

BETTER PENS MEAN 'BETTER' PIGS

Pigs that grow up in an enriched environment – a bigger pen with straw and sawdust, for example – grow faster, have better immunity, and can cope with disappointments better, concludes PhD researcher Lu Luo.

Luo's study is the first to compare the long-term effects of an enriched pen with those of a standard bare pen. Luo assessed not only the pigs' behaviour but also their growth, their immune systems and their emotional state.

Luo discovered that pigs from enriched pens had different levels of natural antibodies than pigs from conventional pens, which probably makes them respond more effectively to infections. Her discovery ties in with earlier research findings by Ingrid van Dixhoorn, who found that pigs from enriched housing had better resistance to the PRRS virus.

Another significant benefit is that the pigs from enriched environments coped better with being weaned. After weaning they ate

better and grew faster than pigs in a bare environment. What is more, they displayed fewer stress symptoms and could cope with disappointment better.

PLAYING

Luo did her research on the Wageningen campus with 32 groups of pigs. One quarter of the pigs were housed in either an enriched or a bare pen, one quarter were moved from a bare pen to an enriched one after seven weeks, and one quarter were moved in the opposite direction. The pigs that went from an enriched pen to a bare one seemed to become more stressed and began to display harmful behaviour such as tail- or ear-biting, which the pigs in the enriched environment hardly ever did. It

also became apparent that pigs that moved from an enriched environment to a poor one were worse off than the pigs that stayed in a bare pen all the time. And the pigs that were 'promoted' from bare pens to enriched ones showed lasting signs of improved wellbeing, playing and exploring more. **AS**

