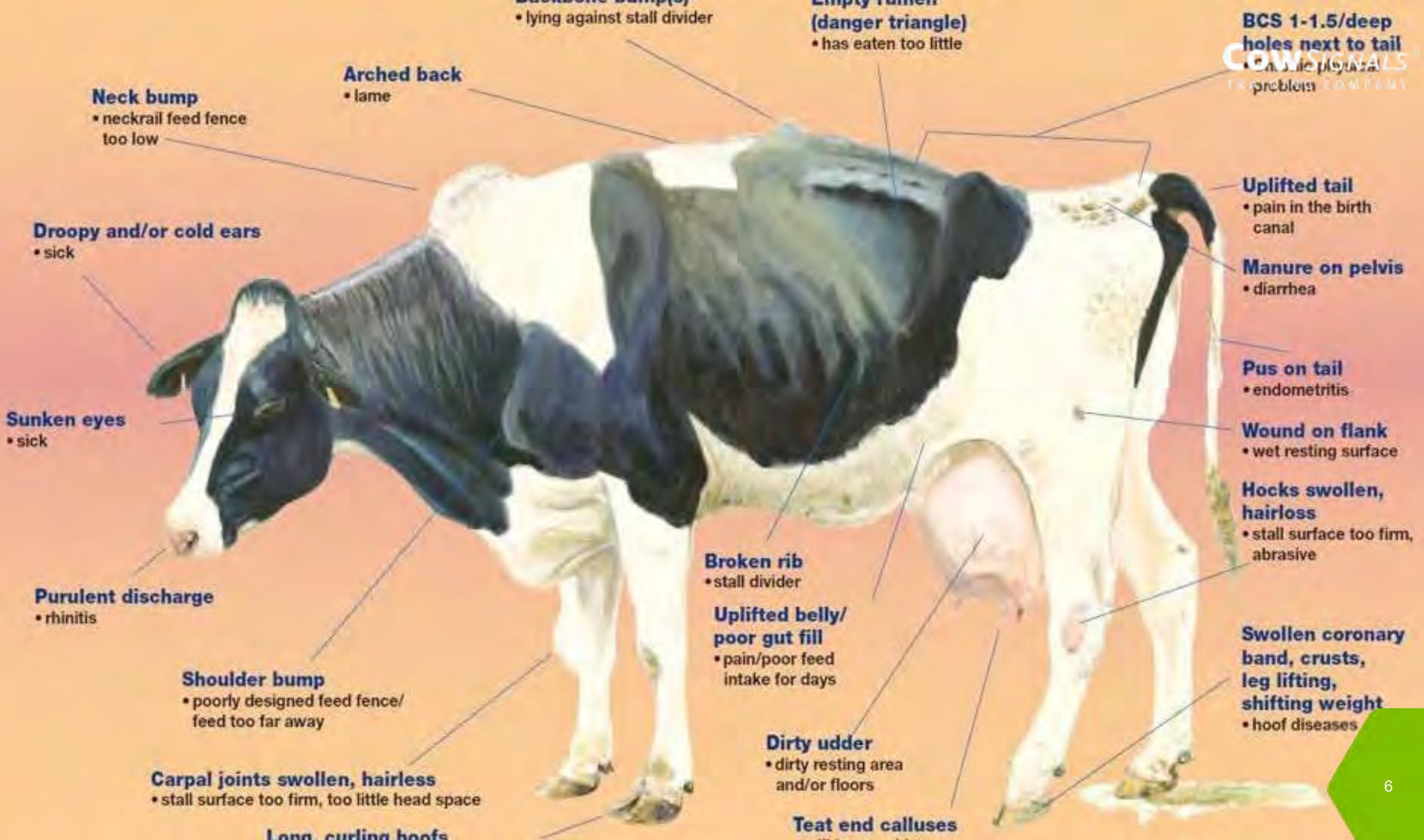
Use the dung feedback to assess feeding methods, feed intake, water intake and health. The rumen is at its optimum when the dung is optimal.

### Soft, symmetrical udder

- hard: due to oedema around calving, or mastitis (painful)
- enlarged quarter: active mastitis
- shrunken quarter: previous mastitis

### Undamaged teats and teat tips

- trodden teats: too much agitation, cubicles too narrow or too slippery
- Check milking machine and technique (wet test) if you see:



**Backbone bump(s)**  
• lying against stall divider

**Empty rumen (danger triangle)**  
• has eaten too little

**Neck bump**  
• neckrail feed fence too low

**Arched back**  
• lame

**BCS 1-1.5/deep holes next to tail**  
• **Manure on pelvis**  
• diarrhea

**Uplifted tail**  
• pain in the birth canal

**Manure on pelvis**  
• diarrhea

**Droopy and/or cold ears**  
• sick

**Pus on tail**  
• endometritis

**Wound on flank**  
• wet resting surface

**Sunken eyes**  
• sick

**Hocks swollen, hairless**  
• stall surface too firm, abrasive

**Purulent discharge**  
• rhinitis

**Broken rib**  
• stall divider

**Uplifted belly/poor gut fill**  
• pain/poor feed intake for days

**Swollen coronary band, crusts, leg lifting, shifting weight**  
• hoof diseases

**Shoulder bump**  
• poorly designed feed fence/feed too far away

**Dirty udder**  
• dirty resting area and/or floors

**Carpal joints swollen, hairless**  
• stall surface too firm, too little head space

**Teat end calluses**

**Long, curling hoofs**



## 50% OF DAIRY COWS SUFFER in the Netherlands

- Today in the Netherlands
- 30% wounded (skadade)
- 25% lame (halta)
  
- In a year
- 50% subclinical milkfever (subklinisk kalvningsförlamning)
- 50% bloody soles (sulblödningar)
- 30% mastitis

# COWSIGNALS<sup>®</sup> CONCEPT

## Look Think Act

- See, hear, feel, smell (se, lyssna, känn, lukta)
- Big – Little (%)
- UNO
- Waiting cow
- Risk animal, place, moment )



You need to take action!



The cow will pay you back in milk and longevity (livslängd)...

**What is your weak spot?**









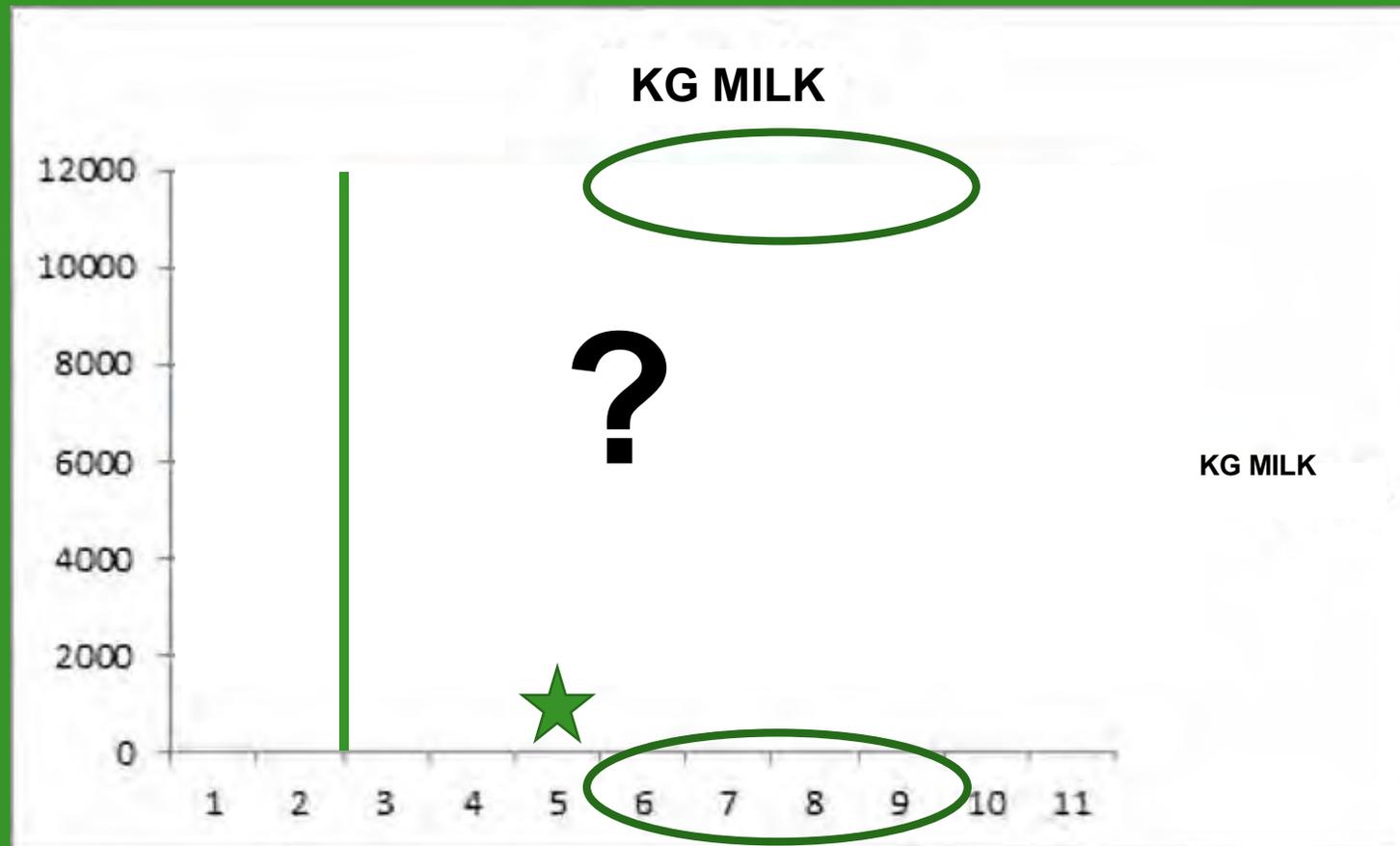
**TAKE CARE OF COWS**  
=  
**TAKE CARE OF YOURSELF**

If you are good for the cow,  
the cow is good for you

Care = Money

# WHAT IS THE MOST EFFICIENT LACTATION NUMBER FOR A DAIRY COW?

8.838 Dutch dairy cows with 100.000 liter of a total of 23.000

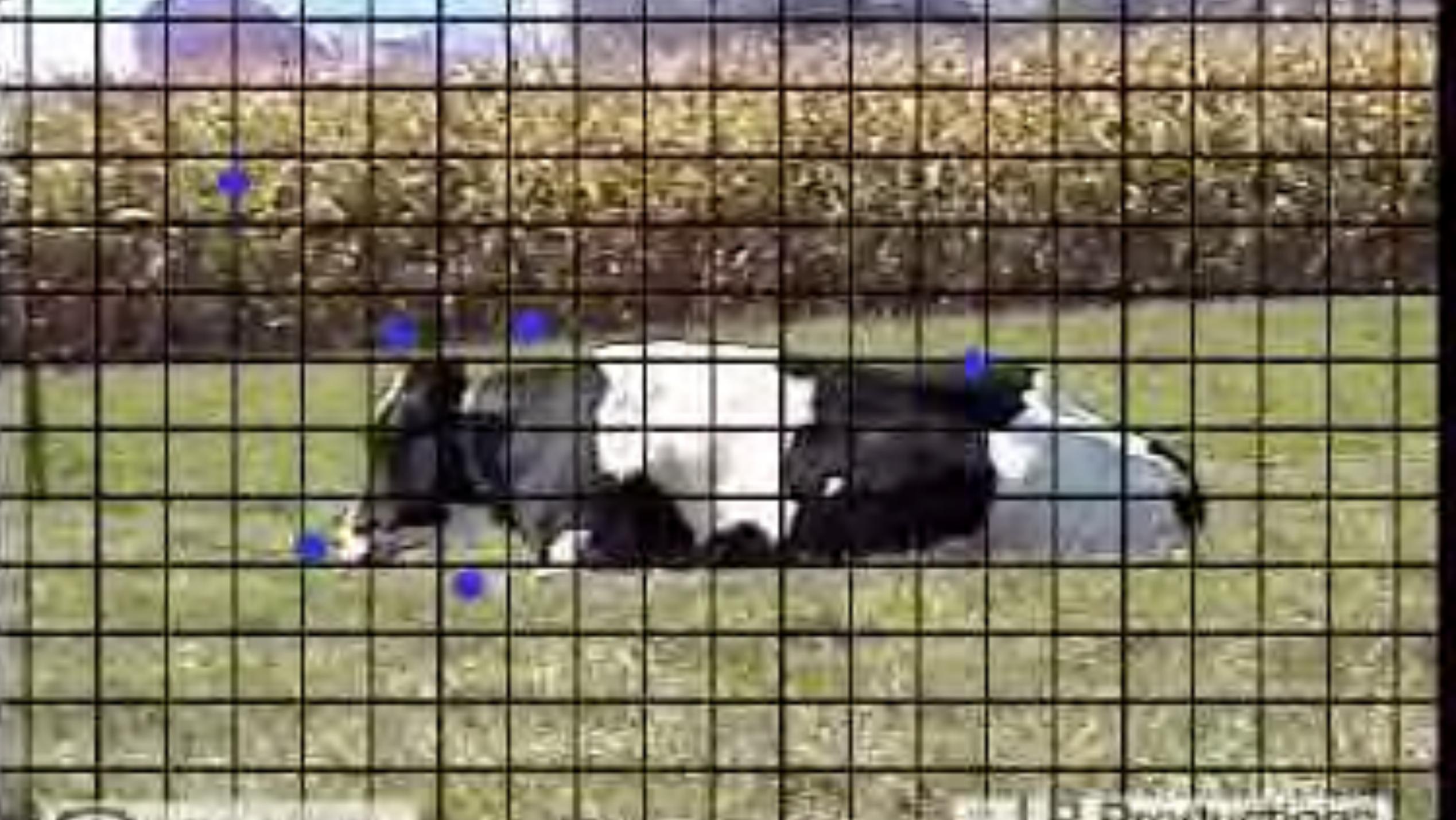


Source: Hiemke Knijn CRV, Netherlands 2018



## **TWO MORE LACTATIONS** **30% METHANE REDUCTION**

- ✓ Half of youngstock (ungdjur) needed
- ✓ Youngstock ready at 23 months
- ✓ Feed efficiency (fodereffektivitet) is better in older cows







## STRESS-FREE CALVING LINE

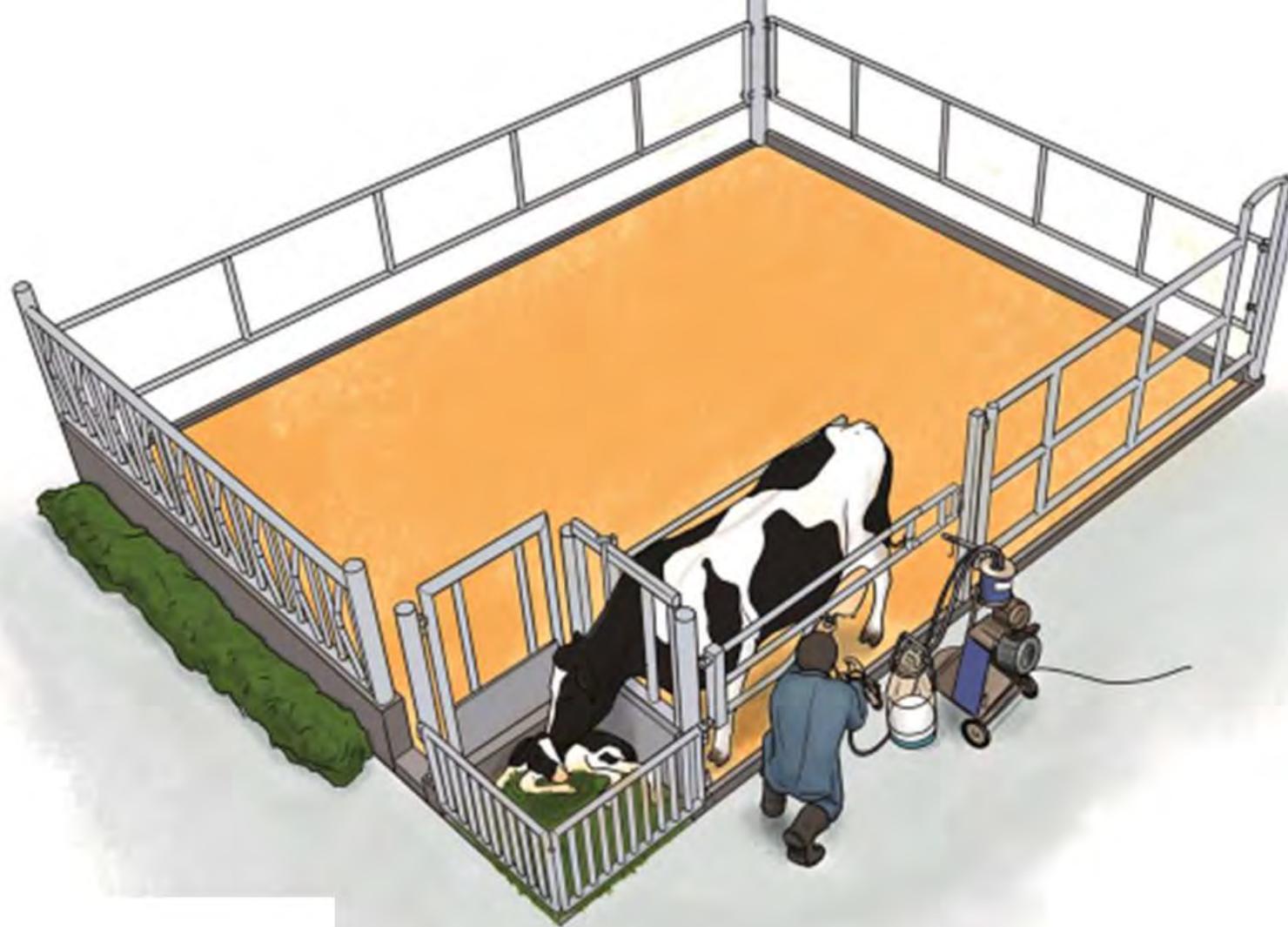
2 weeks before till 2 weeks  
after calving in one line



# COWSIGNALS<sup>®</sup> CUDDLE BOX

Innovation Award EuroTier





# COWSIGNALS® CUDDLE BOX

Innovation Award EuroTier





## CALVING AGE

27 months



23 months



# COWSIGNALS<sup>®</sup> CONCEPT WORKS: 3 OUT OF TOP 4 IN THE NETHERLANDS 2017

Top 10 farms in the Netherlands in 2016/2017 according to CRV

	Owner	Animals	Age	kg milk
1	<b>Melkveebedrijf van Berkum, Elahuizen*</b>	259	4,04	13.664
2	<b>Mts Yj+Jg de Haan-de Vries, Hemrik*</b>	90	4,09	13.463
3	P A M Wielens, Haaksbergen	23	3,11	11.971
4	<b>Mts H+H+J van der Mark-Harmsma, Vee...</b>	123	4,07	12.604
5	Mts G J+A W Holmer-Hesselink, Laren...	80	4,04	13.045
6	Mts P + M Bosscha, Bant**	62	4,02	12.552
7	VOF Jongsteins, Hoogblokland*	117	4,11	13.268
8	Landbouwbedrijf van Creij BV, Landh...	189	4,05	12.037
9	J J M Nieuwenhuizen, Zevenhoven**	142	4,04	12.479
10	Mts Aj+Ra Groot Roessink-Wijnbergen...	110	4,05	11.605

# COWSIGNALS<sup>®</sup> CONCEPT WORKS: TOP 3 IN 2019 SAND BEDS – HIGH LONGEVITY...

Barn design & advice in cooperation with Vetvice/CowSignals

## Rollend Jaar Gemiddelde top 25 MPR-bedrijven van Nederland Periode 1 september 2018 - 31 augustus 2019

rang_land	naam	woonplaats	aantal koeien	gem leeftijd	kg melk	% vet	% eiwit
1	Melkveebedrijf van Berkum	Elahuizen	275	4.07	14.843	3,77	3,53
2	Molkeveebedriuw van der Mark	Veenwouden	116	5.05	13.992	4,02	3,65
3	Mts Mooijman	Westerwytwerd	147	5.05	14.966	3,68	3,42
4	Mts P & M Bosscha	Bant	60	4.02	13.710	4,04	3,69



**TAKE CARE OF COWS  
=  
TAKE CARE OF INCOME**

If you are good for the cow,  
the cow is good for you

Invest in training and  
improve housing (inhysning)



**HAPPY COWS,  
HAPPY FARMERS,  
HAPPY PLANET**

# HOW CAN WE HELP YOU TO REACH YOUR GOALS?

CowSignals<sup>®</sup> provides

- Inspiration
- Continuous education
- Motivation to change

