Effects of live yeast culture (*Saccharomyces cerevisiae*) on growth of growing pigs

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Antibiotics are usually used to improve the microbial balance in the gastrointestinal organs and growth performance in pigs. However, the usage of antibiotics is being banned in some countries or is being considered for restriction in others. With increasing interest in animal welfare, public concern over food safety such as drug residue in meats and the development of antibiotic resistance in specific pathogenic micro-organisms, alternatives to antibiotics are urgently needed. Yeast culture (*Saccharomyces cerevisiae*) has received much attention as feed additives in pigs. Yeast culture appeared to increase gammaglobulin content of sow's milk and improves postweaning growth rate (1). However, information on the effect of various levels of yeast culture addition on growing pigs is limited. Thus, this study was conducted to determine the effect of supplemental yeast culture on growth performance in growing pigs.

One hundred and twenty of three way crossbreed pigs (Landrace x Yorkshire x Duroc or Hampshire) weighing an average of 27 ± 0.64 kg were divided into 12 pens of pigs each for 67 days. Each pen was assigned to one of the 3 treatments with 4 replications (2 pens of castrated males and 2 pens of females each) according to a completely randomised block design. The treatments consisted of control, 1 and 2 % yeast culture. All experimental animals were fed a starter diet for the first 20 days, a grower diet for 21 days, and a finisher diet for the last 26 days of the experiment. All pigs had ad libitum access to feed and water. Pigs were weighed weekly and feed consumption recorded daily.

Although pigs fed 2 % yeast culture showed an improved feed conversion rate ($P<0.10$) compared to the control pigs, yeast culture supplementation did not significantly affect the average daily gain or average daily feed intake. The lack of response to growing pigs in the present study is in agreement with those reported by Kornegay *et al.*(2). These results suggest that yeast culture had little effect on average daily weight gain and daily feed intake.

1. Jurgens MH, Rikabi RA, Zimmerman DR. The effect of dietary dry yeast supplement on performance of sows during gestation-lactation and their pigs. J Anim Sci 1997;75:593-597.
2. Kornegay ET, Rhein-Welker D, Lindemann, MD. Effects of yeast culture additions to weaning pig diets containing dried whey, soybean hulls or peanut hulls on growth performance and diarrhoea. J Anim Sci 1994;72(suppl. 2):6.