

Water intake with a pushbutton system and a single meal a day during gestation were found to be insufficient. The supply of a larger amount of water (minimum 18 l/day during gestation) with two meals a day improved the motricity of the animals. The sows being more active had less difficulties at farrowing, milk secretion was improved and piglets were more vigorous. During lactation, the water intake of sows was higher (minimum 24 l/day) which led to an increased feed intake. The mortality rate of piglets was reduced. The number of weaned piglets was higher and they were heavier (1 more kg).

After weaning, a larger number of sows exhibited grouped oestrus. Reproduction disorders were less frequent. It was concluded that changing the feeding and drinking technique was associated with an improved behaviour of the sows and a better sanitary status resulting in a better efficiency.

### **Flooring characteristics and foot lesions in sows and piglets.**

#### **Influence on performance and nature, frequency and severity of lesions**

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A study was made to determine the influence of flooring on the performance of sows and sucking piglets and on the characteristics of foot and body lesions and their variations with time. Data concerned 1118 litters belonging to 102 batches observed over a six-year period (1981-1986). In terms of performance, straw-covered concrete floors seemed to be more favourable to the sows, whereas in piglets the best results were obtained with metallic slatted floor (+ 9 p. 100 growth, - 2 p. 100 losses). All the sows kept on partly slatted concrete floor during the service-pregnancy period entered the farrowing house with foot lesions (fissure and erosion of the horn) all the more frequent as the litter order was high. During lactation, foot lesions were less frequent but the number of udder and teat injuries was higher. At 8 days of age, the proportion of intact piglets was higher on straw-covered floor than on slatted floor (27.5 and 17 p. 100, respectively). This difference was more marked at weaning (65 versus 19 p. 100). Lesions were variable and concerned heels and wrists. Their incidence and severity were higher on plastic slatted floor. However, their effect on performance could not be demonstrated. After weaning, straw bedding prevented lesions in 60 p. 100 of piglets. This protection was reduced on slatted floor (5-times lower). On concrete slatted floor lesions mainly concerned heels and were more severe. During the fattening period, full concrete slatted floor provoked an important erosion of the claws. Frequency of lesions recorded at slaughter depended on that measured at the end of the post-weaning period.

### **Impact of new technologies on the control of infectious diseases in the pig**

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Available technologies mainly derived from cell fusion and DNA recombination have great implications in the control of infectious diseases in animal species, including the pig. Together with a short description of the relevant techniques, this review provides several examples of existing or