

Welcome-Station as an approach to prudent use of antibiotics and to implement the law in the Swiss veal calf production

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Key words

Veal, Approaches, Antibiotics, Prudent Use, Welfare, Switzerland

Aim of the study

The aim of the study was to reduce the use of antibiotics by recruiting young calves directly from the farm of origin, to take care of them by a veterinarian during the first six weeks of the production cycle on a special farm (Welcome-Station).

Material and methods

From June 2012 until October 2012 totally 316 young calves (8 groups), directly transported from the farm of origin, and totally 425 commercial calves (10 groups) were included in the study. During the second period of time, 9372 control calves could be included. The first three weeks on the Welcome-Station the calves were held in groups of five animals on straw bed and were fed a liquid milk by-product with additional powder twice daily by bucket with nipple. Further three weeks calves were held in groups of 40 and 47 calves, respectively, where they had the same feeding by an automatic feeding system ad libitum. Calves always had free access to water, solid feed and to a source of iron. After six weeks on the Welcome-Station calves were transported as unity to commercial farms until they were slaughtered. Data on mortality and morbidity, the use of antibiotics, blood parameters, performance and carcass traits were evaluated.

Results and significance

Apart from the metaphylaxis at the beginning of the fattening period, the therapeutic use of antibiotics in the groups of young calves increased to 26.8 daily doses of antibiotics (DDA) on average. Therefore, the approach of housing young calves was stopped in favour of housing commercial calves. Apart from the metaphylaxis, commercial calves showed 16.4 DDA on group level. On the Welcome-Station 45.5% of the young calves and 48.5% of the commercial calves had to be treated individually at least once with a DDA of 7.8 and 7.5, respectively. Mortality turned out to be 6.7% in the groups of young calves and 8.2% of commercial calves, whereas the mortality was 3.7% in the control calves. The average hemoglobin at the beginning of the fattening period was 96.2 g/l in young calves and 88.2 g/l in commercial calves. Young and commercial calves tended to result in lower carcass qualities compared to the control calves. 18.8% of the young calves and 51.2% of the commercial calves were older than 160 days by the time of slaughtering. Concerning red coloured carcasses 64.9% of the young calves and 60.8% of the commercial calves had a L-value below 42.0, therefrom a L-value below 39.0 was measured in 12.2% of the young calves and 5.9% of the commercial calves. Data show that the intensive care of the calves during the first weeks of the fattening period have a positive effect on calves' welfare, the prudent use of antibiotics and may reduce its use in the second half of the fattening period. No positive effect on the use of antibiotics could be seen in housing young calves despite of direct and short transportation.

Publications, posters and presentations

Kurs Fachtechnisch verantwortliche Person, Olten, 06.12.2012

21. Infoveranstaltung für TGD-Tierärztinnen, Tirol, 07.05.2013

3. Kälbergipfel, Bern, 25.06.2013

Vorstandssitzung Schweizerischer Kälbermästerverband, Bern, 06.11.2013

Suisse Tier, Luzern, 22.11.2013

ITB Kalb, Schweizer Tierärztetage 2013 in Bern, 26.11.2013 Strickhof, 03.12.2013 BBZN Hohenrain

Tagung Prometerre, Welschland, 23.01.2014

Delegiertenversammlung Kälbermästerverband Kanton Bern, 01.03.2014

Kurs Fachtechnisch verantwortliche Person, Olten, 19.03.2014

Project 1.13.02

Project duration June 2012 – December 2013