PIGLETS BORN LATER IN THE FARROWING HAVE LESSER VITALITY AND INCREASED BLOOD PH AND LACTATE

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Background and Objectives

- Due to uterine contractions the last piglets born are more prone to a compressed or ruptured umbilical cord, resulting in lack of oxygen supply and decreased vitality
- Reduced oxygenation triggers anaerobic metabolism, which reduces blood pH and increases blood lactate.
- The aim of the present study was to assess if piglet birth order, vitality, lactate and blood pH at birth are associated.

Material and Methods

Piglet vitality was assessed with the following Apgar score:

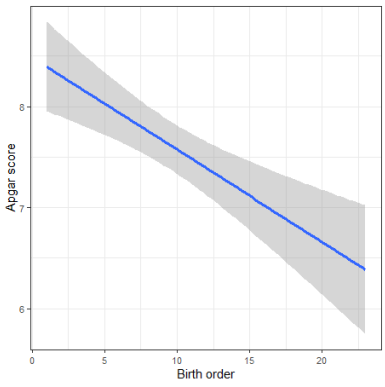
	0	1	2
Respiratory latency (s)	> 60	16 to 60	≤ 15
Heart rate (beats/min)	0 ≤ 110	121–160	≥ 161
Snout skin color	Pale	Cianotic	Pink
Latency to stand up (min)	≥ 5	1–5	≤ 1
Meconium staining	Absent	< 50% of the body	> 50% of the body

Lactate and blood pH level were measured in a hemogasometer from a blood sample collected immediately after birth.

Linear regressions were performed to assess associations between variables and statistical differences were set at p≤0.05.

Results

- Piglet birth order and Apgar score were negatively (p<0.05) associated.
- Piglet birth order and Apgar Score were negatively associated (p<0.05) with blood pH and lactate levels.



Discussion and Conclusion

Piglet blood lactate is as an indicator of fetal hypoxia, which decreases piglet vitality at birth. Piglets of higher birth order faces more challenges to adapt to early extra uterine life, have decreased vitality which can impair colostrum intake e survivability