

ANIMAL WELFARE

Title: Effect of Prenatal Androgenization on Growth Rate, Feed Efficiency, and Carcass Quality of Swine – **NPB #98-092**

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Abstract:

This study was conducted to determine if the prenatal administration of testosterone, prenatal androgenization, would enhance the growth rate of pigs as has been reported in ruminants. Fifteen gilts or sows were administered testosterone via an intravaginal controlled release insert on days 21-26 of gestation. Females were confirmed pregnant via ultrasound before insert administration and inserts were left in situ for 35 days. Pregnancy was terminated in six of the 15 (40%) females administered the intravaginal testosterone insert. Although the live offspring were normal at birth and equal in weight to the non-prenatally androgenized pigs, there were fewer live offspring. Litters that had been prenatally androgenized had a higher incidence of stillborns and mummified fetuses. Therefore, prenatal androgenization, as done in this study, increased the incidence of pregnancy termination and increased embryonic and fetal mortality. Also, in contrast to our results in cattle, prenatally androgenization appeared to have no effect on the growth rate or on the gain to feed ratio.

These research results were submitted in fulfillment of checkoff funded research projects. This report is published directly as submitted by the project's principal investigator. This report has not been peer reviewed

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