

Stereotypic oral behaviour in ruminants – causes and consequences

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Stereotypic behaviours (SB) are described as repetitive, topographically invariant response sequences that appear to lack any ultimate or proximal function. The most frequent examples of SB in ruminants are “tongue-playing” observed mostly in heifers and cows, and biting at fences, walls or troughs, which are common in sheep, goats and calves. These behaviours are almost exclusive of intensive systems and are very seldom observed in grazing animals. Although it seems clear that oral SB in ruminants are associated with diet/feeding, the exact causes and mechanisms are not known. Its value as a welfare indicator and its health and economical impact are also under discussion.

Another abnormal oral behaviour is cross-sucking and inter-sucking in dairy farms.

We have been studying tongue-playing, object biting and cross-sucking in intensive dairy farms for the past 10 years. The prevalence varies tremendously across farms, suggesting husbandry plays a crucial role. We suggest that in some intensively kept and fed ruminants this stress is related to a reduced need for oral movements – no foraging, no need for chewing and less time ruminating. For example, our studies show that pens where animals are eating a total mixed ration with shorter fibre or higher concentrate will show more oral SB and restricting feeding will increase oral SB prevalence.

We have also studied the social behaviour of dairy calves and its correlation with the establishment of cross-sucking, through the use of Social network analysis. In one farm only 18 % of the calves did not perform cross-sucking, although not all continued to perform intersucking. In this study, we found that there are “popular” calves that are sucked by many in the group and that there are calves that only suck on each other. In conclusion, we suggest that oral stereotypic behaviour occurs because some quality or quantity feeding needs are not fulfilled. This subject deserves further multidisciplinary research as the welfare and health significance seem to be important.

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