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Peace and performance go hand in hand

# CAUSES AND MEASURES FOR **RESTLESS BULLS**



Restless, bellowing and crowding bulls are often observed in practice. But restlessness causes stress in the barn and thus has a negative effect on the performance of the animals. At the same time, stress increases the susceptibility to infections and increases the risk of injuries to the bulls. The causes are manifold. Unfortunately, there is no single solution. Instead, bull farmers must take a critical look at possible causes. The following article helps in the search for clues and at the same time provides valuable tips and advice for more peace and quiet in the bull pen.

#### One possible cause: postural defects

One important cause of restlessness is poor husbandry. This includes, among other things, overcrowding in the barn. Farmers should therefore ensure that there are enough feeding places. The ideal ratio of animals to feeders is 1:1.

Size and lack of homogeneity of groups can also promote restlessness in the barn. Small and homogeneous groups in terms of weight, age, breed and the presence of horns are preferable. A frequent change of animals in the group can cause ranking fights and thus promote stress and restlessness.

As a matter of principle, farmers should ensure good air quality in the barn. Especially during hot periods, sufficient cooling (e.g. by fans) and a supply of fresh water should be provided to avoid heat stress. Further tips on how to avoid heat stress can be found here.

#### Well fed animals are calm animals

Feeding errors are a relevant cause of restlessness among bulls. Some simple rules and principles in ration design can help to promote calmness among the animals.

- The silage used should be cool and must not heat up in the silo or at the feeding table. More frequent presentation of fresh feed or the addition of acids can also help. Important: As mouldy silage also promotes restlessness, infested batches should not be fed as a matter of principle.
- In the case of maize silage, ensure that the chop length is suitable. Moist silage should be chopped longer than dry silage because of the structure it provides. At 35 % dry matter, a theoretical chop length









of 7.5 mm is ideal.

#### Acidotic rations: a major cause of restlessness

In the fed ration, a crude fibre content of 15-16 % is the optimum. In terms of rumen-available starch and sugar, a value of less than 27 % is to be aimed for. Otherwise the ration promotes acidosis. This is accompanied by little ruminating, which means that the animals produce less saliva to buffer acids and are also less busy. This increases restlessness and activity in the barn. Acidosis leads to excess acids that attack the rumen mucus wall. Inflammations that develop in this way can cause pain and increase restlessness and aggressive behaviour in the animals.



## This helps with restlessness caused by acidotic rations

- Since the acidotic effect of the ration increases with the starch content, more grain maize should be mixed into the concentrate in the case of starch-rich maize silages. When selecting the silage maize variety, therefore, greater attention should be paid to high residual plant digestibility rather than a high starch content.
- The longer the maize is silaged in the silo, the faster the starch contained in it is degraded by microbial activity. To counteract this, additional grain maize in the concentrate has a positive effect. Therefore, 30-60 % grain maize must be included in the grain mixture.
- Short-cut barley or wheat straw is suitable as a source of raw fibre (for small bulls: 200 g/animal and day; for larger bulls: 300 g/animal and day or 500 g hay/animal and day).
- Optional: If possible, include 5-20 % tasty, nutrient- and fibre-rich grass silage in the ration.

Once all measures to combat restlessness have been exhausted, farmers can discuss further measures against acidosis with their feeding advisor. These include, for example, the use of live yeast or sodium









bicarbonate, which have a rumen buffering effect, as well as the administration of organically bound and calming magnesium.

## Acidoses favour calcium and magnesium deficiency

A wide-ranging study in Bavaria recently showed that almost all bull rations have a calcium deficiency, which is favoured by acidoses. Calcium is needed to remove the acids from the body. As a result, it is no longer available to the bulls. The absolute or relative calcium deficiency that develops in this way favours restlessness among bulls. Therefore, a safety supplement of about 30 g of calcium should be added to the mineral feed in the ration.

Since a magnesium deficiency promotes restless behaviour in bulls, the mineral feed used should contain approx. 4-5 % magnesium. Ideally, at least part of this should be organically bound, so that the magnesium is better absorbed in the animals' intestines.

Farmers should also always ensure a balanced amount of zinc (approx. 4,000-5,000 mg) in the mineral feed. Zinc is an antagonist to magnesium and calcium. If the mineral feed contains too much zinc, this inhibits the absorption of both minerals and thus indirectly promotes restlessness in the barn. Zinc is often used excessively to improve claws damaged by acidosis.

## Feeding with mineralised bull supplements

If a fully mineralised bull supplement (e.g. Superbull 35) is used, no additional mineral feed must be included. It is sufficient to add a safety supplement of approx. 30 g lime. In the case of only partially mineralised feed, on the other hand, it is only necessary to top up this mineralisation as required.

#### Conclusion

- Restlessness among bulls can have many causes.
- One possible reason is husbandry errors such as an insufficient ratio of feeding places to animals or poor air quality in the barn.
- Acidotic rations are a major cause of restlessness in the bull pen. It is therefore important to prevent this.
- It helps to ensure that the ration contains 15-16% crude fibre and less than 27% rumen-available starch and sugar.
- Calcium and magnesium deficiencies can also promote restlessness and are favoured by acidosis. To avoid a deficiency, a safety supplement of approx. 30 g lime in addition to the mineral feed helps, which should also contain approx. 4-5 % magnesium.







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