Get control of your gilts

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Grisekongressen
MCH, Herning
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SEGES INNOVATION

Photo: Lars Mikkelsen

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Agenda of this presentation …

Arguments about minimizing variation at first service

Feeding strategies for modern genetics

Unflexible quarantine and gilt facilities

Simple and advanced instant monitoring of gilt performance

Take home messages

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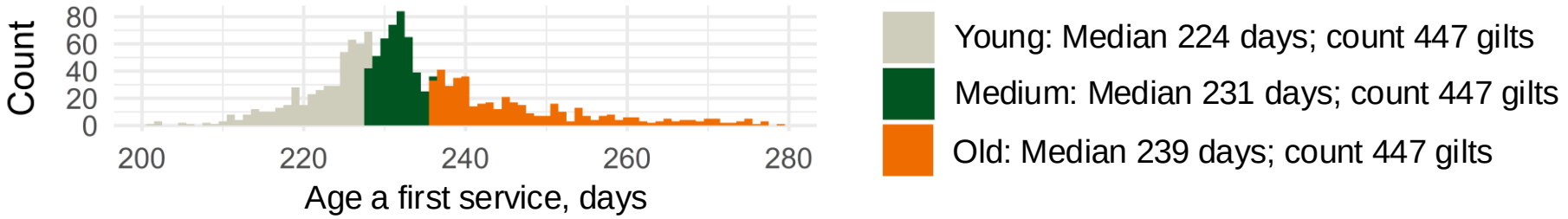
SEGES INNOVATION

What is the impact of weight, backfat and age at first service?

1341 gilts serviced from 2018-2020 has been followed for 8 parities



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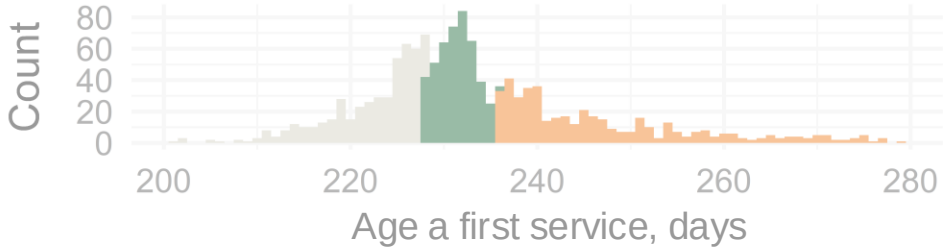
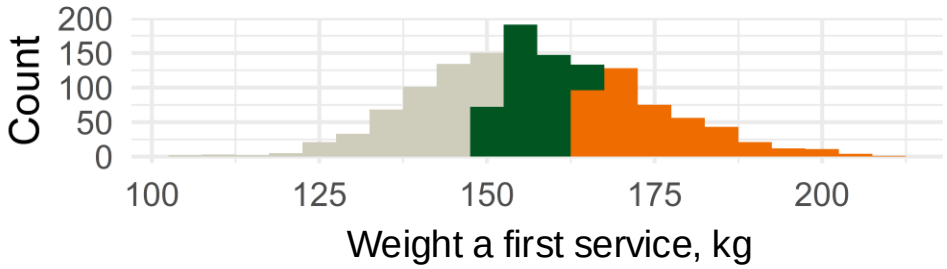


Grouped by age

- Young: Median 224 days; count 447 gilts
- Medium: Median 231 days; count 447 gilts
- Old: Median 239 days; count 447 gilts



Grouped by weight

- Light: Median 136 kg; count 447 gilts
- Medium: Median 154 kg; count 447 gilts
- Heavy: Median 168 kg; count 447 gilts

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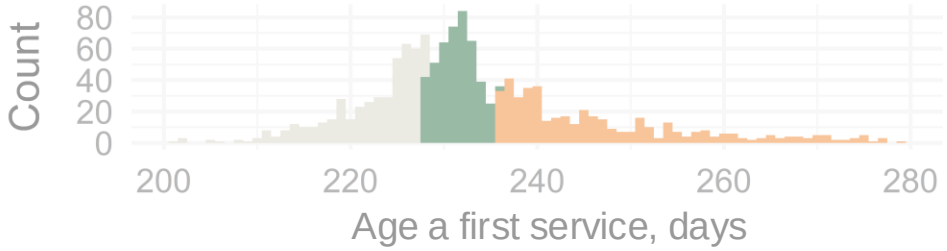

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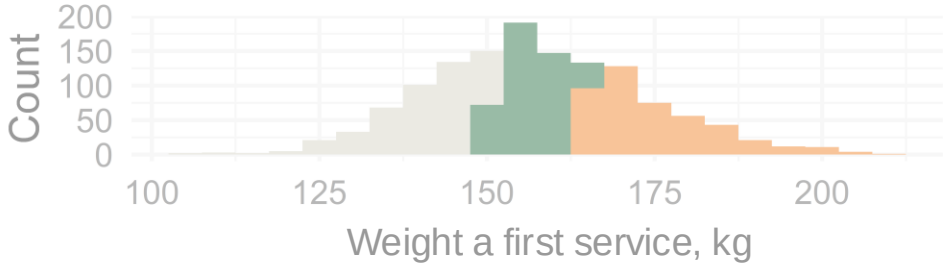

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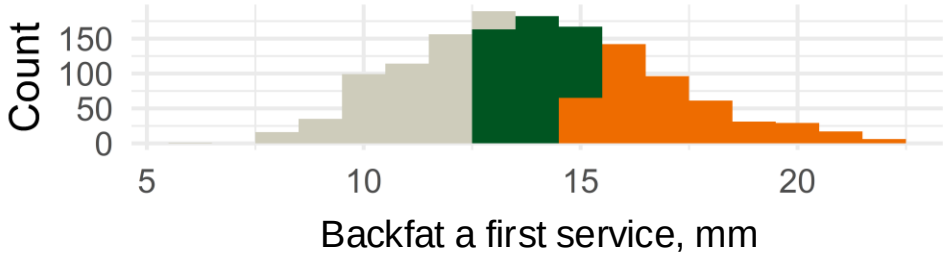

Grouped by backfat

Light: Median 12 mm; count 447 gilts
Medium: Median 14 mm; count 447 gilts
Heavy: Median 18 mm; count 447 gilts

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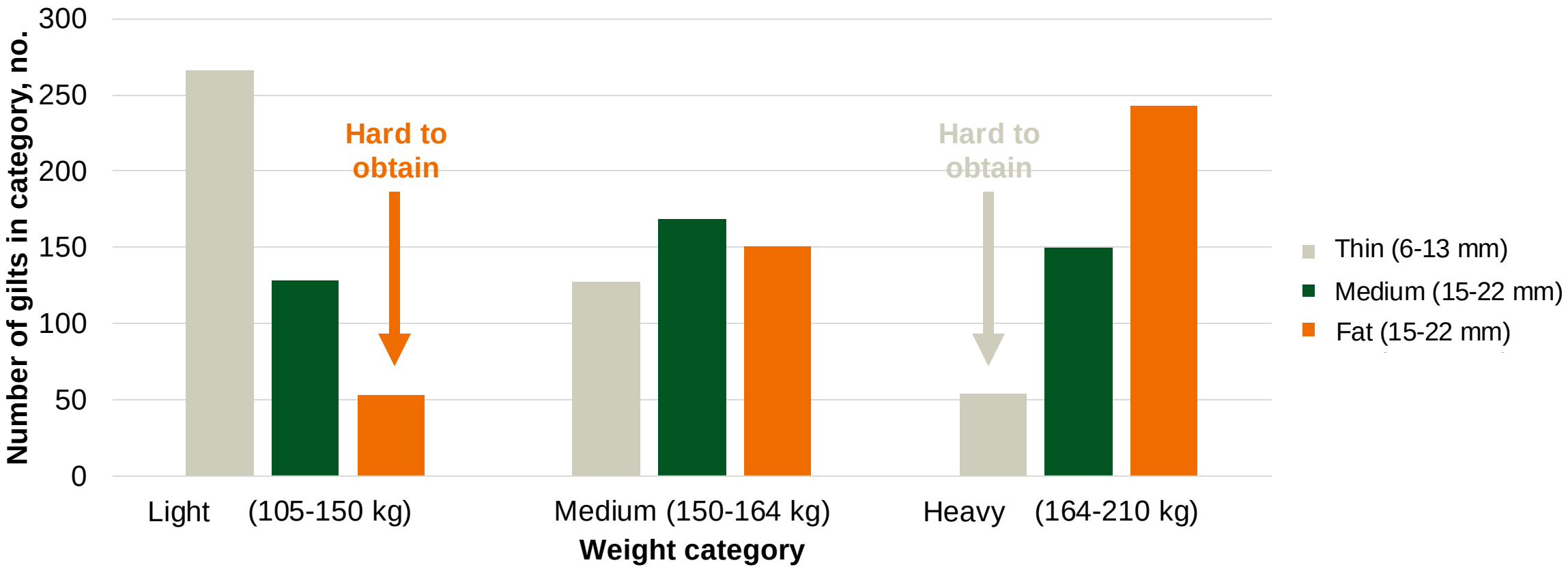
Link between weight and backfat

Important to understand and easy to affect through feeding



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Being heavy at first service is not an advantage

Probability to reach a certain parity before leaving the herd

… irrepective of backfat gilts being heavy at first service has a higher risk of being culled at a young parity …

SEGES INNOVATION

Being heavy at first service is not an advantage

Probability to reach a certain parity before leaving the herd

… Irrespective of weight (almost) gilts being lean at first service has a higher risk of being culled at a young parity …

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Lifetime performance is the way of paying for the gilt

… gilts that has medium or high backfat gives birth to 106 and 107 piglets during life - thin gilt only gives birth to 92 piglets before being culled …

… light and medium gilts gives birth to on anverage 110 and 106 piglets during life whereas heavy gilts reaches only 89 piglets born before culling …

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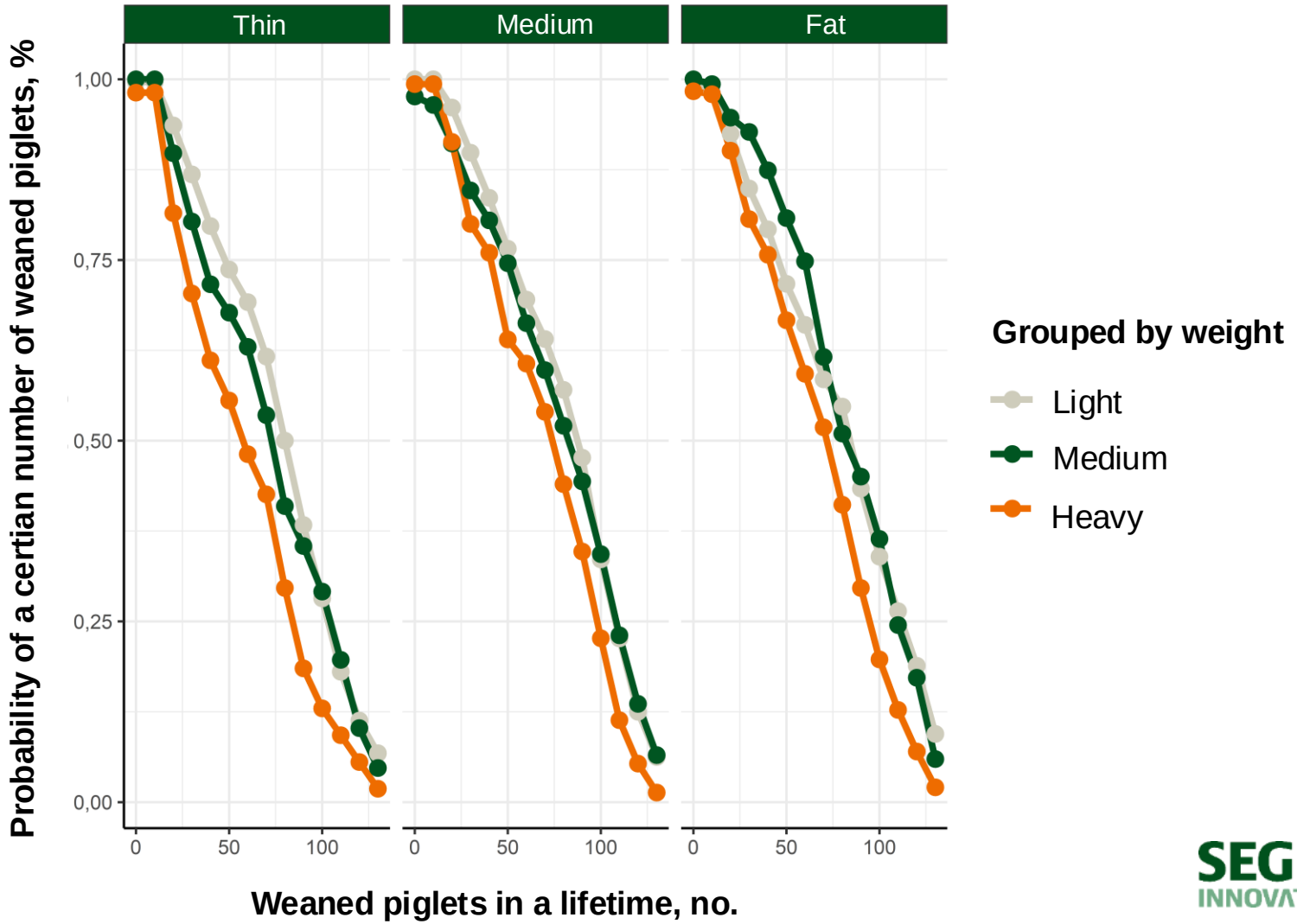
Lifetime performance is the way of paying for the gilt

A high weight negatively affect number of weaned piglets in a lifetime



SEGES INNOVATION

Lifetime performance is the way of paying for the gilt

A high weight negatively affect number of weaned piglets in a lifetime

… gilts that are light or medium at first service wean 80 and 78 in a lifetime – a heavy sow only wean 66 piglets before being culled …

… gilts that are medium orfat at first service wean on average 77 piglets in a lifetime – a thin gilt only wean 69 piglets before being culled …

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Length of the sow life is dependent on weight at first service

A very strong correlation

… a weight difference of 16 kg affects life length with +/- 8% equal to +/- 0.35 parity …

Length of the sow life is also dependent on backfat at first service

Low backfat is critical

… a reduction in backfat from 14 to 11 mm reduces life length 6.8% or about 0.30 parity …

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Photo: Rasmus Bendix, Bendix Production

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New feeding standards 2024 and goodbye to one diet strategy

Behaviour and genetics defines the standard

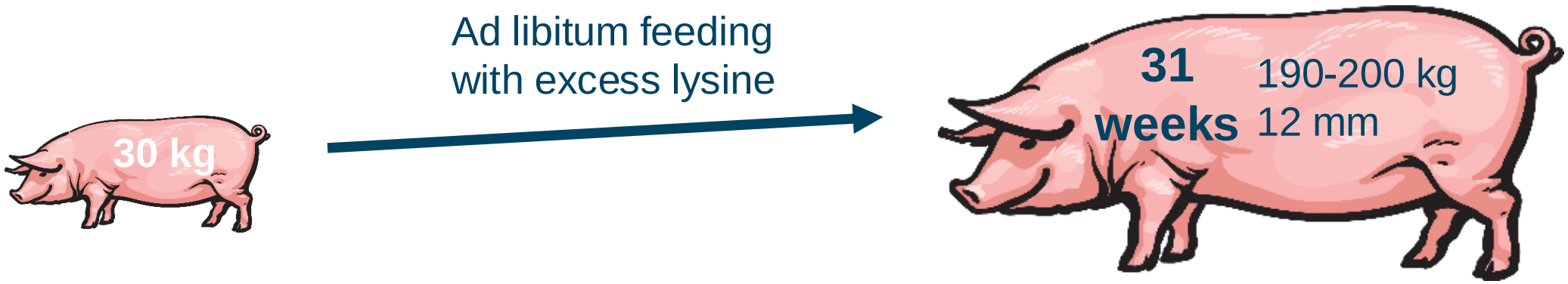

Illustration: Colourbox

New feeding standards 2024 and goodbye to one diet strategy

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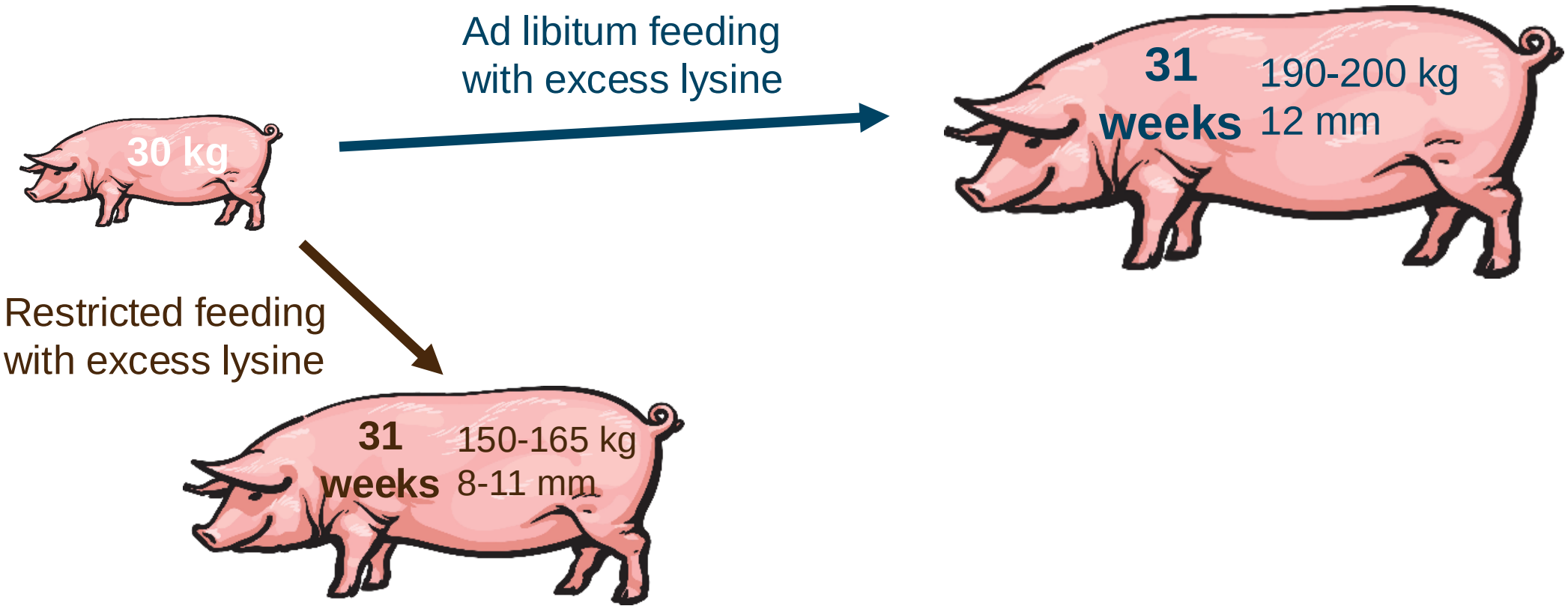

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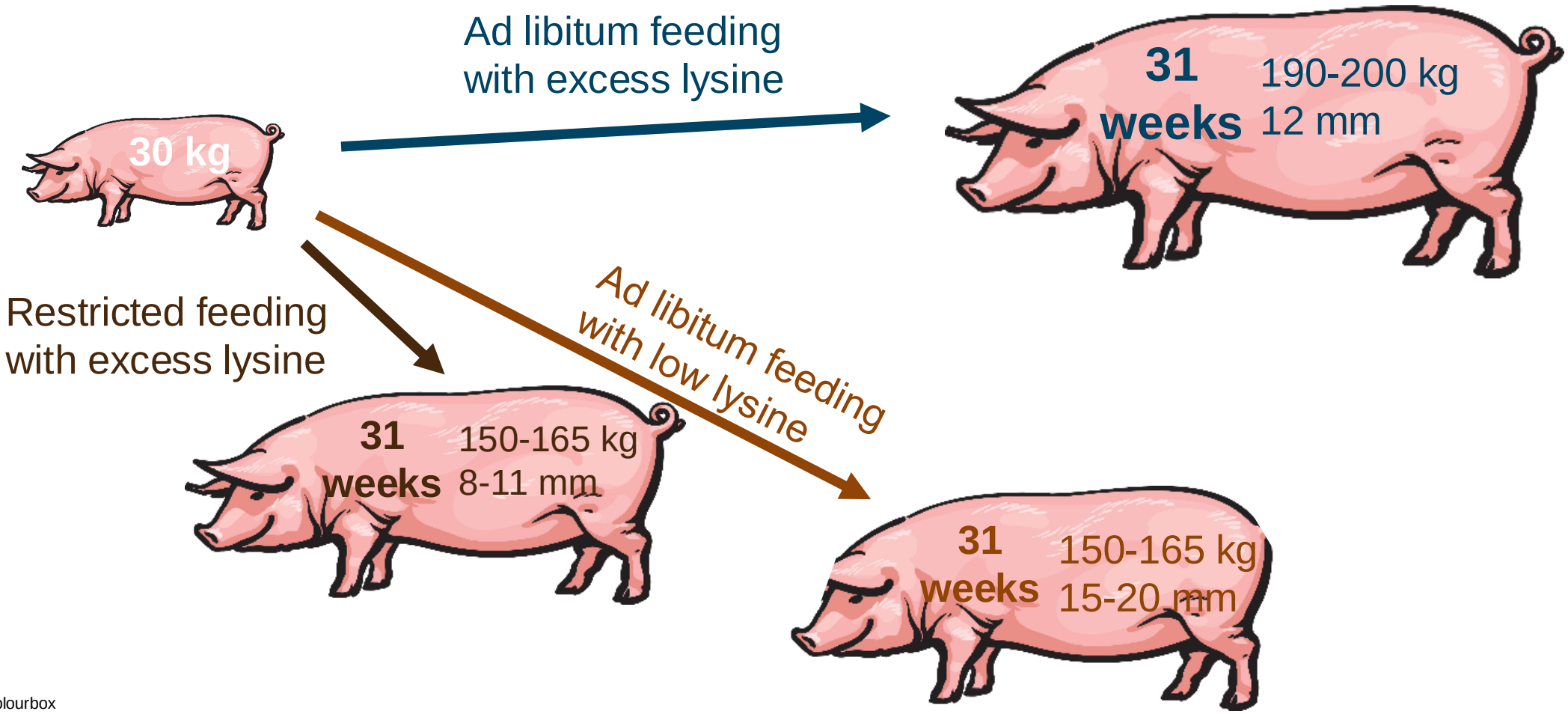

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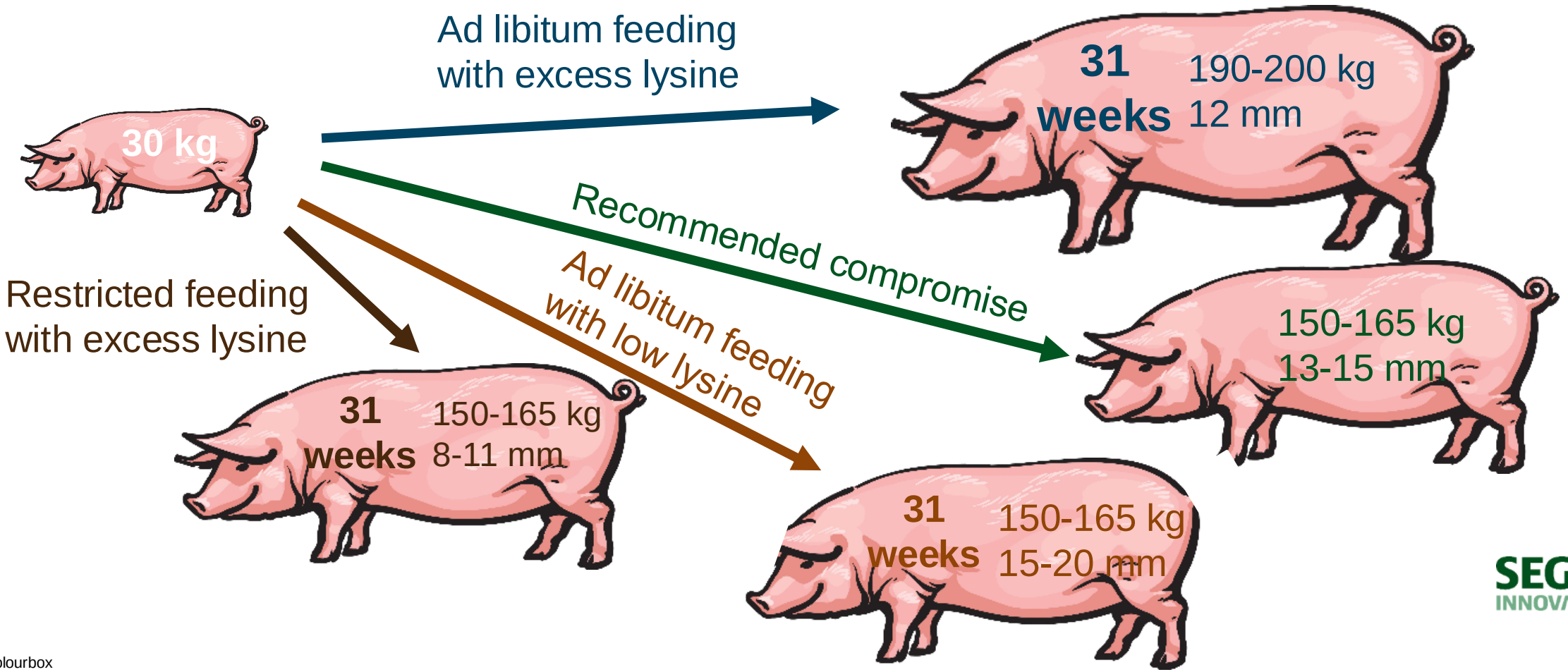

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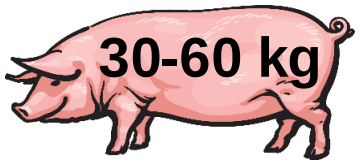
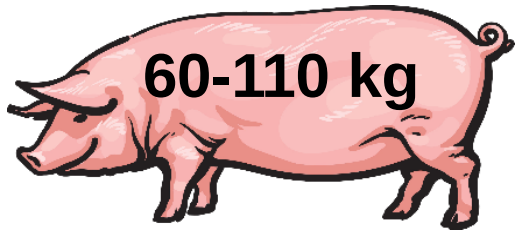
Illustration: Colourbox

New 2024 feeding standards for gilts includes phase feeding

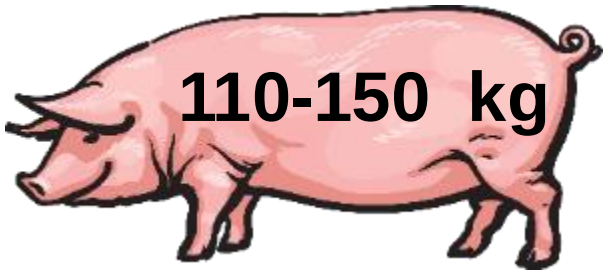
Nutrient requirements per FUpig/FUsow



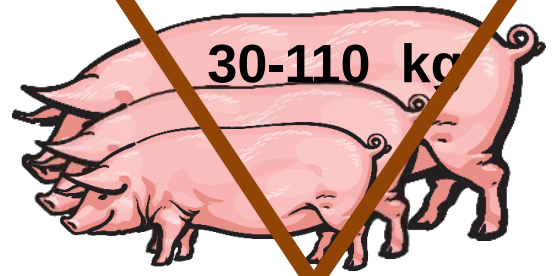
SID lysine: 7,7 g
SID protein: 114 g
Dig. phosphorous: 2,5 g



SID lysine : 6,0 g
SID protein : 100 g
Dig. phosphorous: 2,3 g



SID lysine : 4,0 g
SID protein : 80 g
Dig. phosphorous: 2,0 g



SID lysine in: 6,0 g
SID protein : 100 g
Dig. Phosphorous: 2,5 g

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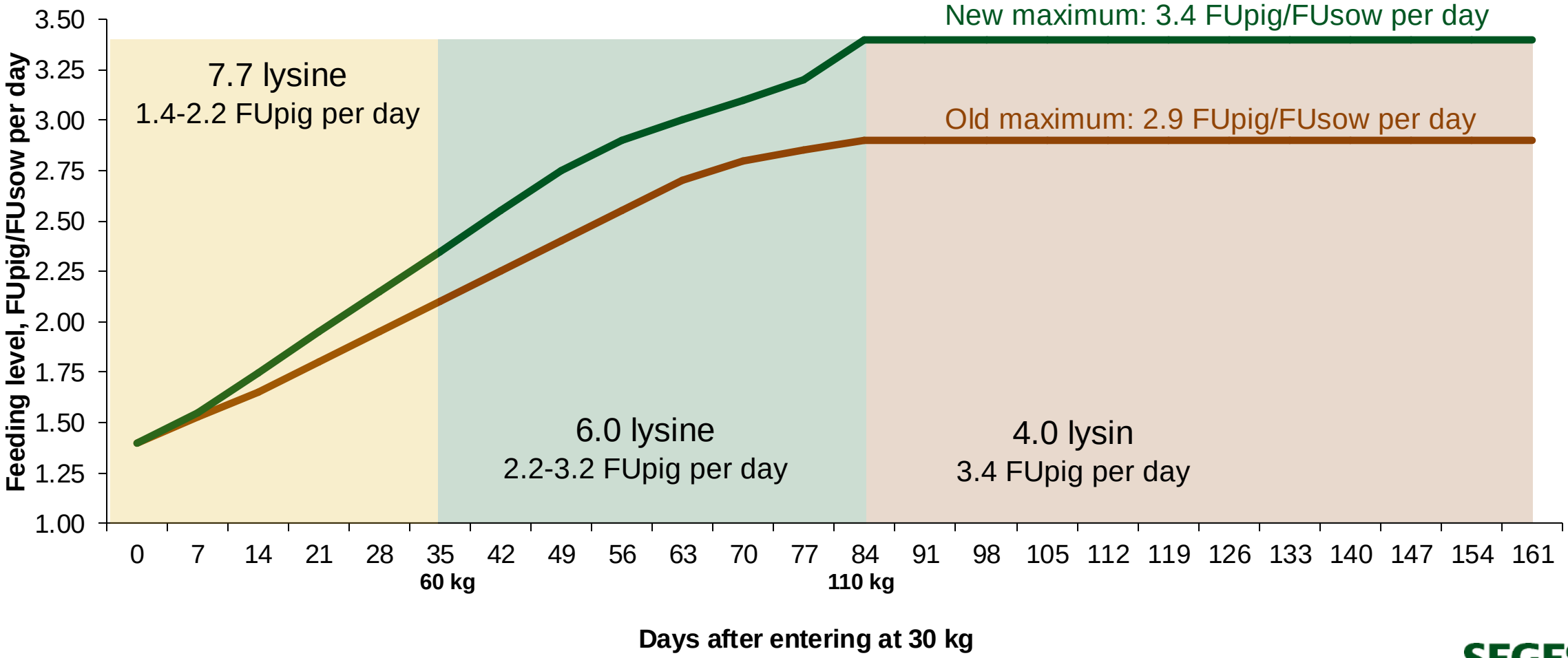
Illustration: Colourbox

New 2024 feeding curve for gilts

A necessity to achieve sufficient backfat with modern genetics



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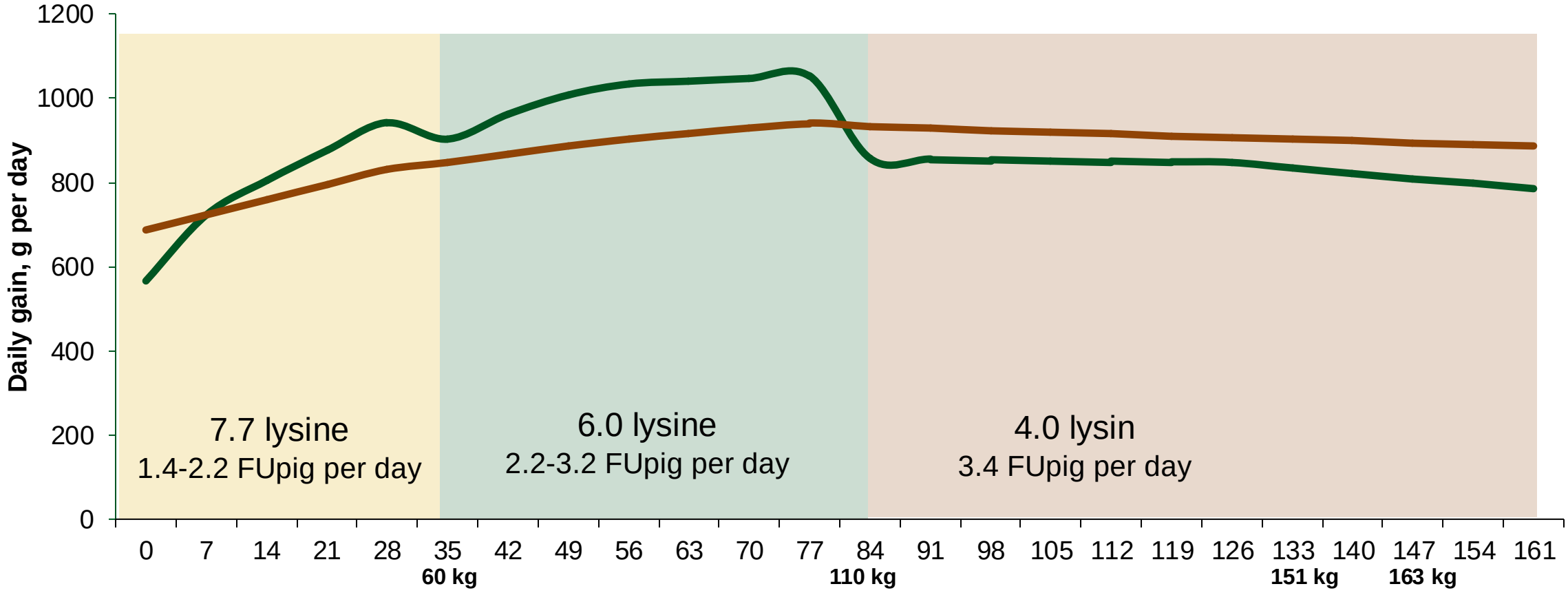
Consequences combining new standards and new feeding curve

Average daily gain over time



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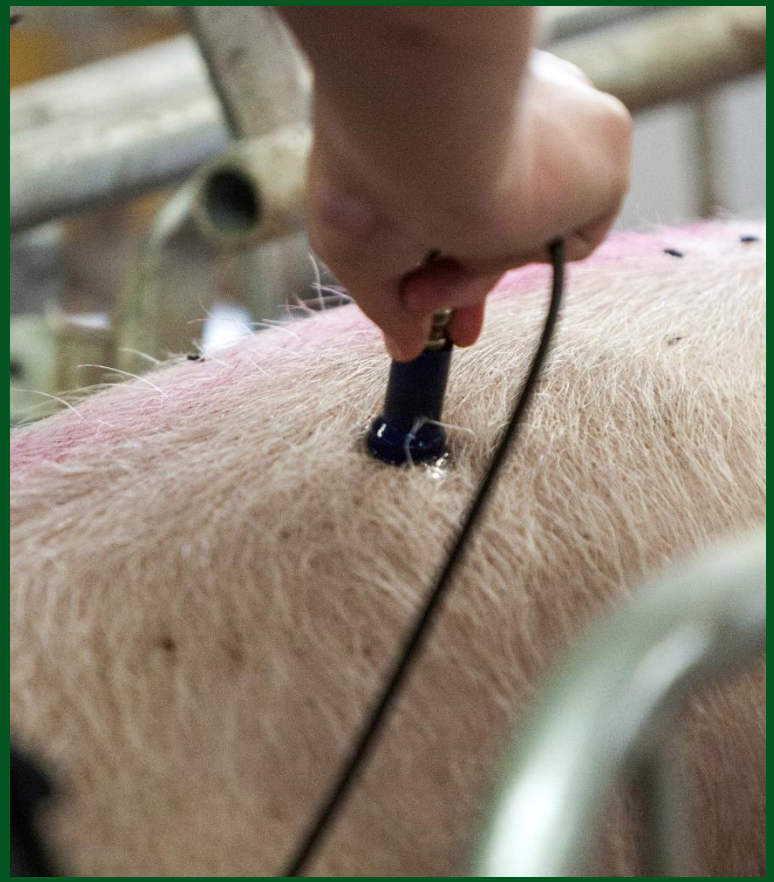

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Physical or mathematical limitation in the quarantine?

Rethink the timeline of the gilt in your herd (single 12 week quarantine)

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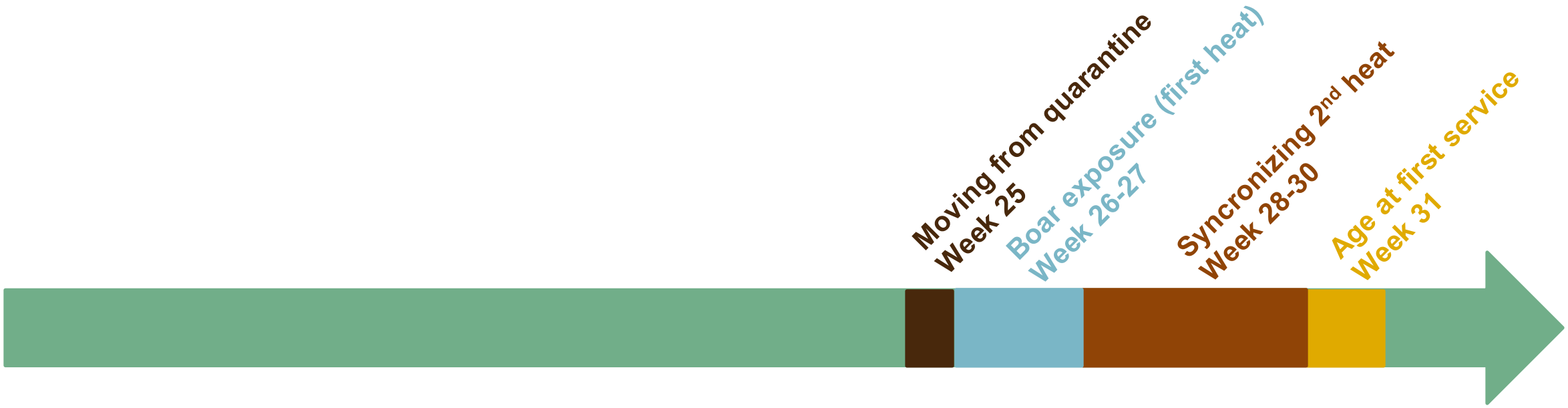

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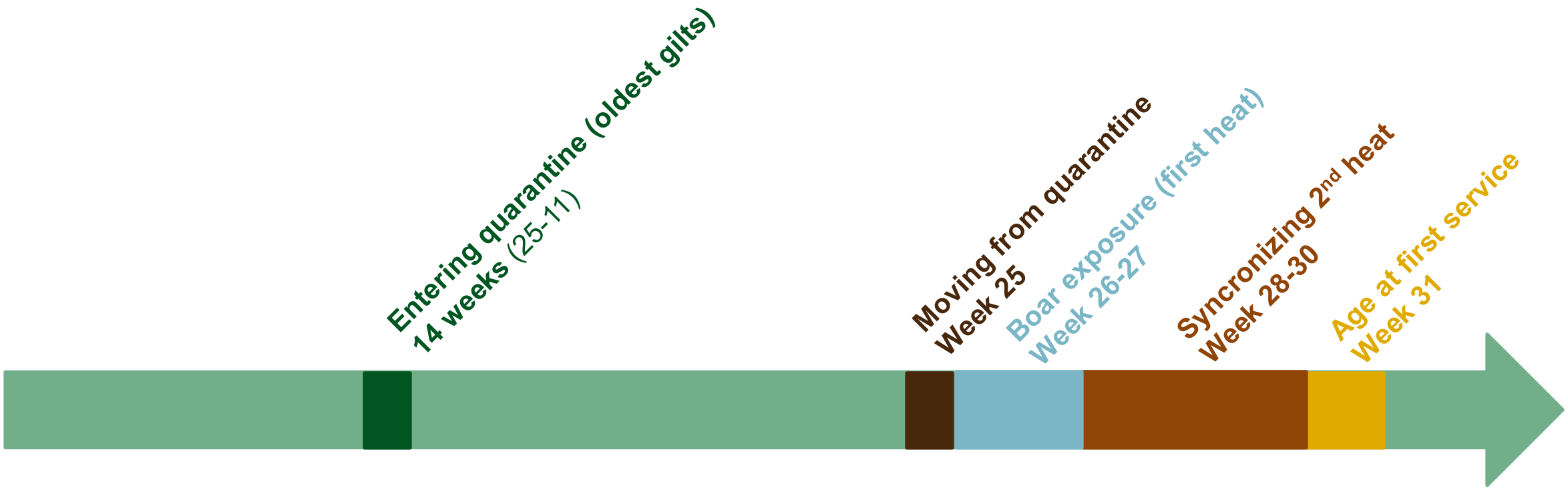

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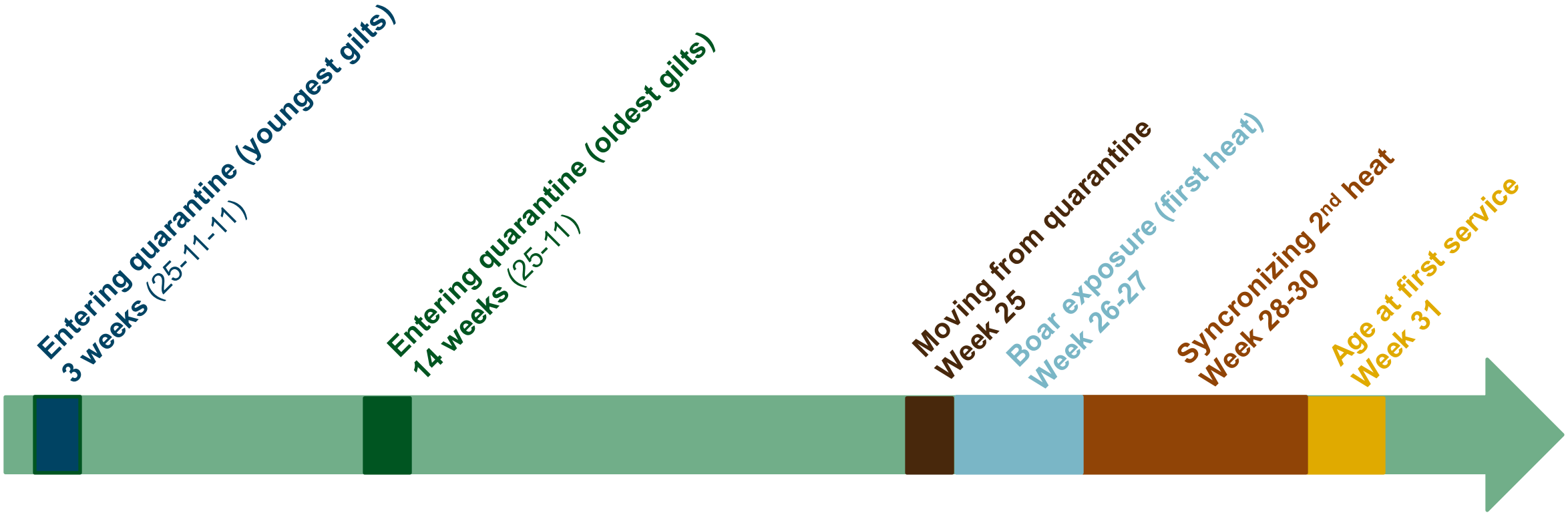

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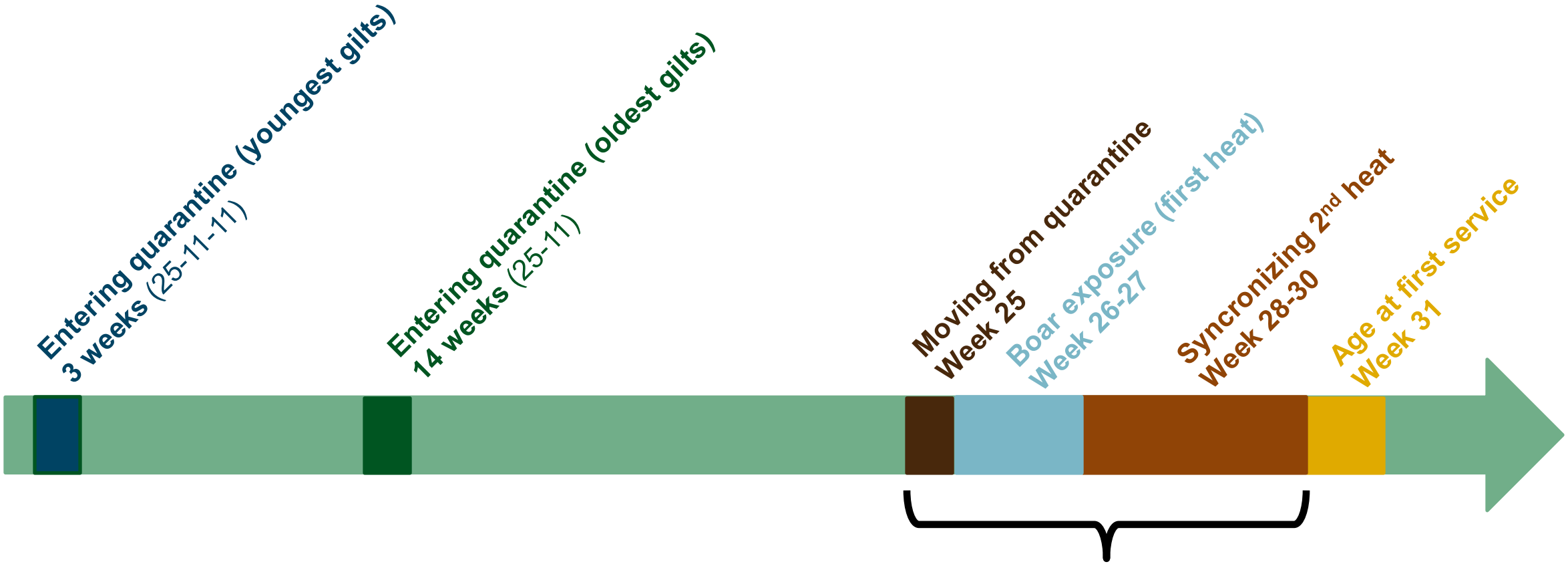

Having ESF/Transponder you also need time to train the gilst somewhere …

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Staggered use of two or three quarantine facilities

A way to ease gilt management and feed more correctely

1 × 8 weeks

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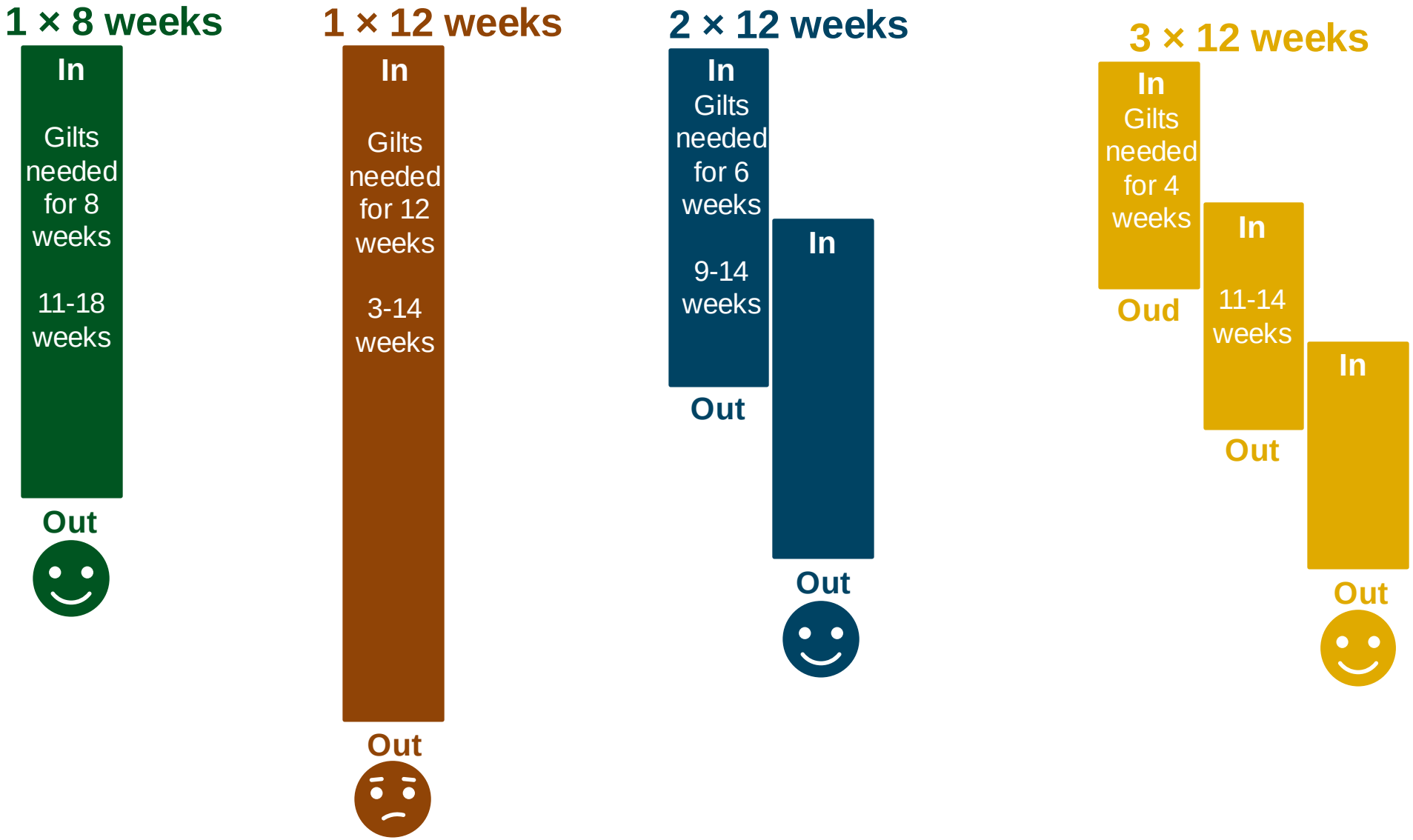

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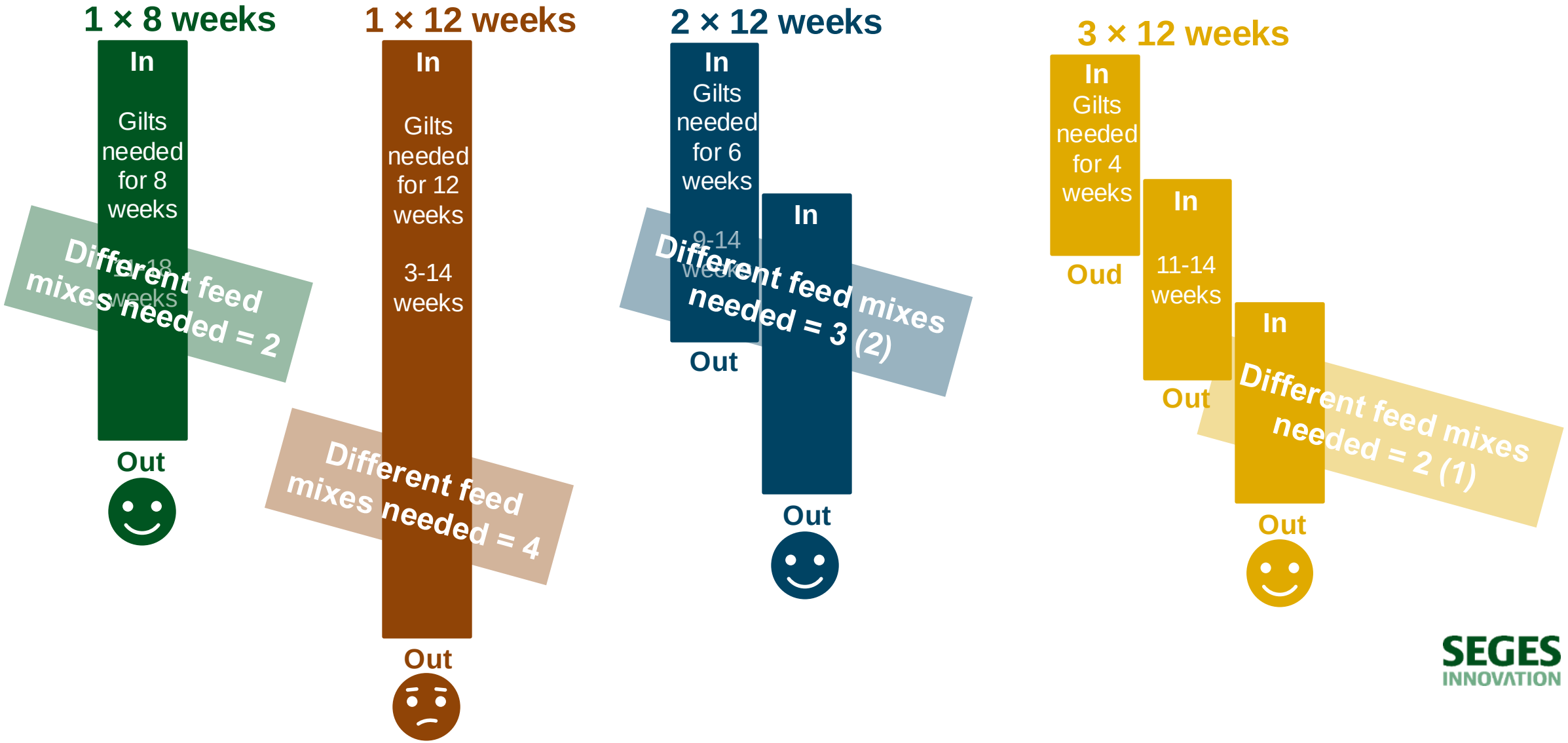

Number of diets or manual corrections

A possibility to compensate for a bad feeding system

- Can a 60-110 kg diet be modified to fit 30-60 kg gilts by using soybean meal? **YES**
  - 100 g of soybean meal provides 2,6 g SID with an acceptable amino acid profile
  - 200 g soybean meal per gilt per day can be an easy solution from 30-60 kg

Feed level, FUpig per day	60-110 kg feed foder, Fupig	Soybean meal, g per day	SID lysine, g per FUpig
2.2	2.0	185	7.7
2.4	2.2	202	7.7
2.6	2.4	218	7.7
2.8	2.6	235	7.7

Photo: SvineRådgivningen (with permission)

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Simple overview of variations in gilts entering the herd

Example from Cloudfarms shows distribution of age at first service

Løbningsperformance

Navn	0-210	211-220	221-230	231-240	241-250	251-260	261-999
Løbninger [#]	0,00	3,00	25,00	74,00	144,00	232,00	231,00

Few data

… critical age at first service …

Faring performance

Navn	0-210	211-220	221-230	231-240	241-250	251-260	261-999
Faringsprocent [%]	0,00	100,00	85,71	91,30	95,80	92,28	86,67
Total fødte pr kuld [#]	0,00	17,67	19,22	17,21	17,25	17,27	17,92

Few data

… the derived consequences…

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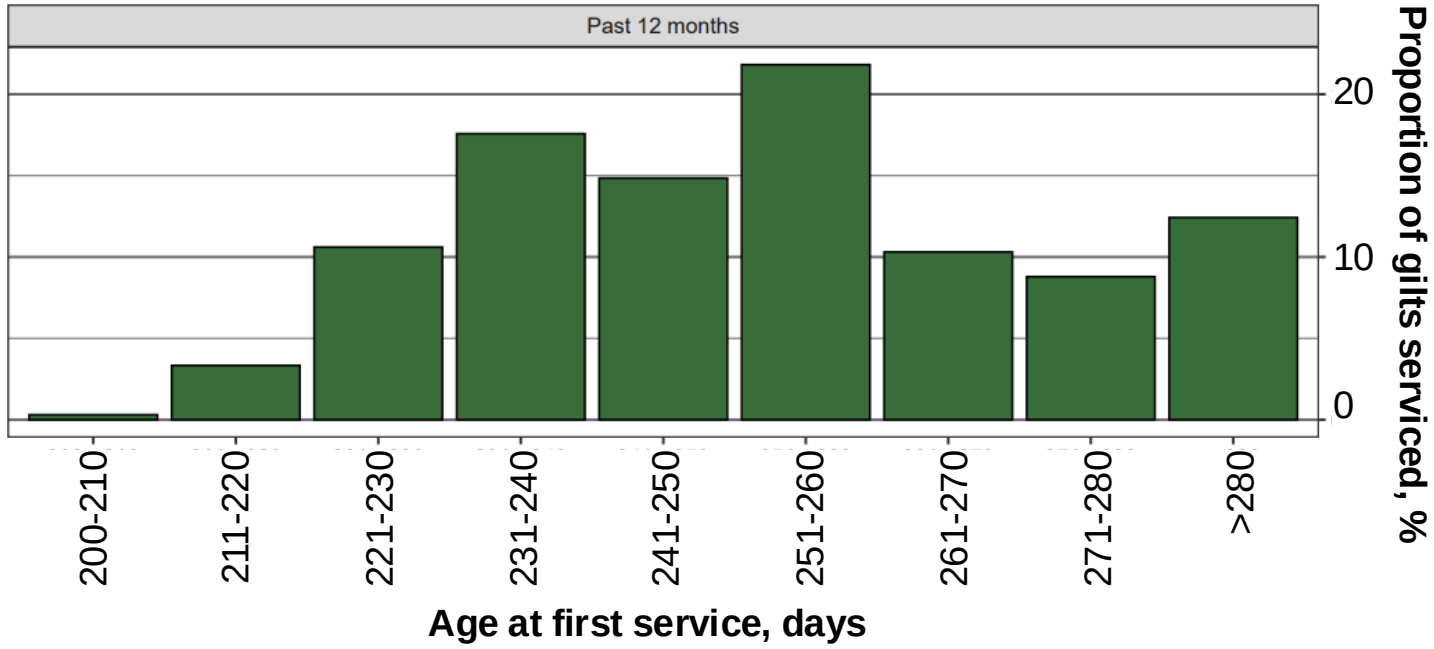
More advanced analytical approach to age at first service

Examples from SoOptimeter (SEGES InSight)



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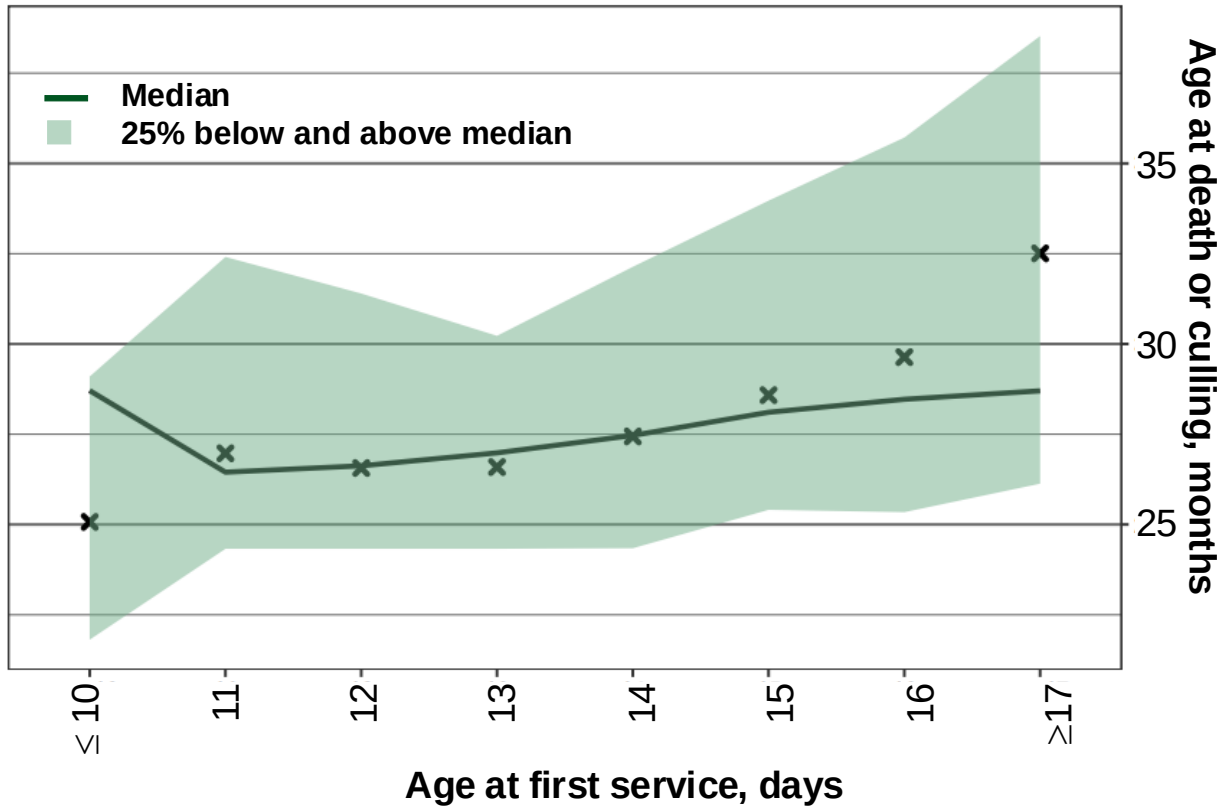

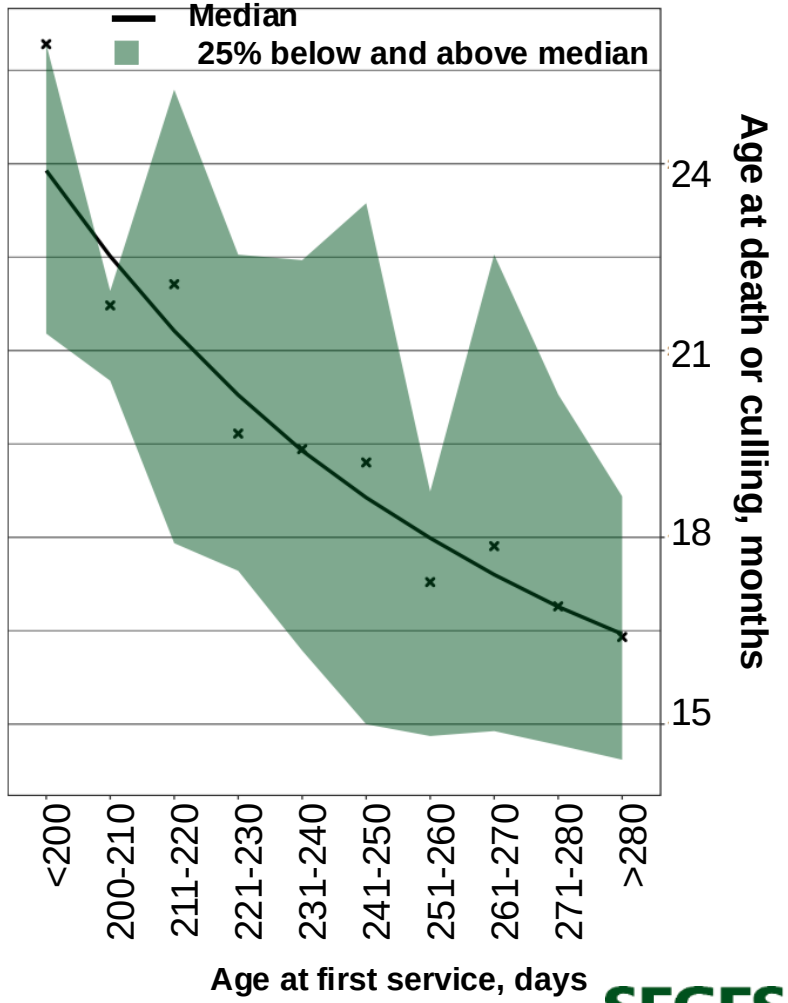

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Focus on weight at first service

- Longevity is determined by weight and backfat rather than age

Management must include phase feeding and the new feeding curve

- If not the gilts will be to old and too heavy at the time when they have optimal backfat level

Our aims at first service are:

- 150-165 kg (lighter is preferred if possible)
- 13-15 mm backfat (12 mm is better than to wait + 10 kg)
- 30-33 weeks (older gilts become too heavy and will increase replacement rate)

Photo: Lars Mikkelsen

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