

The development of a new stunning technology for Halal slaughter

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1. Introduction

European Council Regulation on the protection of animal at the time of killing, EC1099/2009 requires the stunning of all animals at the time of slaughter, with the exception of those slaughtered according to religious rites by mainly Muslims and Jews. Whilst the Jewish community unanimously reject all forms of stunning, some Muslims accept stunning on condition that it does not result in the death of animals prior to neck-cutting. To this end, head-only electrical stunning is widely accepted during Halal slaughter of small ruminants and poultry, however, there is currently no approved head-only electrical stunning system for cattle within the EU. The Humane Slaughter Association (HSA) and Agriculture and Horticulture Development Board (AHDB) are funding my PhD research into the development of a new system of head-only electrical stunning, it is hoped that if successful, the system may be accepted for Halal beef production.

2. Update on the new stunning system

To identify optimum electrical parameters for the stunner, a series of laboratory experiments were conducted using cattle heads and brain cells obtained from animals slaughtered in the Langford abattoir. Both the restraint and electrodes have now been constructed, the next step is a trial using live animals to test the efficacy of the stunner.

3. Research on acceptability of stunning

Whilst research into the development of the new stunner is ongoing, we conducted a survey of Halal consumers and Islamic scholars in the UK to gather their views on the acceptability of stunning for Halal meat production. A total of 66 Islamic scholars and 314 Halal consumers were surveyed, 95% and 53% of Islamic scholars and Halal consumers respectively indicated that stunning was acceptable on condition that it did not cause death prior to neck-cutting or negatively impact the volume of blood loss.