INTRODUCTION
The use of technologies like beta-agonists has greatly improved production efficiency and more profitable production of lean protein. The increase in lean meat due to the use of beta-agonists is either due to an increase in protein deposition, decrease in protein degradation or both. All indications are that short-acting beta agonists have their major effect on increased lean meat production through the increase of protein deposition, whereas long-acting beta agonists has their major effect on the decrease in protein degradation. If the improvement in growth, with the use of beta agonists, is partly due to the decrease in protein degradation, it will lead to reduced post-mortem proteolysis or protein breakdown, resulting in tougher meat. Meat quality is measured according to scientific criteria, including colour, drip loss, palatability tests and shear or breaking force.

TRIAL INFORMATION
Salbutamate® 10% was fed for 30 or 40 days, Zilpaterol for 30 days and a control group.

RESULTS
In the trial it was determined that Salbutamate® 10% had no effect on meat tenderness score, rate of post mortem carcass pH decline and percentage cooking loss compared to the negative control group. When compared to the meat from Zilpaterol treated animals the Zilpaterol treated carcasses showed a slower pH decline from 1 hour to 24 hour post-mortem. The Zilpaterol treated meat had a statistically tougher meat in comparison to the Salbutamate® 10% treated meat.

* References available on request.