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Select the Congress: Le Porc Show
Research domain (1 word, Calibri 11pt): welfare
Title (short, Calibri 11pt): Promotion of positive welfare through play behaviour in grow-finish pigs
Short description (60 words, Calibri 11pt): English; Exploring the possibility to promote play in grow-finish pigs to use it as a tool to promote positive welfare in intensive commercial systems as well as an indicator of good welfare on farms and identify whether play has positive effects on stress reduction and the emotional state of pigs.

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Summary (3000 characters including spaces, Calibri 11pt):

Positive welfare is of increasing importance for pig husbandry and a means to enhance the quality of life. Animals play when all needs are satisfied, thus play could be used as an indicator of good welfare of value for on-farm welfare assessment. Play is also linked to positive feelings and could be a tool to improve the welfare of pigs. Play may confer beneficial characteristics; the positive emotional state could enhance resilience and productivity by reducing stress, supporting behavioural adaptability and the immune response. To achieve these benefits, it is necessary to promote play beyond the piglet age in which it is naturally expressed. This study explored the ability to promote and sustain play in growing pigs in a commercial scenario and examined if play reduces stress and is positive for pigs. Pigs (n=288, 10 weeks old) were reared in three treatments: i) Control (CON, 1 m^2/pig), and intermittent play promotion through novelty ii) in the home pen (NOV, 1 m^2/pig), or iii) through access to a play pen (PLP, 2.9 m^2/pig) three times a week. Novelty consisted of six destructible objects rotated weekly (cardboard, straw, popcorn, rope, lumber, burlap), and scents sprayed on them to enhance novelty. Play was stimulated for 11 weeks and measured by counting the number of times it occurred during a 30-minute play promotion period at 11, 16, and 21 weeks of age. Play frequency is reported as median count. Behaviours observed were grouped into: locomotor, social and object play. Preliminary regression analyses were conducted for the three play types at each of the time points separately. At 11 weeks, compared to CON, NOV and PLP engaged more in locomotor (NOV:13, PLP:20.5, CON:2, $p<0.0001$), social (NOV:8, PLP:8, CON:2, $p=0.0004$) and object play (NOV:16, PLP:10.5, CON:1, $p<0.0001$). At 16 weeks, NOV and PLP performed more object play (10.5, 3.5, respectively) compared to CON (1, $p<0.0001$), and PLP displayed a higher frequency of locomotor play (8.5) than did CON (0, $p<0.0001$) as well as social play (PLP:4, CON:1, $p<0.0001$). At 21 weeks, compared to CON, NOV and PLP performed more social (CON:0, NOV:2.5, PLP:4, $p<0.0001$), and object play (CON:0, NOV:7, PLP:8, $p<0.0001$), and PLP engaged more in locomotor play (PLP:3. CON:0, $p<0.0001$). The results suggest that

when pigs' preferences for destructible enrichment as well as inquisitive nature seeking novelty are considered, play behaviour can be repeatedly promoted in grow-finish pigs. As seen in NOV, this also applies to more intensive conditions, thus, the provision of extra space may not be needed. If play is confirmed as positive, it could be a marker of positive welfare and a tool to support good welfare in standard production throughout the life of pigs. Good quality of life for animals reared for food is a concept that resonates with consumers and contributes to the ethics of responsible production, thus supporting the sustainability of the Canadian swine industry.