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## ***Floor quality and space allowance in intensive beef production: a review***

**B Wechsler**

Swiss Federal Veterinary Office, Centre for Proper Housing of Ruminants and Pigs, Agroscope Reckenholz-Tänikon Research Station ART, 8356 Ettenhausen, Switzerland; email: beat.wechsler@art.admin.ch

### **Abstract**

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*In intensive beef production in Europe, finishing beef cattle are typically reared in pens with fully slatted floors and low space allowances. These housing conditions were questioned in a report published by the Scientific Committee on Animal Health and Animal Welfare in 2001. The report concluded that the welfare of finishing bulls and steers is at risk if they are housed on fully slatted concrete or wooden floors or not provided with adequate floor space. The aim of the present paper is to review and update scientific evidence on the effects of floor quality and space allowance on the welfare of finishing beef cattle. It is shown that the recommendations made by the Scientific Committee on Animal Health and Animal Welfare are still valid, and are well supported by studies published over the last 10 years. Furthermore, results of several recent studies testing fully slatted floors with rubber covering indicate that this type of flooring is an acceptable alternative to concrete slats, with positive effects on animal behaviour and leg lesions. Consequently, a phasing-out of housing systems with fully slatted concrete floors is suggested. With respect to floor space, the studies reviewed here support the notion that it is essential to enforce minimum standards resulting in increased space allowances for intensive beef production systems.*

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**Keywords:** animal welfare, behaviour, finishing beef cattle, floor quality, legislation, space allowance