

## The effect of differences in feeding strategy on the reproductive performance of early pregnancy gilts

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### Abstract

Nutritional management is very important in early gestation pigs because the metabolic burdens increase and induce free radicals affecting embryo survival and litter size. Antioxidants can protect the cell from free radical damage such as vitamin E that very necessary for gestation pigs. This study aims to demonstrate the effect of differences in feeding strategy on the reproductive performance of early pregnancy gilts. In this experiment, thirty (Yorkshire × Landrace × Duroc) gilts were used with an average initial weight of 120 kg/gilt. The gilts were randomly allocated to 3 dietary treatments in the early pregnancy stage: 1) fed 1.5 kg/day, 2) fed 1.5 kg/day with 1.7-fold of vitamins and minerals (feed contained vitamin E 150 ppm.), and 3) fed 2.5 kg/day, with 10 gilts per treatment. Each pen was equipped with a feeder and nipple drinker, water was provided *ad libitum*, and feed was provided for 4 stages: 1) before mating provided feed 2.2-2.4 kg/day, 2) early pregnancy stage provided feed following the treatment groups, 3) middle pregnancy stage provided feed 2.2-2.6 kg/day, and 4) late pregnancy to lactation stage provided feed 4.8 kg/day, this experiment is still processed in the 1<sup>st</sup> stage. The study expected that the differences in feed intake, vitamins, and minerals have a benefit on the reproductive performance of early pregnancy gilts but the result will summarize after the experiment is finished.

**Keywords:** feeding strategy, early pregnancy, gilt, reproduction

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