



# Environmental enrichment and nutritional strategies to reduce tail biting in pig farms

# Project context



- Council Directive 2008/120/EC

*‘before carrying out tail-docking other measures are to be taken to prevent tail-biting and other vices, **taking into account environment and stocking densities**. For that reason, **inadequate environmental conditions or management systems** are to be changed’*

*‘ensure that pigs have permanent access to a **sufficient quantity of material to enable proper investigation and manipulation activities**, such as straw, hay, wood, sawdust, mushroom compost, peat or a mixture of such (‘enrichment material’), which does not compromise the health of those animals.’*

- March 2016: EU commission recommendation (2016/336) on application of the 2008 Directive on tail docking
  - Staff working document developed and available to provide guidance

# Current situation

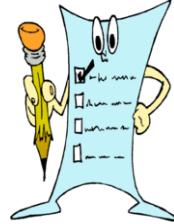


- 99% of Irish pigs tail docked  
.....Similar figures in most European countries!

1. What are the concrete progress indicators for this action plan for the period 2017-2019?
  1. Action plans from all MS by end Jan 2018
    - a. existing compliance with EC law
    - b. enforcement strategy
    - c. the rate of tail-docking at national level
    - d. recorded evidence at farm level of tail and ear injuries
    - e. on-farm risk assessment based on the parameters listed in Recommendation (EU) 2016/336<sup>(2)</sup>
    - f. implementation of improvement measures on farm
2. What specific steps have been taken by individual Member States in this regard?
  1. 12 MS submitted by end Jan 2018

# Work to date.....

1. Survey



2. Compressed straw



3. Use of wood

1. Hard

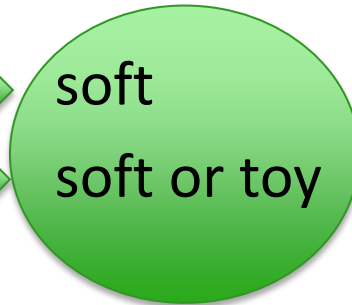


soft

2. Hard

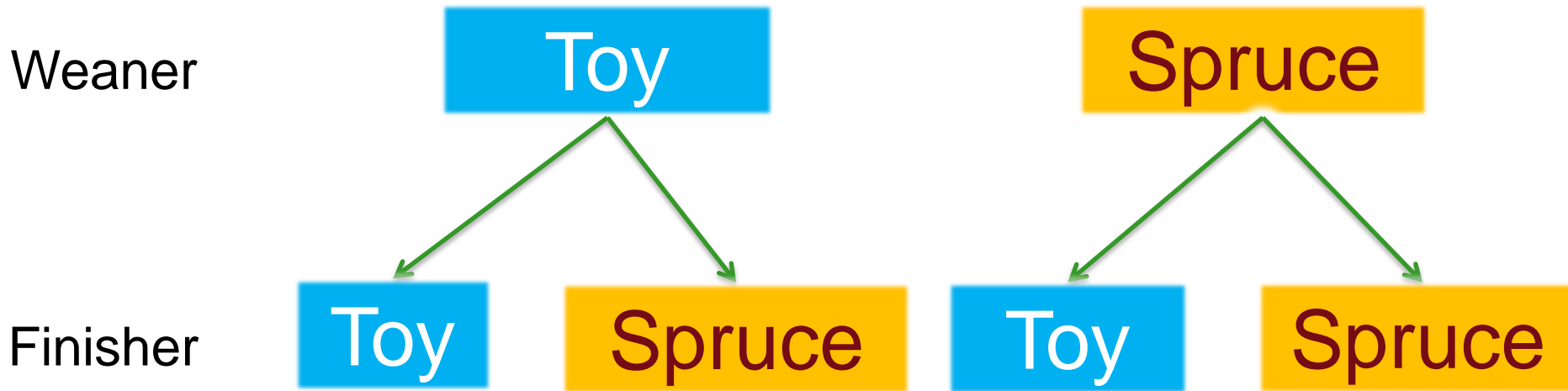


soft or toy



# Long tails!

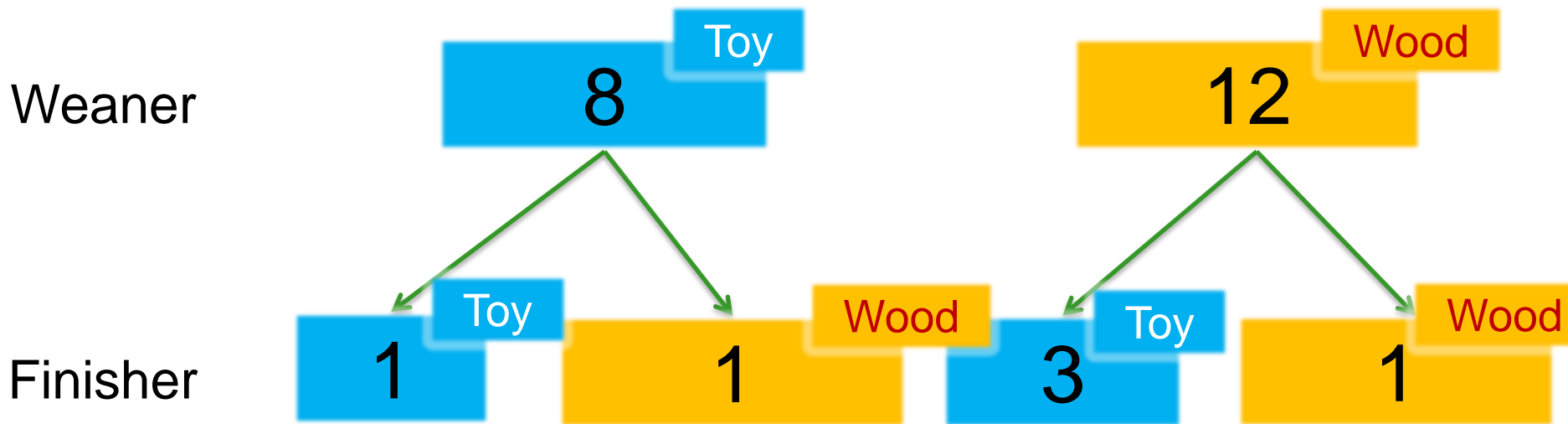
- August – December 2016, 14 pigs/pen (48 pens)



	Control (%CF)	High fibre (%CF)
Weaner	3.23	6.38
Finisher	5.63	10.65

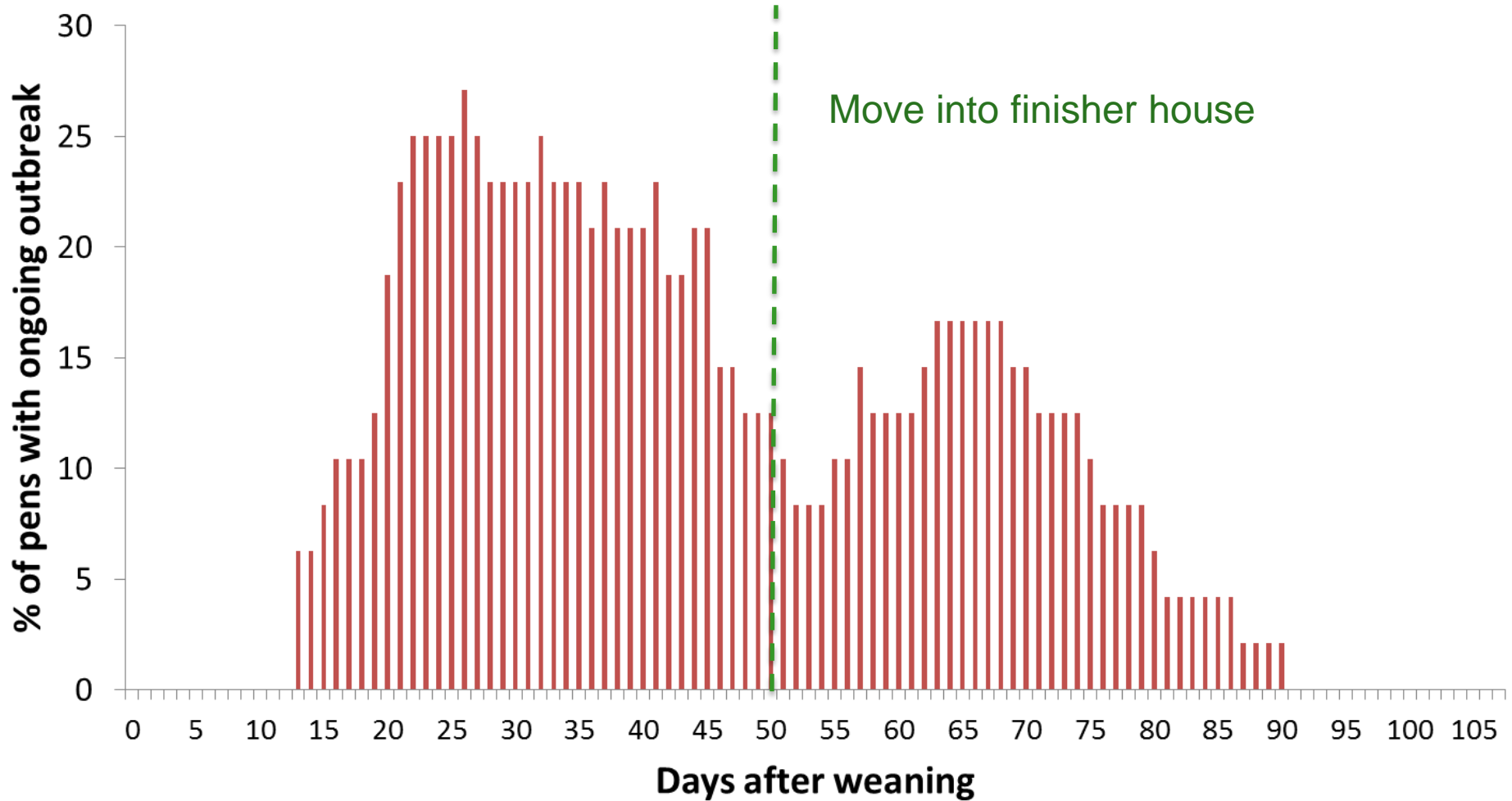
# Outbreaks

- 20% of the pigs had fresh blood present on the tail



		Control (%CF)	High fibre (%CF)
<ul style="list-style-type: none"> <li>26 c</li> <li>Hos</li> </ul>	Weaner	8	12
	Finisher	4	2

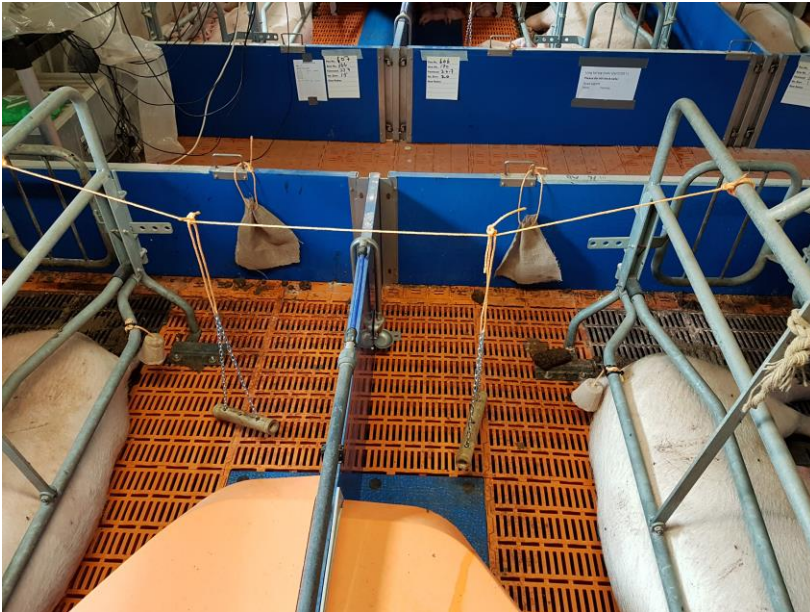
# Outbreaks






# Proof of concept study

- 96 pigs (12 pigs/pen), 8 pens
- Farrow to finish



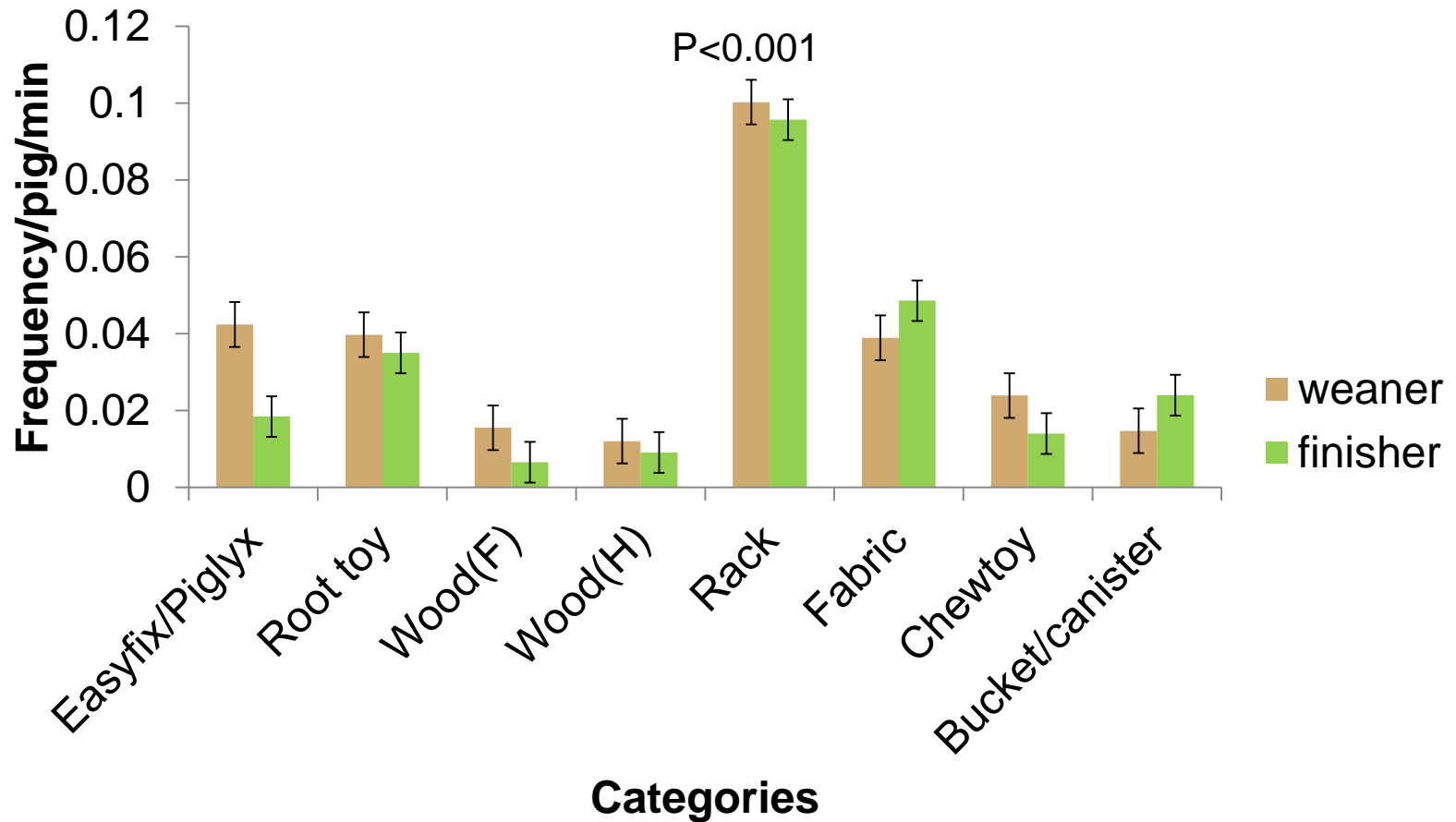


# 8 Enrichment Categories x 4 items

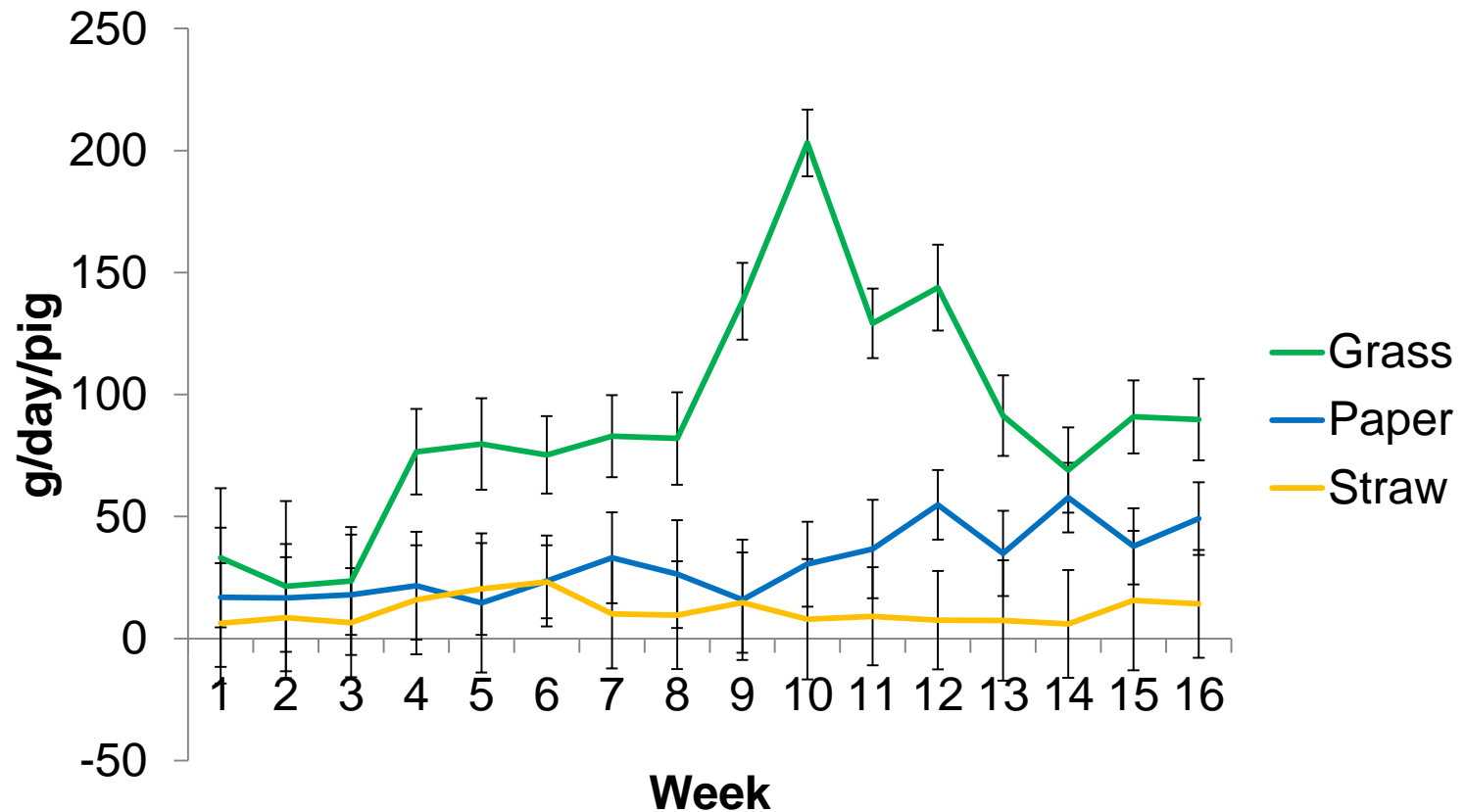
	Properties (Van De Weerd et al., 2003)					
Category	Rootable	Durable	Edible	Presentation	Texture	Location
1. Easyfix	→			Move	Soft	Floor
2. Root toy – floor	→			Move	Soft	Floor
3. Wood – holder	→			Attach	Hard	Floor
4. Wood – hang	→			Suspend	Hard	Eye
5. Rack	→			Attach	Loose	Eye
6. Fabric	→			Suspend	Soft	Eye
7. Chewtoy – hang	→			Suspend	Soft	Eye
8. Bucket	→			Suspend	Loose	Eye



# Interaction with different categories by direct observation



# Different loose materials



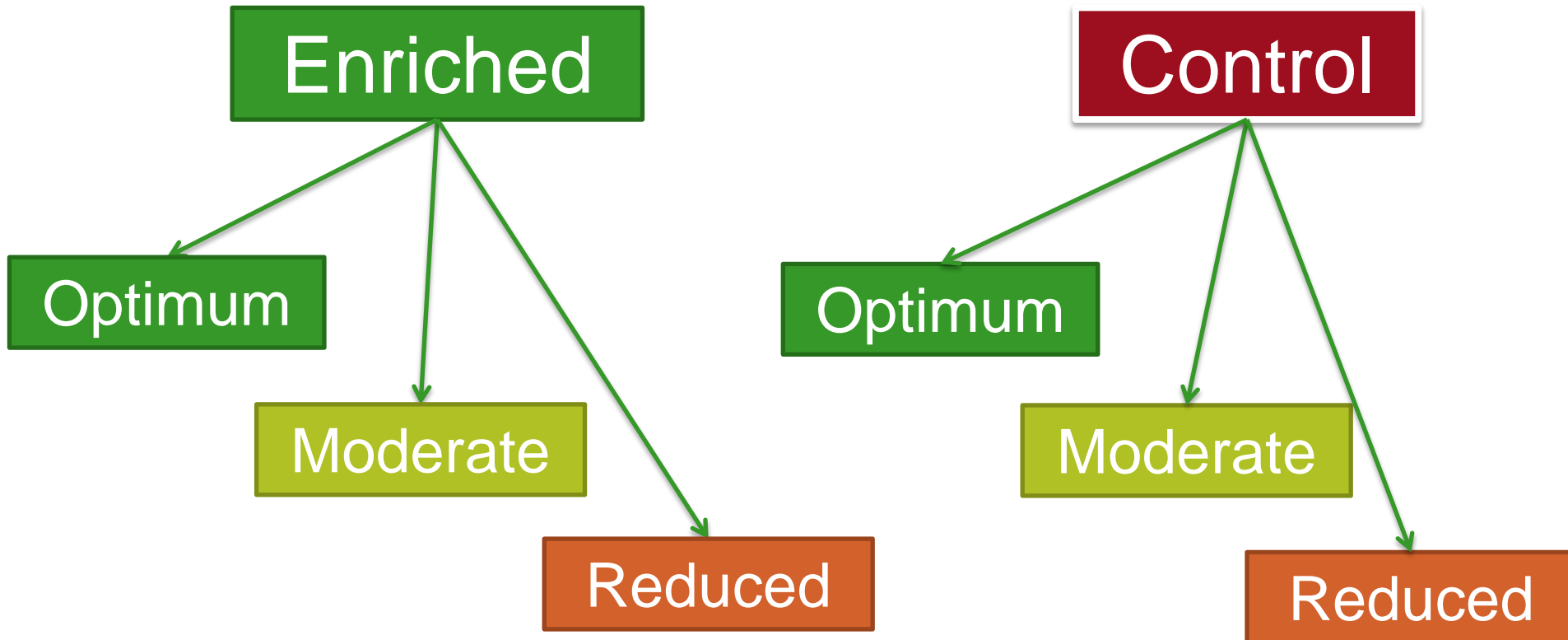
# No outbreaks!!





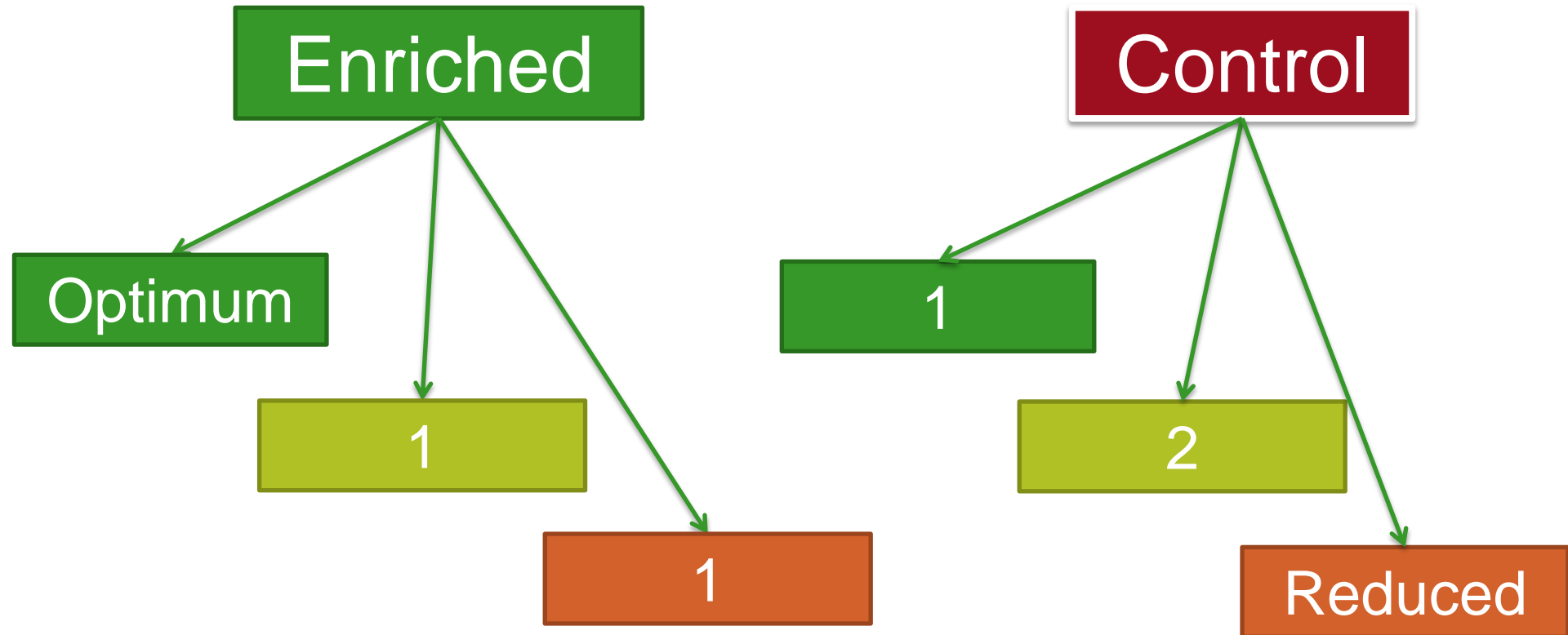
# Next step...

- March 2018 – present



# Unfortunately.....

- 7 weeks post weaning for first batch...



# Where to next...



We need to be able to rear undocked pigs in Moorepark...

- Maybe the rack is ↑ important than we realised

Finnish experience:

- Reduce no pigs/pen (0.9 m<sup>2</sup> finishers since 2012)
  - Our pens = 10.02 m<sup>2</sup>: 12 pigs = 0.84 m<sup>2</sup>
- Reduce competition at feeder
  - Considered ↑ important factor for Finnish farmers

(Valros et al., 2015)

- Breed?

Open to suggestions!

# Take home message!

- Control of tail biting outbreaks in undocked pigs is extremely difficult
- Step-by-step process of determining which methods work
  - Farm specific
- Looking like the ban on docking will be enforced reasonably shortly – post 2019?

***Must be addressed before it becomes a non-compliance issue!***

# Thanks!

- Teagasc advisory, technical and farm staff
- Constance Drique

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(Entail, 2014)

