Table S1. Ethogram of the recorded sow behavior during 72 hours postpartum and during piglet crushing.

hadr pastura	standing	cave cololy touches the ground with three or four limbs (except enout)		
body posture	standing 	sow solely touches the ground with three or four limbs (except snout)		
	sitting	weight-bearing of the forelimbs, but not of the hind limbs. Ham touches ground.		
	sternal recumbency	sow touches the ground with the belly side/underside of the body, but not with her body sides. N		
		weight-bearing of any limb.		
	lateral recumbency	sow touches the ground with the whole of one body side, not weight-bearing of any limb and at		
		least three limbs are next to the body of the sow.		
body posture	lay down in sternal recumbency	physiological and controlled lying down from a standing or sitting position in sternal recumbency		
changes (piglet	lay down in lateral recumbency	physiological and controlled lying down from a standing or sitting position in sternal recumbency,		
crushing)		followed by an immediate change from sternal to lateral recumbency		
	"flopping" in lateral recumbency	uncontrolled fall down of the sow from a standing or sitting position in lateral recumbency		
	lateral recumbency to sternal	transition from lateral recumbency to sternal recumbency		
	recumbency			
	sternal recumbency to lateral	transition from a central sternal recumbency to lateral recumbency		
	recumbency (central position)			
	sternal recumbency to lateral	transition from an asymmetric sternal recumbency (a distinction can be made between udder side		
	recumbency (same side)	and back side) to lateral recumbency in direction of the back side		
	sternal recumbency to lateral	transition from an asymmetric sternal recumbency (a distinction can be made between udder side		
	recumbency (swap side)	and back side) to lateral recumbency in direction of the udder side		
	sternal recumbency to sternal	position correction without changing the body posture sternal recumbency		
	recumbency			

Table S2. Ethogram of the recorded piglet behavior in the first 72 hours postpartum and during piglet crushing.

location	creep area $\geq 50\%$ of the litter in the creep area		
	pen	> 50% of the litter in the pen	
active / inactive	active	> 50% of the piglets in the pen are active (standing, sitting, sucking)	
	inactive	≥ 50% of piglets in the pen are inactive (lying, except sucking)	
resting behavior next to the sow	no resting behavior	no piglets rest next to sow's body immediate to the rolling event	
during rolling	resting behavior	one or more piglets rest next to sow's body immediate to the rolling event	