Hoof Health on Rubber Mats versus Slatted Concrete

A study conducted at the University of Munich, Germany compared the effects of rubber-matted versus slatted concrete flooring on claw health and milk yield in loose-housed dairy cows. Milk yield and activity data of 53 complete lactations from 49 cows were recorded by an automatic milking system. Claws were trimmed and measured in combination with claw lesion diagnosis 3 times during each lactation. Claw horn growth increased on the rubber mats. Therefore, correct and frequent claw trimming is at least as important for claw health in dairy herds kept on rubber flooring as for those on slatted concrete flooring.

The figures on the right summarize differences in claw disorders in cows who were not clinically lame. Cows housed on rubber had an increased incidence of sole ulcers. Sole hemorrhages (except for hemorrhages associated with sole ulcers) occurred less frequently on rubber than on concrete. Results concerning digital dermatitis were difficult to assess, because manual manure scraping on rubber required sprinkling the flooring twice daily, which additionally moistened the digital skin of the cows. This might explain the greater incidence of digital dermatitis on rubber flooring. The incidence of clinically lame cows did not differ significantly between flooring types.

Cows showed greater activity on rubber, most likely caused by the more comfortable walking surface compared with the slatted concrete flooring. The greater activity may indicate better overall health of high-yielding dairy cows on rubber flooring. Milk yield did not differ between flooring types.