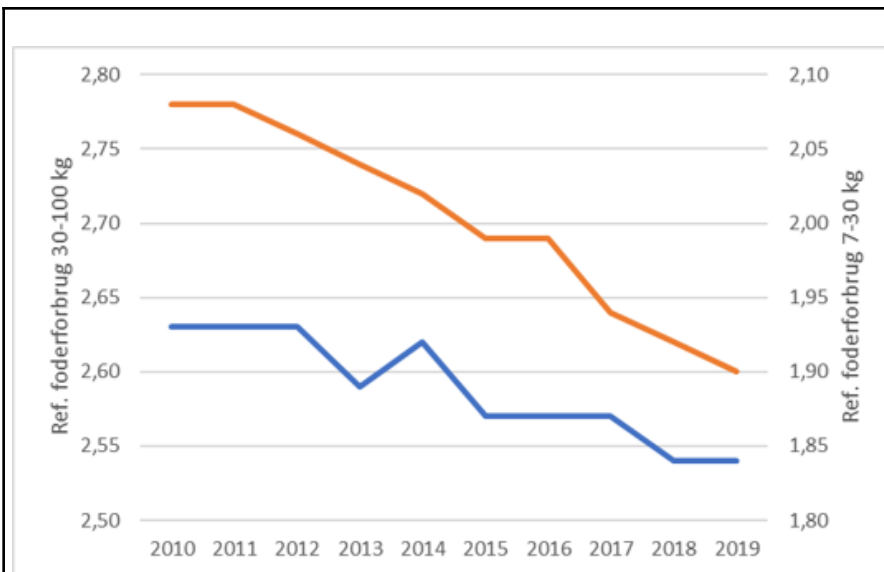


Sådan får du dine grise i Superligaen



Lars Morten Jensen, Porcus
Peter Mark Nielsen, Velas

Weaned piglets have not had the same improvement as the slaughterpigs



Orange, slaughterpig reduced 6,5 %
Blue line, weaned piglet reduced 4,7 %

Mortality of weaned piglets increased 0,9 %
Mortality of slaughterpigs reduced 0,3%
Daily growth of weaned pigs increased 11 gram (3%)
Daily growth slaughterpigs increased 96 gram (11%)

There are enough challenges



- Higher productivity in the sows = lower weaning weight and more pigs to share the space in klimastable
- Less copper in the feed
- "Gult kort"
- Zink has been phased out

Top præstation

★ Evt. Produktionsresultater på en af de bedste

Lets look at we can do ourselves

- ★ Preparation of the stable
- ★ Clima control
- ★ Startup of the team
- ★ Feedind and the feed
- ★ Water
- ★ New possibilities / challenges

Preparation of stable, the success is made before pigs enter



There is no news

- ★ There has been made experiments and articles about this since 1993
- ★ It is even more important now, when we have all these challenges
- ★ So at risk of repeting myself:
- ★ WASH THE STABLE SO IT I COMPLETELY CLEAN

Drying out

- ★ When temp. is over 20 degrees outside you can dry out by ventilation alone. There is rarely over 20 degrees at night!
- ★ Add heat, heat the stable up to 30 degrees, adjust min. ventilation on 10% and let it ventilate more
- ★ You need to use 1L of diesel per 3m² of stable
- ★ It takes a long time!

Eksempel: klimastable 1000 stipladser, 400 m2 inkl. corridor

- ★ 130 L diesel
- ★ Typically 50 kw heatcanon burning 5 L per. hour
- ★ It needs to be heating for 26 hours
- ★ The tank often only contains 40-50 L
- ★ So we need to refill the heating canon 3 times

When is it dry?

- ★ Use InfraRed thermometer
- ★ Measure on the concrete floor, away from floor heat
- ★ Measure on plastic inventory
- ★ Temp. Should be the same, and show the temperature we want.
- ★ That is 24 grader at 6 kg weaning weight
- ★ Of course it has to be warmer under the cover



Surveillance camera shows if the temperature is correct

Too hot



Too cold

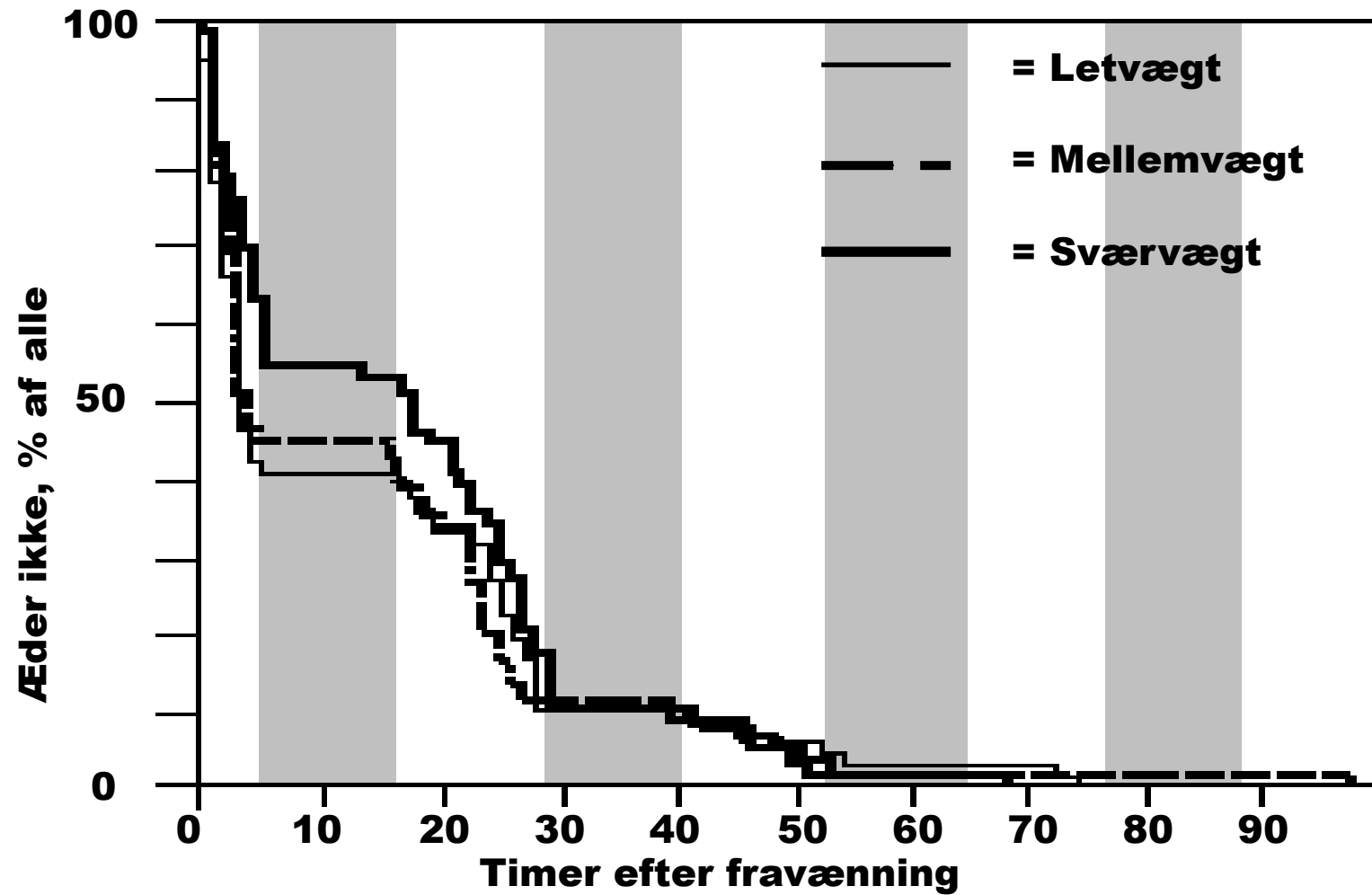


Camera costs ca. 500 kr. for startpackage +
500 kr./camera+ internet connection if it
isn't there already

Team start-up

- ★ When pigs have entered a clean, dry and warm stable they just need to start!
- ★ Make sure to feed the 6 times daily
- ★ There has to be easy access to the food
- ★ Pigs want to eat at the same time
- ★ Remember water
- ★ Elektrolytwater can help get them to the trough
- ★ Light has to be turned on the first 24 hours
- ★ After 16 hours a day
- ★ Legislation says 8 timers continuous light and 8 hours continuous dark

Weaning and first feed intake



Food and feeding

- ★ There is no product that can replace medicinal zink
- ★ We are still working on finding the correct solution for feeding without high dose of zink
- ★ There are solutions that work
- ★ Coarsely ground startfeed, same grind as sowfeed, reduces diarré- occurrence with 44%
- ★ More synthetic amino-acids in the feed gives less diarré
- ★ Stopfeed 1-2 days around expected diarré outbreak
- ★ The classics, acids, low protein, good raw materials still work
- ★ Fibers have been attempted, it has often looked good, but doesn't last

Eatingplaces

- ★ Make sure there are enough eating places
- ★ Double the amount of places = + 30 Gram daily growth
- ★ We need to find the right level
- ★ Keep an eye on queue at the automat
- ★ Here the camera also works



Water

- ★ Make sure there is enough water of good quality
- ★ Water in Denmark is good quality, so is there a problem then we have made it ourselves
- ★ Ongoing cleaning of water system is a must to keep it working
- ★ ECA systems work, but a lot of medicine cannot work with it.
- ★ Oxidative products work, but they take some effort to use, here it is possible to use medicine the days you are not cleaning the system, and often at the same time as well
- ★ Are you in doubt, then check the water quality

New challenges

- ★ Removing zink has been ok the most places
- ★ But many have experienced backlash since then

Summary

- ★ There are enough challenges
- ★ Things don't solve themselves, so it takes a lot of work
- ★ Focus on cleaning and drying out
- ★ Make sure the pigs start eating
- ★ Use food that fits the pigs, both in nutrients, ingredients and structure
- ★ Be aware of food getting stuck in the automat
- ★ Clean the water system and use acids
- ★ Light in the beginning and all of the growth period
- ★ Use the new possibilities with surveillance of growth, water, temperature and behaviour

The healthy weaned piglet



The healthy weaned piglet

Make sure your pig is free from:



Intestinal infection of newly weaned

Parasitologisk undersøgelse

- 1: 1L: Coccidioocyster (*Cystoisospora suis*), massiv udskillelse: 17380 OPG
- 2: 1L: Coccidioocyster (*Cystoisospora suis*) ikke påvist.
- 3: 3L: Coccidioocyster (*Cystoisospora suis*), massiv udskillelse: 9020 OPG
- 4: 3L: Coccidioocyster (*Cystoisospora suis*) ikke påvist.
- 5: 4L: Coccidioocyster (*Cystoisospora suis*), massiv udskillelse: 24420 OPG
- 6: 4L: Coccidioocyster (*Cystoisospora suis*) ikke påvist.
- 7: 4L: Coccidioocyster (*Cystoisospora suis*) ikke påvist.
- 8: 5L: Coccidioocyster (*Cystoisospora suis*) ikke påvist.
- 9: 5L: Coccidioocyster (*Cystoisospora suis*), moderat udskillelse: 3080 OPG
- 10: 2L: Coccidioocyster (*Cystoisospora suis*), massiv udskillelse: 11220 OPG.

Rotavirus + coccidiose

Lower infection pressure by vaccinating the sow

Coccidiostatika in the right dose, on the right day

+ change pigs as little as possible in farrowstable

Complete washing and drying of stable between teams

The healthy weaned piglet

Make sure your pig is free from:



The healthy weaned piglet



Prøvebemærkning	Kl. 1 uge	Kl. 1 uge
Influenza A virus	Positiv	Positiv
Influenza virus H1pdm09	Negativ	Negativ
Porcin cytomegalovirus	Positiv	Positiv
<i>Haemophilus parasuis</i>	Positiv	Positiv
<i>Streptococcus suis</i> type 2	Positiv	Positiv
<i>Bordetella brochiseptica</i>	Negativ	Negativ
<i>Mycoplasma hyorhinis</i>	Positiv	Positiv
<i>Pasteurella multocida</i>	Positiv	Positiv
PCV2	4,21	4,18

The healthy weaned piglet

The correct vaccination program for the sowherd
(with 15 frav/kuld and 35 frav/årsso)

- PCV2 = 0,3 – 1kr pr. pig
- Glässer = ca. 1 kr pr. pig
- Influenza = ca. 1 – 1,5kr pr. pig
- Rotavirus = ca 1,3 kr pr. pig
- Streptokok = 0,4kr pr. pig
 - Only type 2 + ½

= 4 - 5,2kr/gris

The healthy weaned piglet

We have now ensured our pig
is healthy



Intestinal infections



← E. Coli F4 + F18 →

Coccidier
Rotavirus

← Lawsonia
Pilosicoli →



0

1

2

3

4

5

8

Uger

E. Coli

Illegal or count x 10 in
"gul-kort" system

kvantitativ

PCR-analyse

Brachyspira pilosicoli Ikke påvist

E. coli, fimbrietype F18 Moderat 3860

E. coli, fimbrietype F4 Massiv 69900

Lawsonia Ikke påvist

Doxycyclin

Fortolkning Resultat

Resistensbestemmelse

Hæmolytisk E. coli, F18, Fæces, 1

Præparat Aflæst værdi (µg/ml) Fortolkning Følsom hvis MIC

Cefquinom ← =0.06 F 0.25

Cefixim ← <=0.5 F 2

Doxycyclin =4 F 4

Enrofloxacin ← 0.15 I 0.15

F = følsom, I = intermediær resistens, R = resistent

Resistens-bestemmelse er akkrediteret af DANAK, metode 4.4.01.

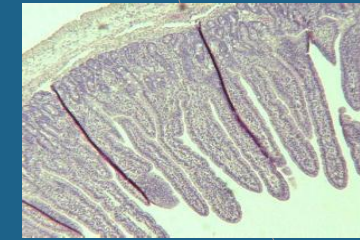
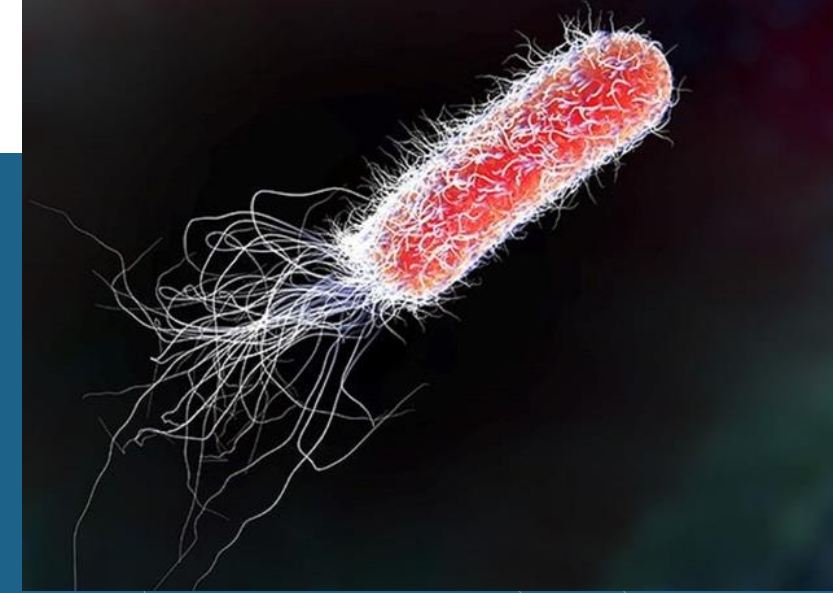
The growing weaned piglet

Why do we have this problem?

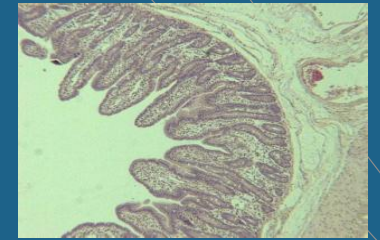
Undigested food gives nutrition for the coli bacteria!!

Undigested food is found in the intestine when:

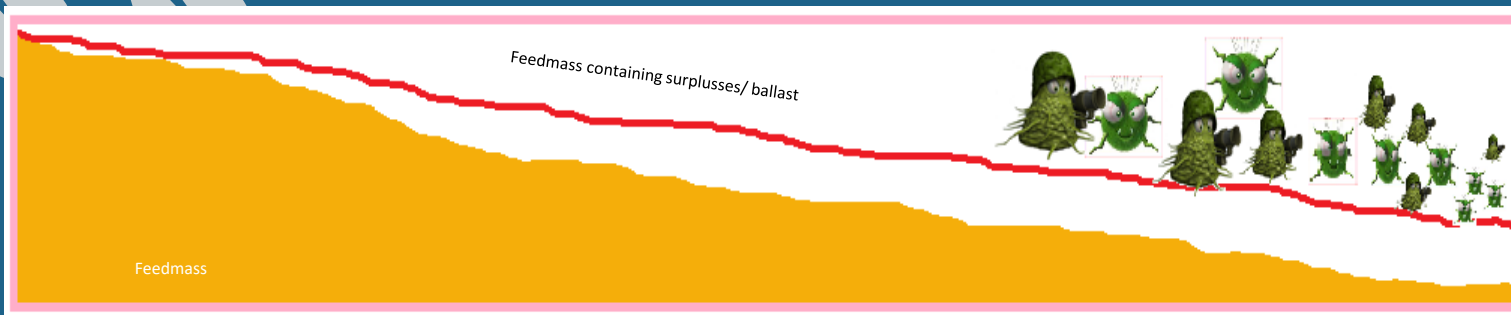
- 1) The intestine is damaged (infection)
- 2) When the pig cannot digest all of the feed!



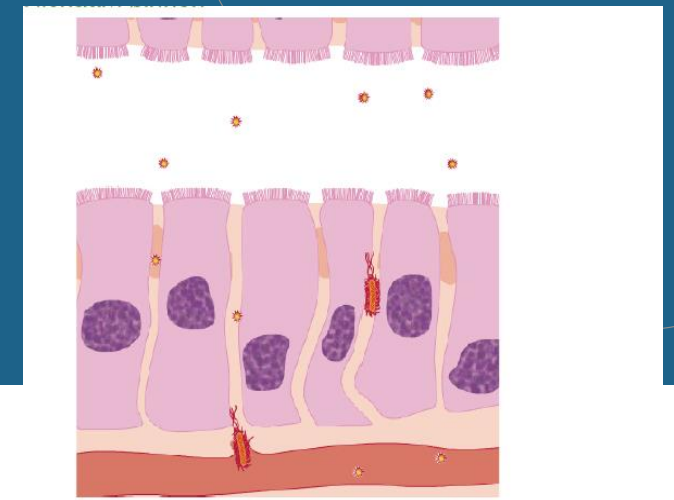
weaning



5 days after weaning

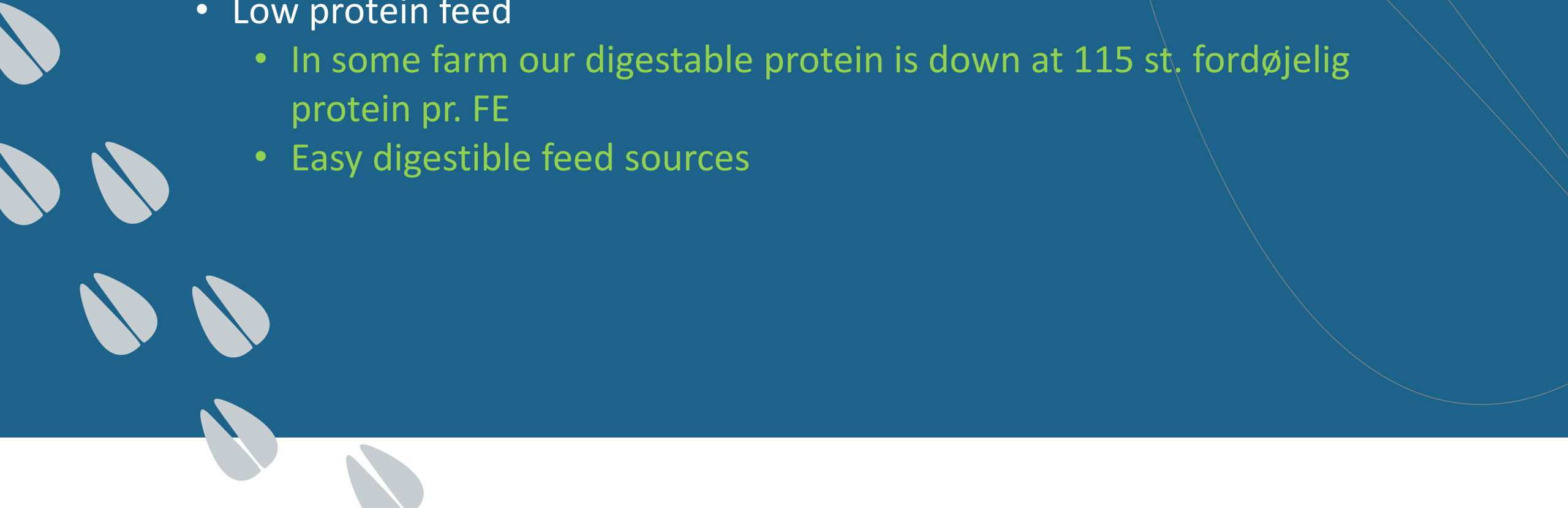


Intestinal system



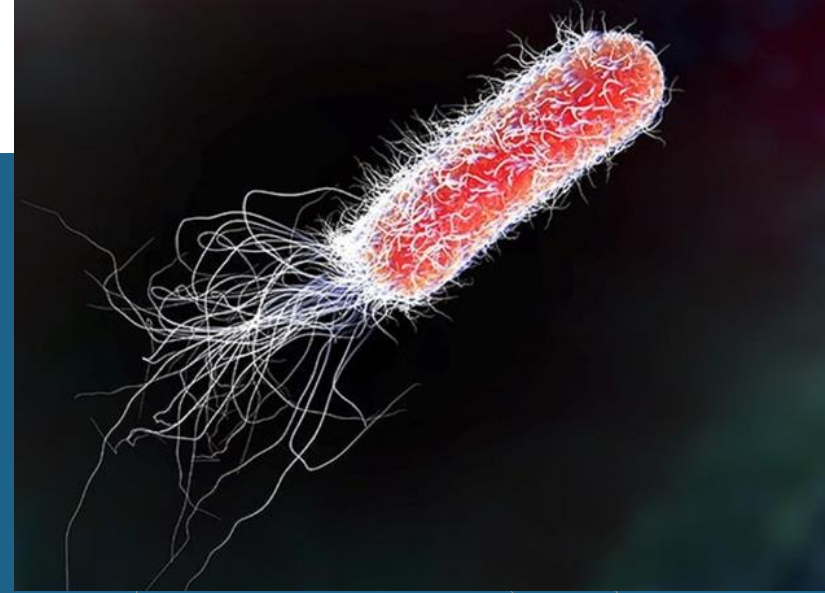
How do we control Coli

- A pig who is old enough and knows how to eat
 - Stable production
 - Feeding 3 or more times pr. day in farrowstable
- Low protein feed
 - In some farm our digestable protein is down at 115 st. fordøjelig protein pr. FE
 - Easy digestible feed sources



How do we control Coli?

- Acid
 - Water
 - Mixed acid
 - Maxivital
 - Selko PH
 - Naturporc S
 - Goldfeed Prestige
 - Feed
 - Benzoesyre + Calciumformiat



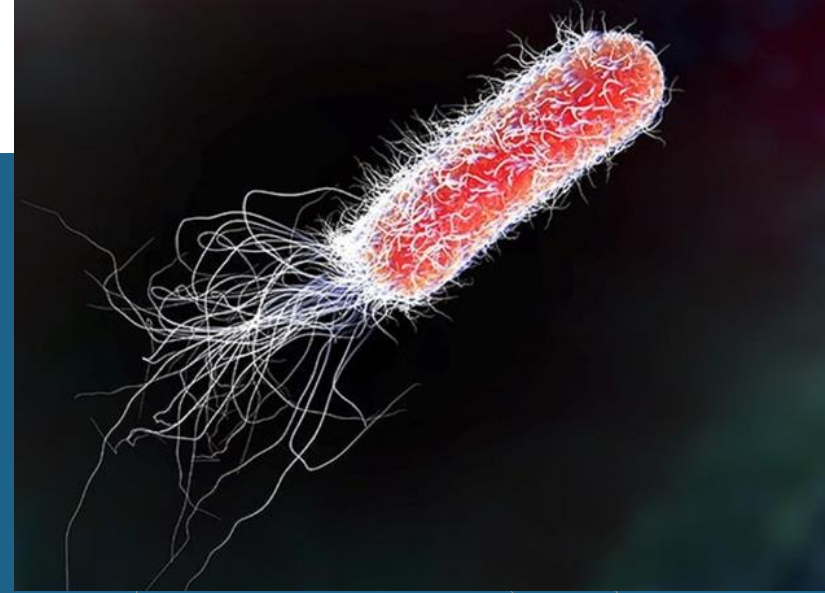
What



and it be?

How do we control coli

- Antibiotics
 - Analysis for antibiotic resistance
- Vaccine
 - Coliprotec



Questions



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