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2. PREGNANCY, PARTURITION AND THE NEONATE

2.1. Plenary Session

PP5

Sow influence on neonatal survival: a special focus on colostrum

Hélène Quesnel^{1,2}, Florence Gondret^{1,2}, Elodie Merlot^{1,2}, Florence Loisel^{1,2} and Chantal Farmer³

¹INRA, UMR 1348 PEGASE, F-35590 Saint-Gilles, France; ²Agrocampus Ouest, UMR 1348 PEGASE, F-35000 Rennes, France; ³Agriculture and Agri-Food Canada, Dairy and Swine R & D Centre, Sherbrooke, Canada

The main cause of early postnatal deaths in piglets is hypothermia due to an inadequate intake of colostrum. Colostrum consumption is the outcome of complex interactions between the sow, the piglet, the litter and the environment. The sow may have an impact on many factors that are determinant for colostrum intake and chances of survival, such as piglet weight, maturity and vitality at birth, or within-litter variation in birth weight. Colostrum intake also depends on the ability of the sow to produce colostrum in sufficient quantity to fulfill the needs of the whole litter. Maternal stress during gestation may increase piglet morbidity and mortality up to weaning, presumably by affecting the ontogeny of the fetal immune system, but also IgG contents in colostrum and IgG transfer to newborn piglets. Ways to reduce neonatal mortality through maternal feeding during gestation are largely investigated. Feeding strategies generally failed to increase piglet birth weight but led to more promising results on piglet maturity and vitality at birth and on the acquisition of passive immunity. There is some evidence that maternal feeding during the periparturient period may influence both the quantity and the quality of colostrum; this needs however to receive further attention.