

## Overall assessment of broilers' welfare at slaughterhouse and on farms rearing conditions

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**Introduction:** Legislation and a variety of animal welfare (AW) assurance programs are being used to encourage the adoption of animal welfare standards in food production. All flocks of chickens destined for slaughter are subject to a systematic assessment by AW at the slaughterhouse according to Portuguese DL No. 79/2010, according to Directive No. 2007/43/EC. This evaluation consists of monitoring parameters related to management and conditions during the production in farms.

The aims of this study were carried out to a systematic evaluation of AW indicators in broilers' slaughterhouses and in cases of warnings or alarms indicative of decreased animal welfare conditions, the most at-risk farms were visited in order to assess the conditions provided to animals and risk factors affecting welfare conditions.

**Material and Methods:** Seventy flocks of broilers belonged to a fast-growing genotype (mostly Ross 308) were assessed at three slaughterhouses (A, B and C). The welfare measures collected were emaciation, dirty feathers, foot pad dermatitis (FPD), hock burn (HB), breast burn, ascites, septicemia, cellulitis, traumatism, dead on arrival (DoA) rate, condemnation rates, accumulated mortality rate.

After monitor welfare indicators at slaughterhouse, farms with two or more relevant results were selected and visited to assess farms' drinker space, litter quality, panting, stocking density, lameness, FPD, HB were verified as well as light program and ammonia level. Seven farms in a total of fourteen pavilions were visited.

**Results:** Only one farm fulfilled the requirements for the lighting program. None of the pavilions exceeded 20 ppm of ammonia, 7 pavilions had insufficient ventilation and air circulation. Contact dermatitis lesions had an important effect on the overall assessment of welfare as it plays a part in the assignment of reduced welfare.

**Conclusion:** The obtained results corroborate previous studies and showed the close correlation between AW conditions at the farm and the evaluation at slaughterhouse.

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### Literature:

Decree-law (DL) No. 79/2010, 25 June (2010). Establishes the minimum rules for the protection of chickens for human consumption, 2010.

Directive No. 2007/43/EC of the Council of 28 June (2007). Laying down minimum rules for the protection of chickens kept for meat production.