Improving sow nutrition to aid piglet survival



Piglets are most at risk of mortality after they've been born when they're competing for **colostrum** and the little space they get at the teat, especially if they have a low birth weight. They're born with some reserves of energy but quickly need more to survive. Other factors such as **warmth** gained from



underfloor heating, heat lamps or straw for example, can aid piglet survival significantly - helping them to preserve energy and spend more time consuming colostrum in order to gain the energy and passive immunity they need.

The first 3 days therefore, are key to survival, firstly in getting colostrum and then getting the sow's first milk rich in fat. Because the **sow's milk** is such a key part of the piglet's survival, focussing on her nutrition during gestation is also important. Key elements are the **yield**, **quality and composition** of the colostrum she is able to offer her piglets.

A piglet which gets enough colostrum, (>200g) is more likely to survive so there is ongoing work to breed sows that produce more colostrum of a better quality. It's also known that **nutrition** during gestation influences the quality of colostrum although care is needed to add the right constituents to the diet. For example, **fat and fibre sources** (e.g. sugar beet pulp) of the right type can increase yield, improve composition and also increase piglet colostrum intake. Improved piglet daily growth rates have also been observed when a sow's diet during gestation contains the **right type of protein** i.e. protein containing the arginine family of amino acids. Piglet birthweight is higher and suckling behaviour is improved too.



In the light of all that can be done to manipulate colostrum yield and quality to aid piglet survival it's worth offering the sow a different diet during gestation compared to the one she gets during lactation after piglet birth.



Best growth rates following birth are then achieved by supporting the nutrition the piglet gets from the sow's milk e.g. by creep feeding during the transition from birth to weaning. This also benefits the sow by reducing the piglets' reliance on nutrition provided by the sow and enabling her to regain body condition.

For further information please see our Farming Connect articles *Improving piglet survival: a* nutritional approach from the sow to piglet and *Improving piglet survival: a management approach* from breeding to farrowing by Dr Ruth Wonfor.

