How to maximize quality and output through prevention and manangement.

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The world is changing

Who makes the decisions?

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The Government?

The newspaper?

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In the future , the consumer!

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As little as possibly
As much as necessary

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Restrictive antibiotic use

- Force us to focus on prevention and good management
- Make the good results!
- Makes the Danish swine production to one of the most productive in the world.

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Healthy pigs, high efficiency, less antibiotics, more money

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Prevention

Diarrhea control

- Good feed mix,
- All in- all out production
- Lawsonia vaccination

Pneumonia

- All in – All out
- Virus control!
  - All farms have PCV2 virus
  - 60-70 % have PRRS virus
- Vaccination
  - PCV2
  - Mycoplasma
  - PRRS
  - APP

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Controlle of virus infektions as PRRS, PCV2 and Influenza is an absolute must

Think in batch production
All in – All out
Gilt strategi versus PRRS
ect. …..

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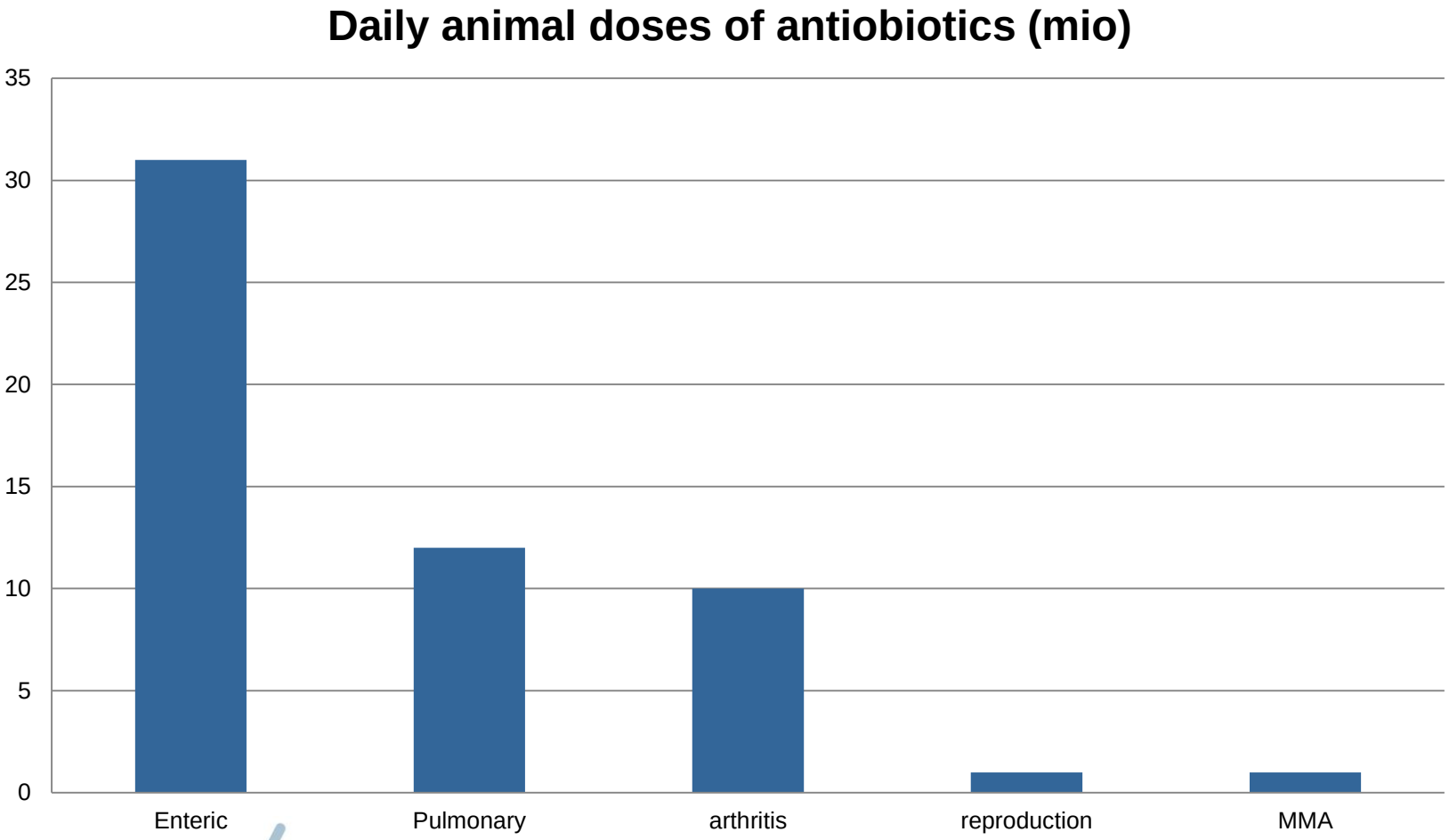
For which diseases are the antibiotics used?



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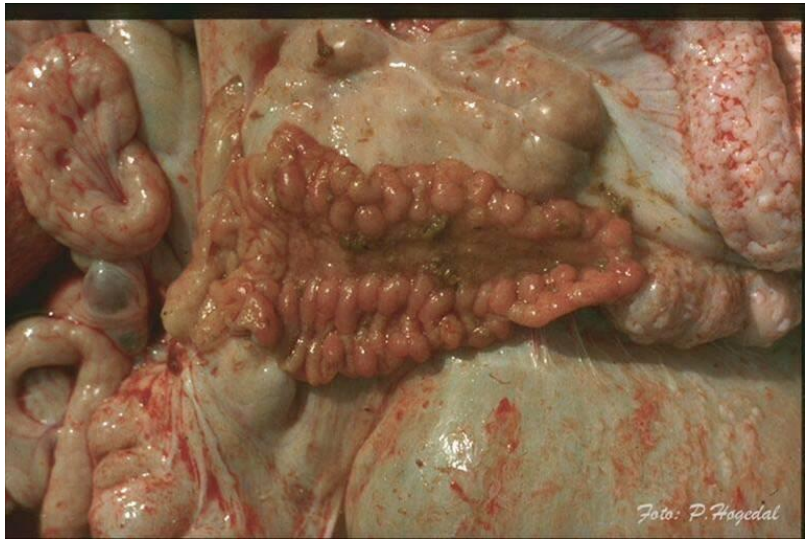
Controlling, Ilietis = Lawsonia-PIA

- Good management is not always enough
- Intervention with therapeutic antibiotics is needed on most farms
- Sows are shedding Lawsonia



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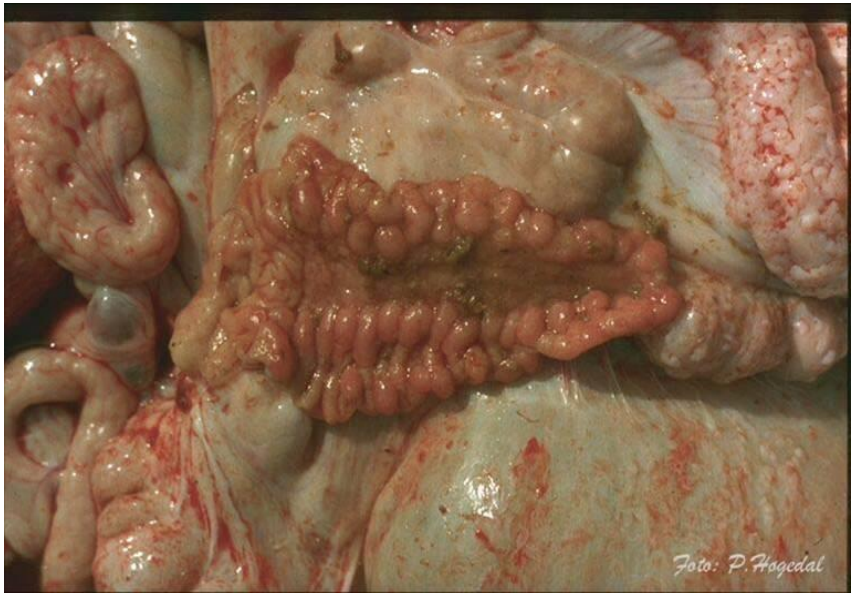
Medication or prevention?

- To late or to early with our medication strategy
- Risk of subclincal iliitis = high Feed Conversing Rate
- Weight distribution

- Vaccination
- Lower FCR
- More uniform pigs



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Think prevention as an good investment.

As long as you get your money back…….

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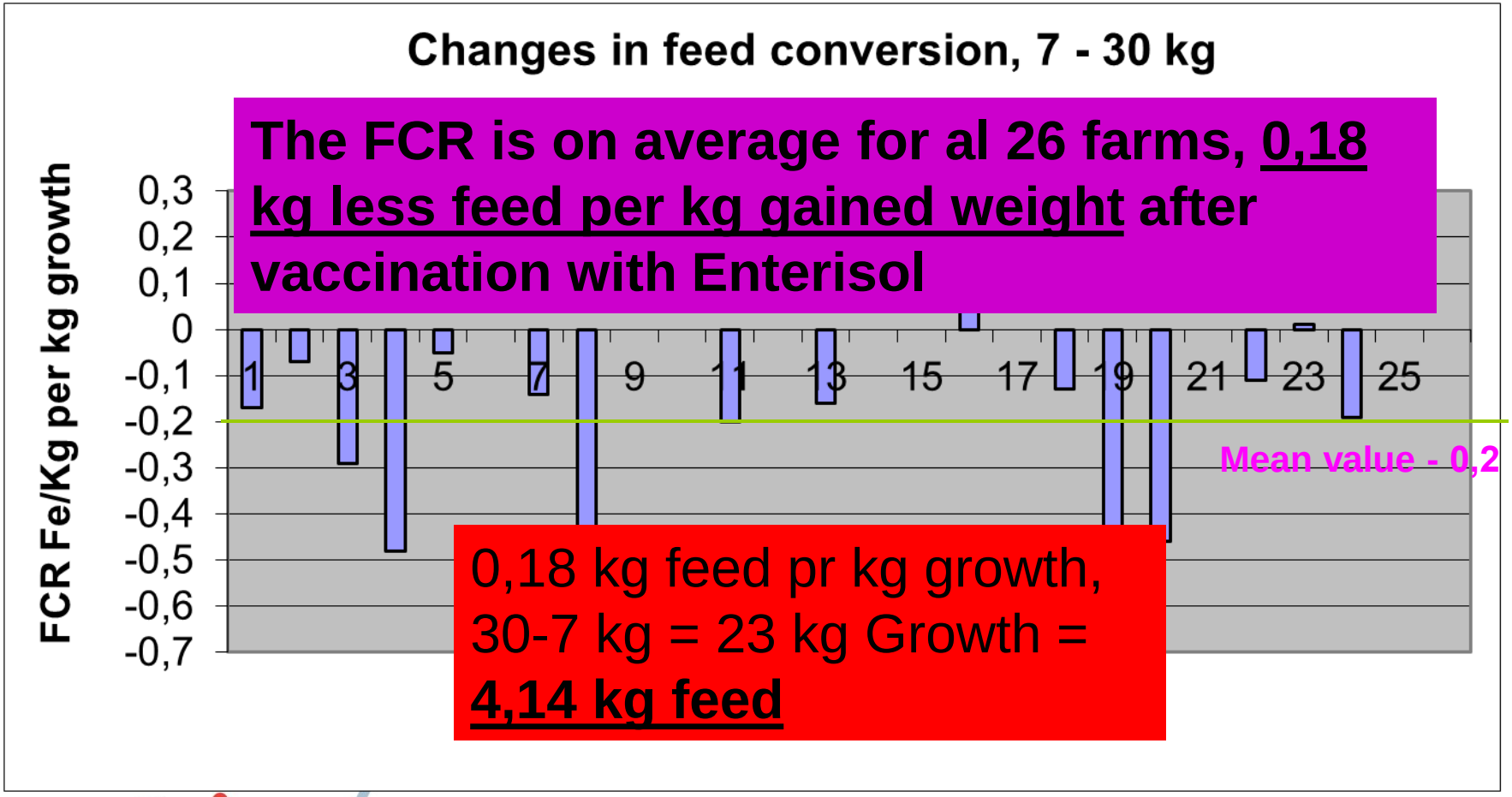
E- controlle data from 26 farms, weaners



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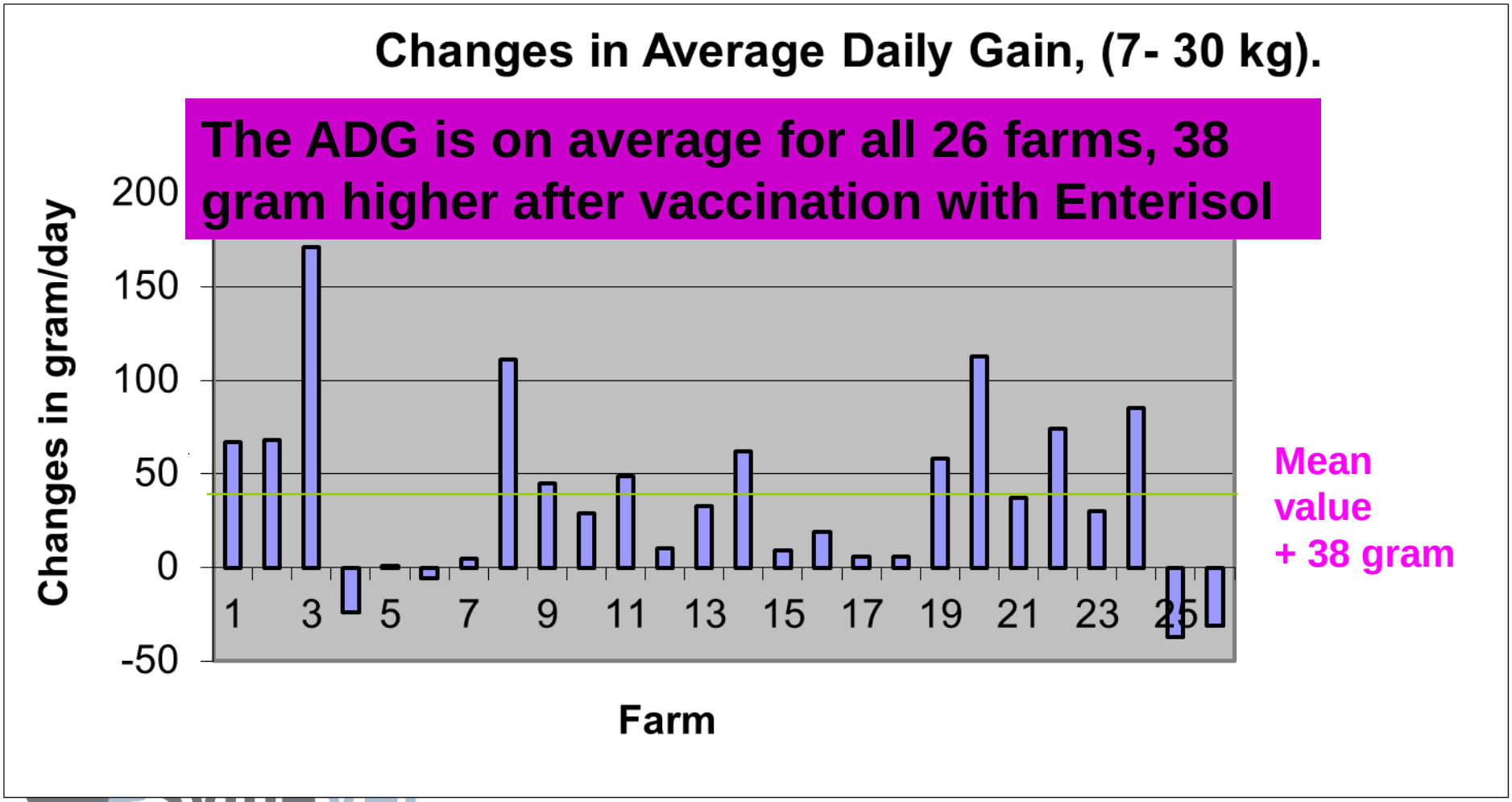
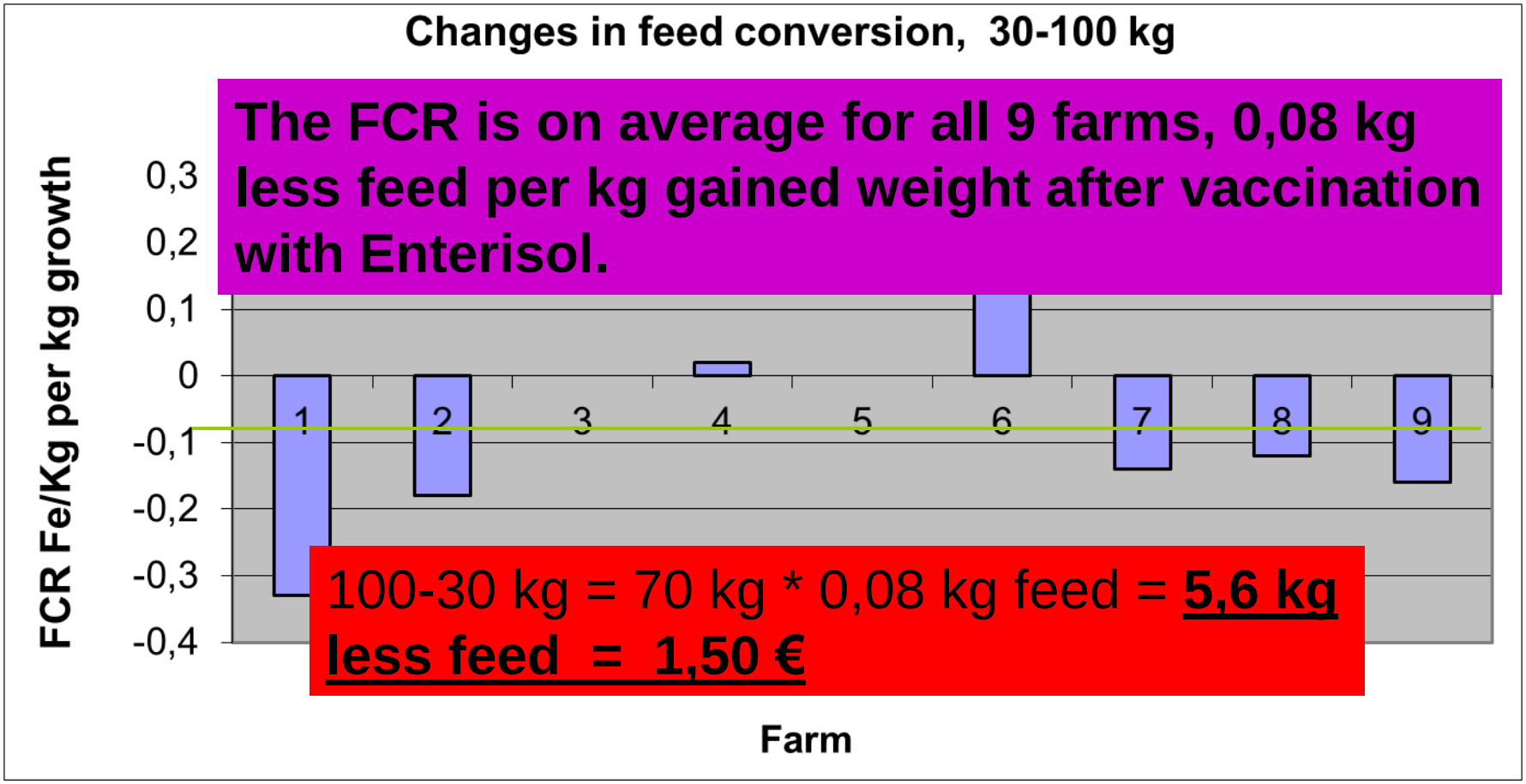


E- Controlle data from 9 farms, Finisher



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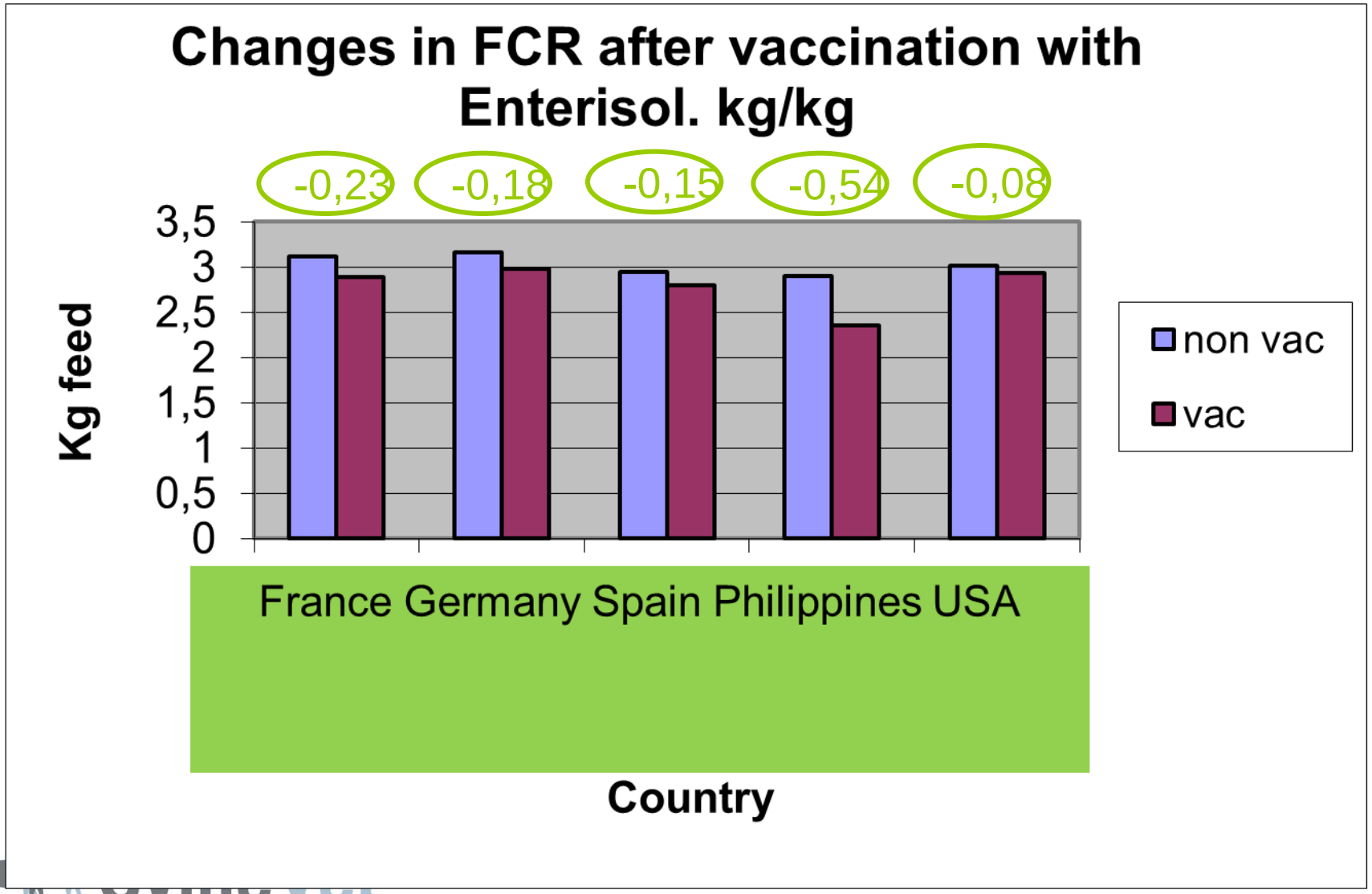
FCR data of 191.748 pigs!



Reduced use of antimicrobials after vaccination for Ilietis.

- Every second batch of pigs was vaccinated with Enterisol. In total 15.656 pigs.
- Every second batch of non vaccinated pigs was control.

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Effect of vaccination

- Oxytetracycline to treat PE was reduced by 79 % in the vaccinated pigs.
- ADG + 46 Gram pr day
- Carcass weight + 1,25 kg
- Fattening periode – 8 days

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Significantly reduced use of antimicrobials with PCV2 and ileitis vaccination in a Danish herd

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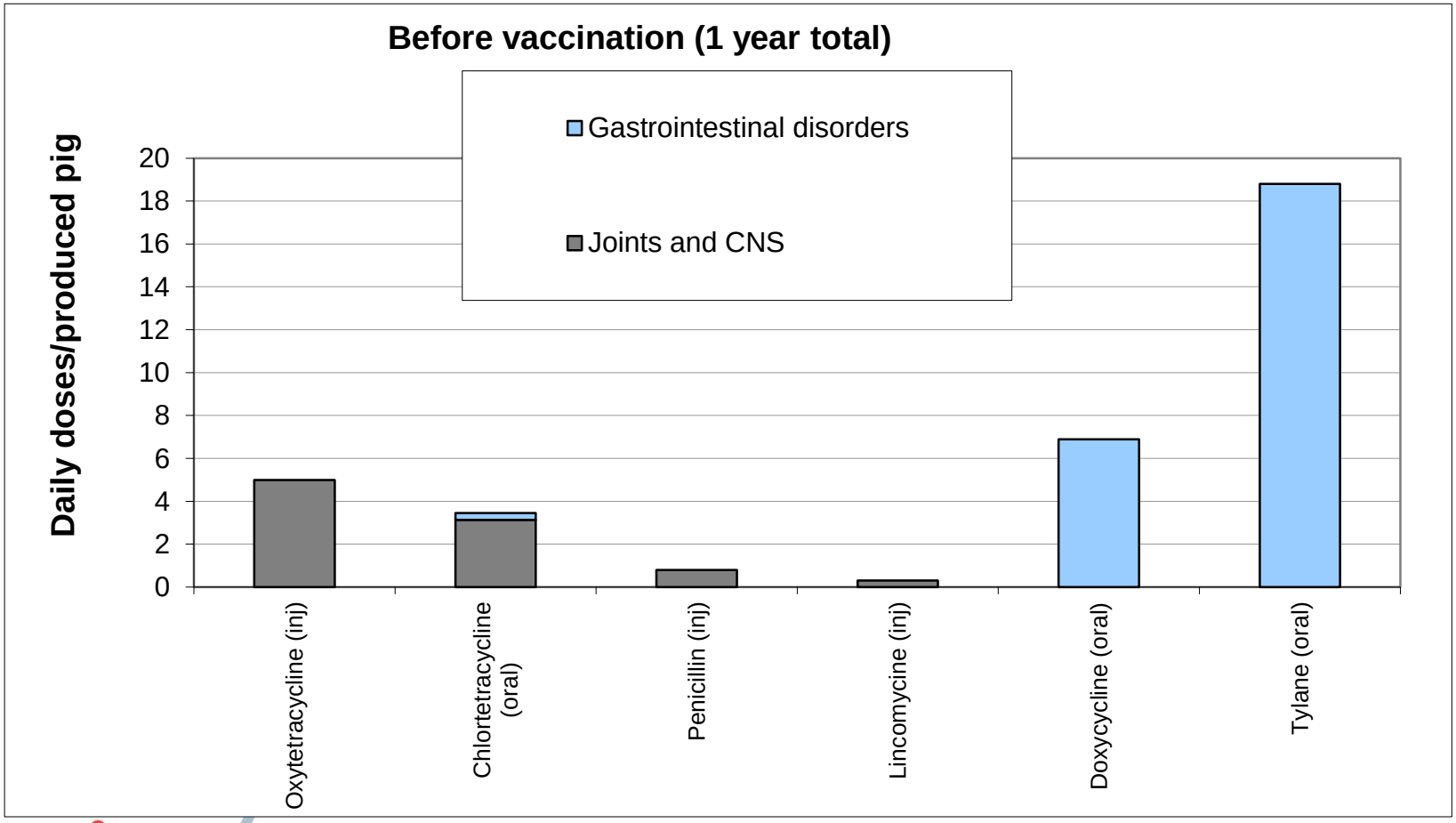
Antibiotic use (ADD) in finishers without Vaccination against ilietis and PCV2



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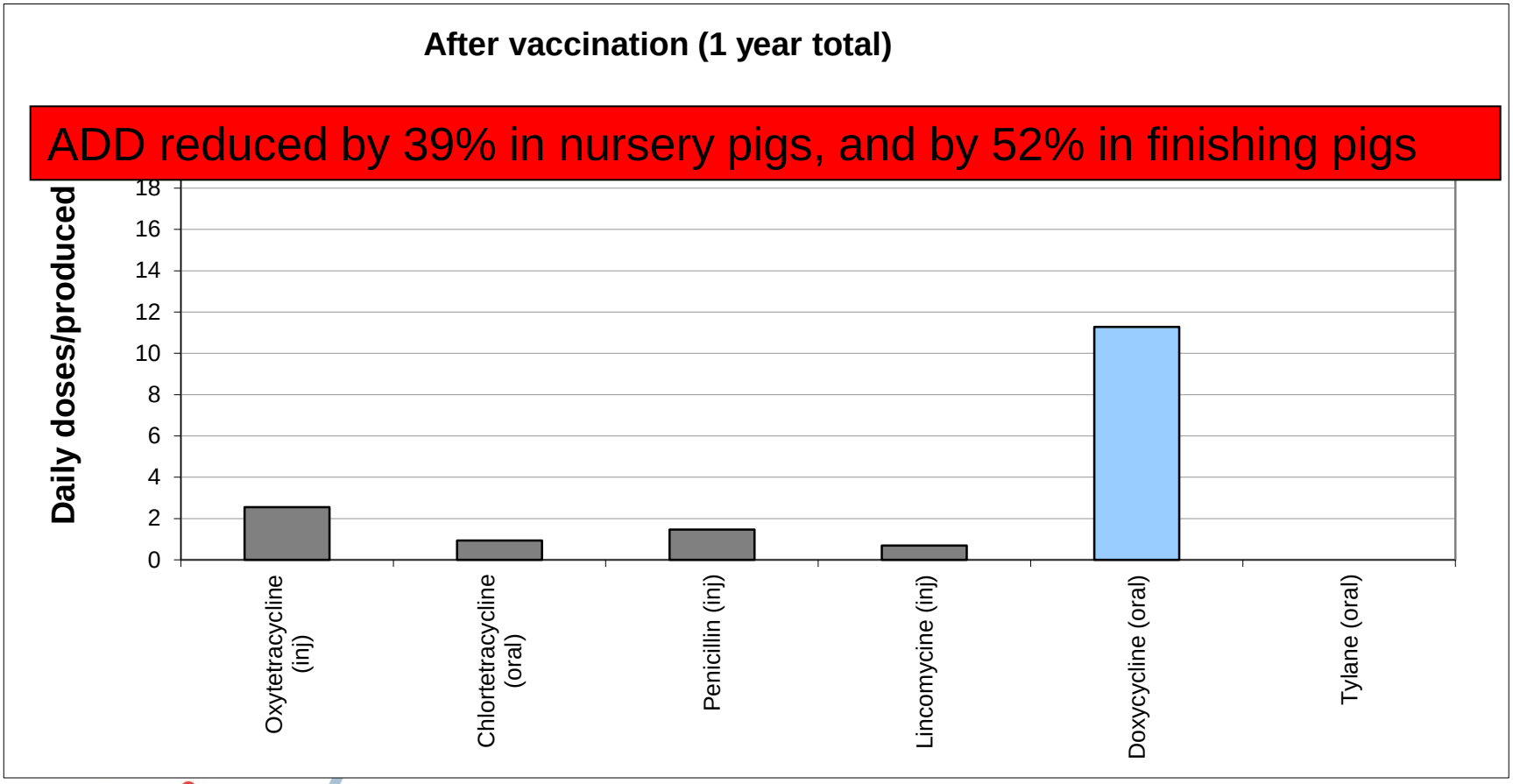
Bak and Havn (2011)

Antibiotic use (ADD) in finishers with vaccination against PCV2 and ileitis



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Bak and Havn (2011)

Before and after vaccination against PCV2 – CircoFlex and ileitis - Enterisol

Mean/period	Non-vacc	Vacc.	Diff.	Value (€/pig)
ADWG (g/day)	928	972	**+44***	0.59
FCR (kg/kg)	2.66	2.54	**-0.12***	2.43
Mortality (%)	3.4	1.6	**-1.79***	1.34
Antibiotics (€/pig)	2.18	1.02	**-1.15***	1.15
Total value			5.50€/pig	

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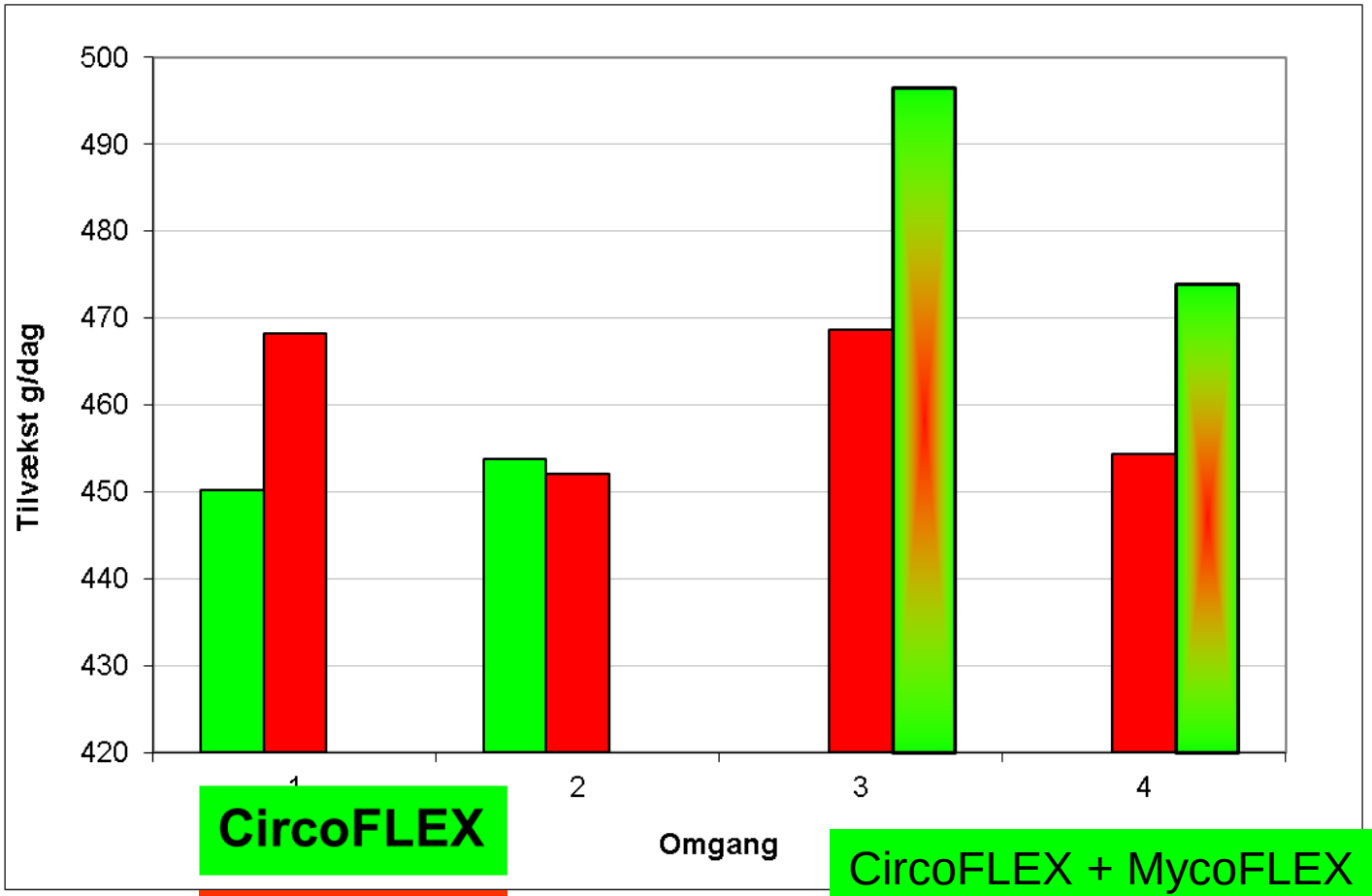
*values with significant difference ($p \leq 0.05$)

Bak and Havn (2011)

Daily gain in the weaners 7-30 kg



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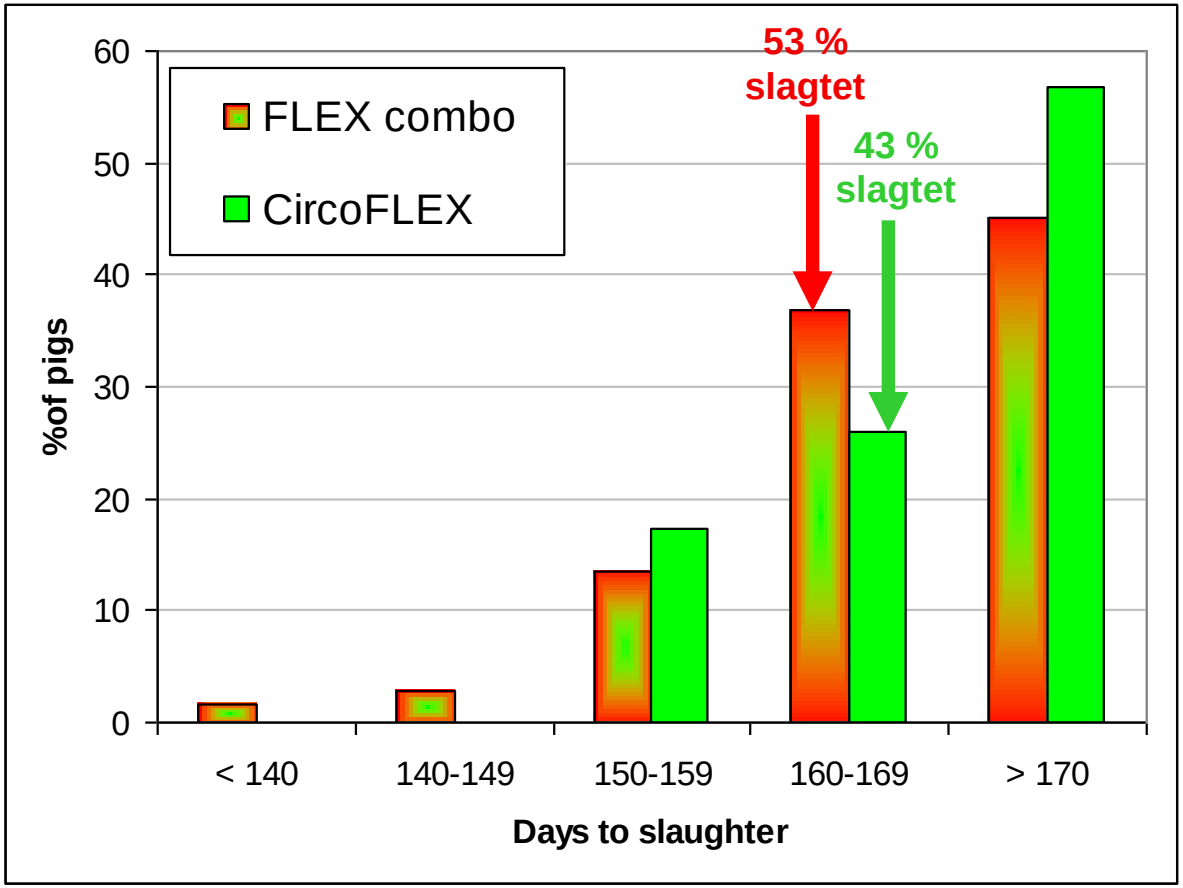
FLEX Combo = MycoFLEX + CircoFLEX pigs are slaughtered early



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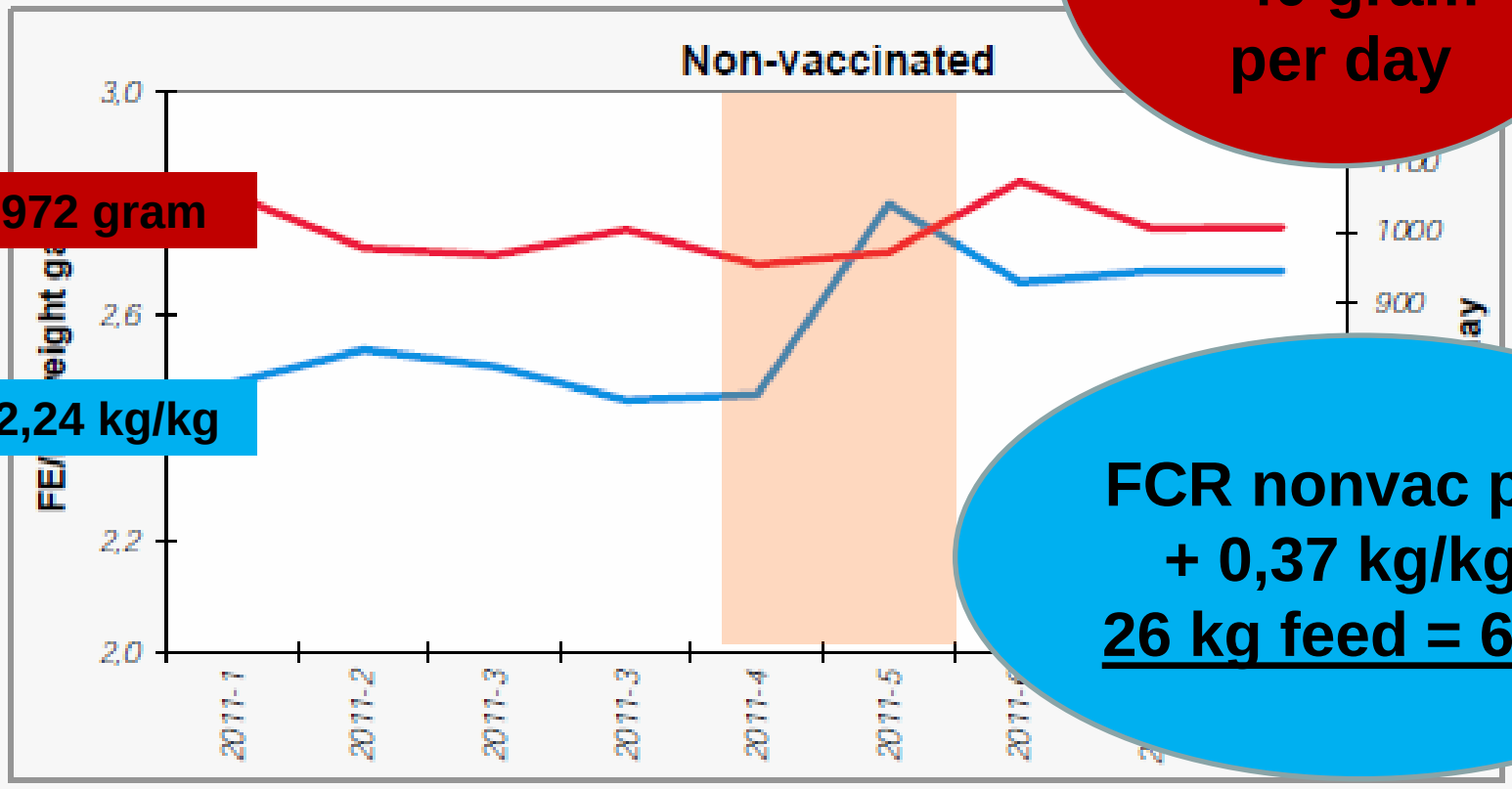
Case 3 - what happens when we stop with vaccination

- The years aga
- A lo s and dus 2
- The wee

Impact on ADG an



ADG nonvac pigs - 40 gram per day

ADG 972 gram

FCR 2,24 kg/kg

FCR nonvac pigs + 0,37 kg/kg = 26 kg feed = 6½ €

Fig. 1: Feed conversion rate (FCR) and average daily weight gain (ADWG) in non-vaccinated finishers in herd 1 compared to vaccinates (PCV2+M hyo) before and after.

Animal daily doses of Antibiotics

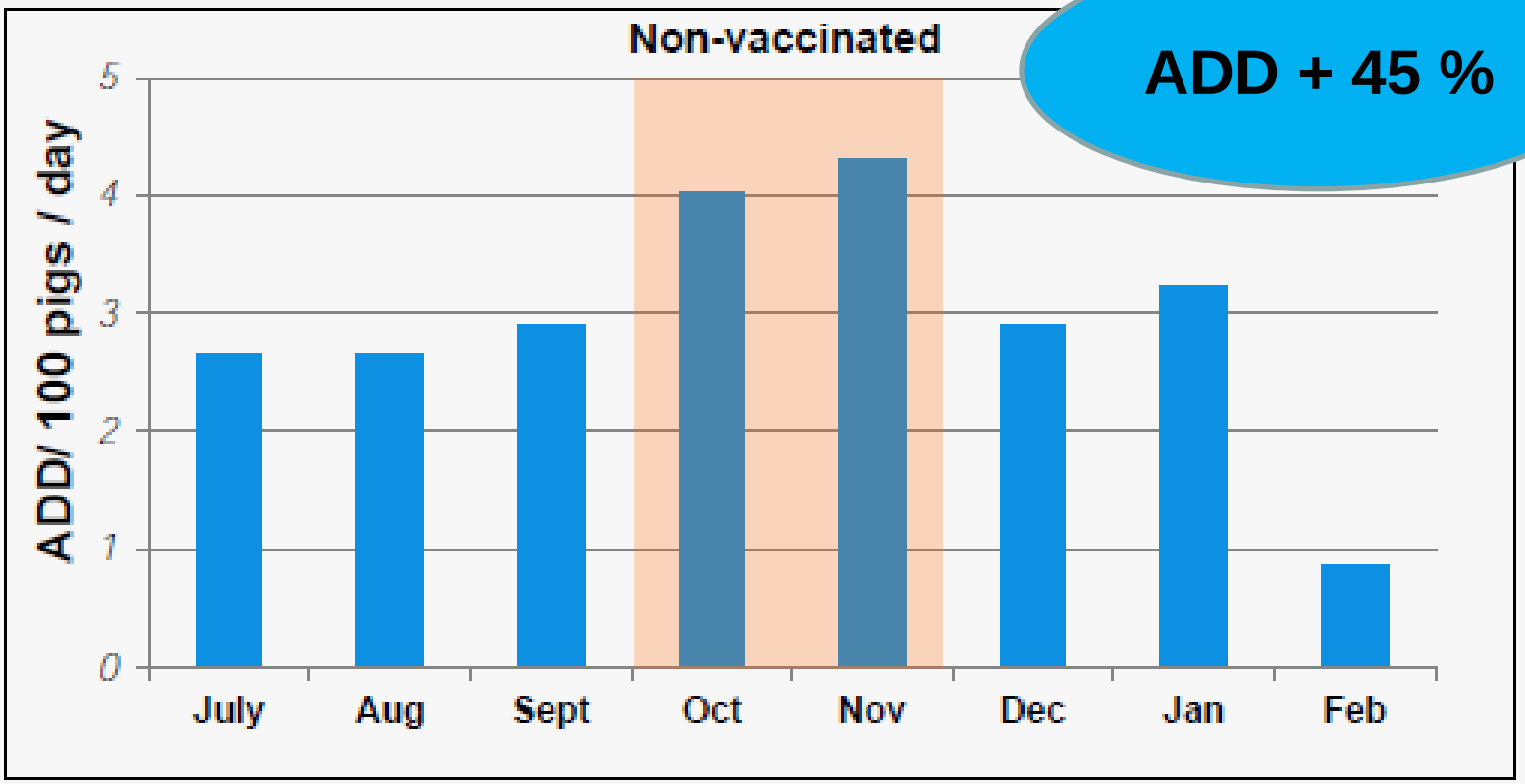


Fig. 2: Animal daily doses of antibiotics (ADD) prescribed to non-vaccinated finishers in herd 1 compared to vaccinates (PCV2+M hyo) before and after.

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Results - qPCR

Sampling		**Vaccinated CircoFlex**		**Non-vaccinated controls**	
		Viremic (%)	qPCR (min-max)	Viremic (%)	qPCR (min-max)
T0	At weaning	0%	Negative	0%	Negative
T1	4 weeks p. vacc (p. wean)	0%	Negative	40%	3,6-9,7
TS	Before slaughter	0%	Negative	70%	3,7-6,0

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Finisher – The Best!

	FEsv/ kg tilv.	Daglig tilvækst	K
Gennemsnit	2,90	902	
Gns for top 20	2,72	943	
Kolonne1			
	2,41	1090	60,4
	2,55	920	61,3
	2,55	1036	60,4
	2,58	951	60,1
	2,59	955	59,3
	2,62	874	60,1
	2,66	889	60,7
	2,71	933	60,1

FCR = 2,25 kg /kg
ADG 1090 gram pr day

Take home message

- Control Virus and mycoplasma
- Vaccination against mycoplasma and PCV is necessary in the control of PRDC
- Vaccination for Ilietis, Mycoplasma and PCV2 are a very good investment at most farms – lower FCR, higher ADG and the high value of more uniform pigs.

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Farmer, in the future

Never give up

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