SUMMARY

By altering the longitudinal slopes of the cubicle floors the drainage could be improved. If the altered slopes also position the cows further back in the cubicles the effect could be cleaner lying surfaces. In result this would lead to lower labour requirements, cleaner cows, cleaner udders and a minimization of the risks of mastitis. However, if the altered slopes lead to that the cows position themselves more diagonally in the cubicles the positive effects could be reduced. The altered slopes could even have a negative influence on the animals’ natural lying behaviour. The latter is not acceptable.

The aim of this study was to examine how an altered longitudinal slope in cubicles, from about 2 % to about 7 %, influences the diagonal lying positions of milking cows and if any effects on the animals’ natural lying behaviour could be shown. This was made by experimental studies. An initial literature review, concerning milking cows’ natural lying behaviour, the influence of cubicle design on the natural behaviour and other important aspects, was necessary for the understanding.

On average, cows did not respond to the increased longitudinal slope regarding the diagonal positioning of the cow in the cubicle. There was a tendency for the smallest cows to lie more diagonally than the larger cows. However, the increased slope made the cows lay towards the back of the cubicle resulting in the back of the cows being about 45 mm outside the cubicle edge. Lying times and lying frequencies were insignificantly influenced by the slope of the cubicle.