AUSTRALIAN Pork®

# R&D Snapshot

## Mineral strontium supplementation improves weaner performance

**Investigator:** Dr Jeff Downing, University of Sydney

**Background:** Strontium (Sr) is a trace mineral which has been reported in other species to increase bone volume and density as well as insulin-like-growth factor-1 (IGF-1) that promotes muscle growth.

**Purpose:**

- To determine the effect of Sr supplementation on performance during the different growing phases, carcass characteristics and leg surface joint temperature (as an indicator of inflammation and the likelihood of osteochondrosis).

**Take home messages:**

- Weaner pigs supplemented with 500 ppm Sr in a commercial environment improved growth performance and feed efficiency.
- Sr supplementation had no effect on performance, carcass yield, P2 backfat or leg joint surface temperature during either the grower-finisher or weaner-finisher period.
- Sr supplementation at 500 ppm may be of benefit during the weaner period – a time when the pigs are very susceptible to environmental and disease challenges.
- During the weaner period pigs consumed approximately 10 kg of feed and so supplementation at 500 ppm a total of 5 mg of Sr per pig would be a small economic cost.

**Additional information:**

- For further information or a copy of the final report please contact Dr Rebecca Athorn at rebecca.athorn@australianpork.com.au or 02 6270 8827.

**APL Project 2015/014** – The supplementation of pig diets with mineral strontium