Promotion of positive welfare through play behaviour in grow-finish pigs

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Introduction

Good quality of life for pigs is an important concept for consumers of pork products.

Play behaviour is functional

Assists in the development of social, cognitive and motor skills early in life

Occurs in the absence of fitness threats

Linked to positive emotions

Positive emotional state may have benefits for resilience and productivity by:

- improving the immune response
- supporting behavioural adaptibility
- reducing stress

- Indicator of good welfare on farm
- Tool to promote positive welfare in standard production environment

Play naturally occurs in piglets up to 6 weeks

For play to be used as a tool to achieve further benefits for the swine industry, first we need to determine:

The ability to promote play in pigs beyond the period of natural expression.

And can we promote play in production scenario?

And then we explore:

Does play reduce stress?

Is play positive for the pig?

Methods

Growing pigs, 10 weeks old (n=288)

Play promoted in NOV and PLP in 30-minute play sessions 3 x per week

Destructible novel objects





CONTROL (CON)
Standard housing
1m²/pig

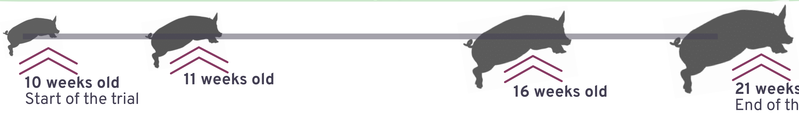


NOVELTY (NOV)
Intermittent access to novel objects
1m²/pig



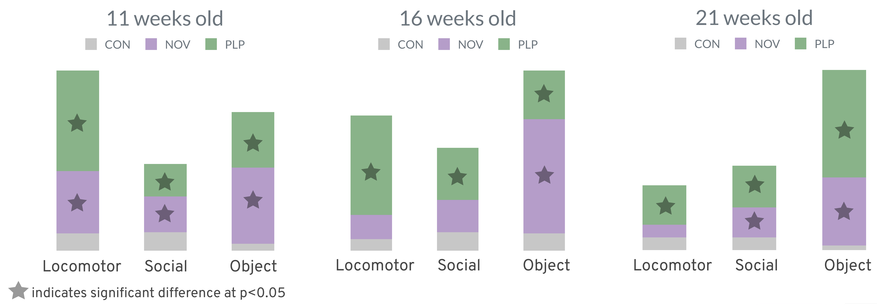
PLAY PEN (PLP)
Intermittent access to novel objects within a play pen
2.9m²/pig

Locomotor, social and object play behaviour of 144 observed and recorded at 11, 16 and 21 weeks of age:



Preliminary Results

Frequency of locomotor, social, and object play behaviour during a 30 minute play session



★ indicates significant difference at p<0.05

Play treatment groups performed significantly more of different types of play at:

- 11 weeks: Locomotor and Social and Object play (NOV, PLP)
- 16 weeks: Locomotor and Social Play (PLP), Object Play (NOV, PLP)
- 21 weeks: Locomotor Play (PLP), Social and Object Play (NOV, PLP)

To see pigs play, scan this QR code:

SCAN ME

Play treatment groups were able to support a greater amount of play at 11, 16 and 21 weeks of age.

Conclusion

Play can be promoted and sustained in grow-finish pigs in an intensive commercial system.

Pigs' preferences for destructible enrichment and novelty should be considered.

Implications for the industry

1. Play could support higher welfare in commercial settings and may support beneficial traits
2. Play could be an addition to welfare assessment where markers of positive animal emotions are currently lacking
3. Play as a tool to support quality of life would contribute to the ethics of responsible production

Thanks to our funders, and for the facility use:

Prairie Swine Centre

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